REGULAR MEETING CONSERVATION COMMISSION

1 JUNKINS AVENUE PORTSMOUTH, NEW HAMPSHIRE EILEEN DONDERO FOLEY COUNCIL CHAMBERS

3:30 P.M. February 08, 2023

AGENDA

I. ELECTION OF OFFICERS

1. Chair/ Vice-Chair

II. APPROVAL OF MINUTES

1. December 14, 2022

III. STATE WETLAND BUREAU APPLICATIONS (NEW BUSINESS)

- Minor Impact
 393 New Castle Avenue
 David Sinclair & Nicole Guisto, Owners
 Map 207, Lot 5
- Standard Dredge and Fill
 227 Market Street
 227 Market Street, LLC, Owner
 Map 119, Lot 6
- 3. Standard Dredge and Fill 105 Bartlett Street Iron Horse Properties, LLC, Owner Map 157, Lots 1 & 2, Map 164, Lots 1 & 4-2

IV. ADJOURNMENT

*Members of the public also have the option to join this meeting over Zoom, a unique meeting ID and password will be provided once you register. To register, click on the link below or copy and paste this into your web browser:

https://us06web.zoom.us/webinar/register/WN_j4WWb7eFRoyUig9mvUtvJA

MINUTES CONSERVATION COMMISSION

1 JUNKINS AVENUE PORTSMOUTH, NEW HAMPSHIRE EILEEN DONDERO FOLEY COUNCIL CHAMBERS

3:30 P.M. December 14, 2022

MEMBERS PRESENT: Chair Barbara McMillan; Vice Chair Samantha Collins; Members;

Allison Tanner, Jessica Blasko, Thaddeus Jankowski, Lynn Vaccaro, Stewart Sheppard and Alternates; Abigail Gindele and

Brian Gibb

MEMBERS ABSENT: Stewart Sheppard

ALSO PRESENT: Peter Britz, Environmental Planner/Sustainability

Coordinator; Kate Homet, Associate Environmental

Planner; Joseph Almeida, Facilities Manager

*Recording timestamps denoted in brackets []

Meeting started at 3:32p.m, no audio until timestamp [7:23]

Chair McMillan introduced new members. Announced Ms. Gindele will be voting in Mr. Sheppard's absence.

I. APPROVAL OF MINUTES

1. November 9, 2022

Ms. Tanner announced she would not be voting on the minutes since she was not present during the last meeting.

[8:58] Ms. Blasko made a motion to approve with the following amendments:

Mr. Jankowski made a correction on page 6 when talking about the CIP funds he meant that he would like to see a discussion at the regular meetings happen earlier than previously done On page 6 under Other Business, "Samantha" should be corrected to "Acting Chair Collins" Ms. Vaccaro should be listed as present

Ms. Gindele seconded the motion. The motion passed unanimously with Ms. Tanner abstaining.

II. WETLAND CONDITIONAL USE PERMITS (NEW BUSINESS)

12 Regina Road
 Edward and Kathleen Vieira, Owners
 Assessor Map 225, Lot 29
 (LU-22-221)

[9:43] Kathleen Vieira came to present for a proposed 10x10 shed. Not many places outside the buffer so they are proposing an area with the least amount of impact farthest from the wetland. They are proposing placing it in 12x12 crushed gravel stone that had already been placed and surrounding it with blueberry bushes. They are happy to put up wetland boundary marker signs. There is currently no pesticide use on the property.

[11:18] Mr. Jankowski suggested they follow NOFA organic lawn care best practices.

[12:21] Chair McMillan asked if the area down towards the wetland could be kept as just a path to minimize disturbance and mowing.

The applicant has considered putting down wild seeds and/or plantings for that area.

[13:10] Ms. Gindele asked for clarification on the area where it was noticed during the site walk that shrubs were removed from.

The applicant mentioned that they have removed vines and prickly vegetation as well as limbing one tree to avoid injuries during lawn mowing.

[14:10] Vice Chair Collins made a motion to recommend approval of the Wetland Conditional Use Permit and Ms. Gindele seconded the motion. The motion passed unanimously.

III. STATE WETLAND BUREAU APPLICATIONS (NEW BUSINESS)

Major Impact
 (Marcy Street) Prescott Park
 City of Portsmouth, Owner
 Assessor Map 104, Lots 1, 3-3, 3-2, 3, & 5

[14:55] Joe Almeida (Facilities Manager), Cassie Bethoney, and Devin Herrick (Weston and Sampson) came to present on this application for Phase 1A of this project. This application has previously been in front of the Historic District Commission. Ms. Bethoney provided a set of slides to give the overall context of the project. This application is the first phase of the Prescott Park Master Plan update. The improvements to the park include stormwater improvements, resiliency improvements, regrading, historic structure adaptation (moving the Shaw Building farther from the flood zone, raising it, and exterior renovations), demolishing the garage and lean-to connected to the Shaw Building, etc. Phase 1A will include improvements to the Water Street area down to the Sheafe and Shaw buildings along with the current arts festival area and west lawns.

[26:03] There are three different resource areas requiring permitting, the Piscataqua River with 14 square feet of impact which will be subject to mitigation. The stream bank of the Piscataqua River with 38 linear feet for a vertical addition to the retaining wall, 2,021 linear feet of temporary impacts of vegetation removal and spot repairs of the wall, 22,387 square feet of permanent impact for regrading, relocation of structures and proposed walkways, 5.278 square feet of temporary impact for roadways, walkways and lawn changes. The Army Corp revealed that no mitigation work is necessary for wall repair work and they are proposing just a realignment of the existing granite blocks along the wall.

[31:38] They are expecting to have comments from the State on their application by the end of January or beginning of February. This project will then go before the Governor's Council and then they will continue working with their permits and finalizing their documents. They are hoping to be out to bid by the middle or end of next year (2023) with construction starting early 2024.

[32:43] The Commission raised questions about how much public input there has been, raised concerns for the addition of a concrete walkway where a tree currently exists, the installation of new walkways, how long the lawn will exist and if it could be a temporary non-grass/native/pollinator planting. The Commission also inquired if there were currently concerns for the stage area flooding? With the upcoming climate action plan, are there any innovative stormwater and resiliency options? What is the involvement of this plan with Strawbery Banke? How would the current parking on Water Street change? Will there be a maintenance plan for the pervious pavement areas? What direction will the tide gate let water flow?

[32:52] The applicants explained that community engagement and input was extensive for the Master Plan creation. The Committee appointed for this is still in contact with Weston and Sampson and had a wide engagement implementation phase.

[36:06] The proposed walkway will not be impacting the existing tree nor its dripline and will not have concrete poured. Many walkways are existing and one of the proposed ones will be temporary for Phase 1 and it will be pervious. The lawn could potentially exist there for a few years in between phases.

The current stage area does flood. The future phase will lean into controlling and remediating the flooding. This will start to be seen with the temporary work near the stage area as well. They have looked at a myriad of different improvement strategies which are all creative and exemplary for what other cities are doing. In terms of materials selection, they are proposing permeable pavers in some places, taking into account maintenance concerns and constructability. They are communicating with Strawbery Banke on how their plans can line up with Strawbery Banke's plans, especially on the stormwater side. Water coming off of Strawbery Banke and into Marcy Street will reach new pipes at Prescott Park allowing for better drainage. The current design for the parking lot will be permeable asphalt and head-in parking spots with the same number of spaces. The City will be maintaining all pervious pavements and pavers. There will be a one-way tide gate allowing for only outflow of the pipe and no inflow of salt and brackish water.

[39:20] Ms. Tanner asked if there are any other opportunities for non-lawn plantings, even if they are temporary.

[58:55] Mr. Almeida and Ms. Bethoney pointed out that there will be the introduction of the formal gardens and trail gardens which will bring in pollinators. They have not considered formal planting plans at this stage as it is mostly stormwater improvements for Phase 1a. There will be pollinator and meadow-like plantings in future phases along with living shoreline plantings that have native aquatic species.

[1:01:15] The Conservation Commission would like to be included in the design and planning phases of each project coming forward to increase the dialogue around what they feel is important and so they can provide feedback on plantings and other aspects.

[1:05:19] Chair McMillan opened the floor for public comment.

[1:05:42] Elizabeth Bratter of 159 McDonough Street came to speak on the Prescott Park application. The delineation of wetlands is in a developed area, plantings along the seawall would aid in floodwater control which are proposed but for on the inside of the wall, Ms. Bratter would prefer they be on the sea side of the wall. She raised concerns for flooding reaching Pleasant Street if nothing is done to address the flood zone. She cited FEMA requirements that buildings in flood zone AE must be raised to at or above the base flood elevation if there is a new building or significant renovations to a building. She agreed that it makes sense to elevate Water Street and update the utilities there as it currently acts as an impervious culvert for floodwaters. Her main concerns consisted of water infiltration rates in the area, especially as they are concerning areas of historical fill which could be difficult to predict flow. She would like to see the Shaw Building moved out of the FEMA flood zone.

[1:16:35] Chair McMillan asked if there were any contamination concerns.

Mr. Almeida explained that they have done various tests and archaeological digs alone with boring samples. They are very aware of soils and contaminations in the area due to years of research and historical studies.

Ms. Tanner is concerned about trees coming down and the move of the building to a higher area when flooding is only proposed to get worse. She would rather see more native solutions.

Vice Chair Collins expressed concerns with the amount of lawn space proposed. She mentioned that there were many smaller pocket areas that could benefit from vegetation other than just lawn. She also would like to see the temporary lawn be native plantings or some sort of pollinator space before it is returned to lawn. Mr. Jankowski seconded this view.

Ms. Blasko reiterated that she would really appreciate the Commission being included in future planning and design phases for these projects because there is a lot to consider, especially with climate change impacts.

Ms. Vaccaro is concerned about wetland impacts and the natural state of the park. She is unsure of whether or not the flood risk is quite in the jurisdiction of the Commission to decide on.

Ms. Gindele expressed concerns for future inundation and flooding impacts. While the City may use maps from the Army Corps there are also other great resources, especially local ones that project impacts from flooding in this area.

[1:26:52] Mr. Britz stated that this project is a major one that is taking into consideration sea level rise and storm surge impacts and doing a lot of work to accommodate flooding. This is an area where flood water has major impacts but is largely outside of a residential zone, making it perfect for flood storage and flood control. This is the first step towards finding a solution for major impacts in the area. Although they did not involve the Commission, this design work had started years ago and had extensive community outreach and engagement. The goal for this plan is for resilience, not necessarily making it a conservation or natural area.

[1:20:18] Vice Chair Collins made a motion to recommend approval with the following stipulations:

- 1. No grass seed should be planted in the open soil areas, instead a native seed mix is preferred.
- 2. A maintenance plan should be provided for the pervious areas throughout the park.

[1:31:50] Ms. Tanner seconded the motion. The motion passed unanimously.

IV. WORK SESSIONS

A. 89 Sparhawk Street Jonathan and Lisa Morse, Owners Assessor Map 159, Lot 2 (LU 22-234)

[1:33:02] Chair McMillan introduced this application for a work session.

[1:34:36] Steve Riker of Ambit Engineering presented this application representing the owners John and Lisa Morse. They are requesting feedback before they go further into the design stages for their application. Two other members of the project team were present, including Robbie Woodburn from Woodburn and Company, and Jen Ramsey from SOMMA Studios.

The property has an existing patio, deck, driveway and retaining walls. There is a tidal buffer zone on the property as well as a freshwater wetland buffer that goes into their property, even the rear of their existing home. They are proposing a garage addition onto the house which will impact the buffer, along with an addition of a patio and the existing deck to remain. They will remove the existing patio, a granite walkway and a series of retaining walls. The garage will be two-stories with two bays and an additional storage section. The owners have installed silky

dogwoods on the property which is not shown on the current plan. They will be coming back with a stormwater design later. They will be part of the next site walks in January.

The Commission expressed concerns for the increase in impervious surface area, which nearly doubles. The size of the garage was also a concern. The dimensions and setbacks for buildings and proposed buildings should be pointed out on the plans to show possibilities for alternative locations and building sizes. Dimensions and materials of the proposed driveway are needed. Will the third bay for storage be used for cars? If not, will the driveway be needed in front of it?

[1:43:38] Jennifer Ramsey of SOMMA Studios mentioned that the storage area will likely be used for storage as well as a third bay for a car so the driveway will be necessary. The driveway and patio spaces could be considered to be made permeable.

[1:46:42] The Commission asked why the garage could not be moved further forward on the property and away from the buffer line.

Ms. Ramsey responded that there were safety concerns associated with moving it closer to the street and they wanted to maintain a longer driveway length as well as avoid needing a variance for setbacks.

The Commission would like to see the next set of plans come back with total impacts to the buffer listed instead of impacts on the lot as a whole. In addition, for the upcoming site walk if the applicants could stake out where proposed additions and construction would be that would be helpful. This could include areas of buffer plantings, patios, the garage, etc. In addition, it would be beneficial for a more conservative garage addition plan.

V. OTHER BUSINESS

- 1. Welcome new members
- 2. Wetland boundary marker signs

[1:56:27] Kate Homet, Associate Environmental Planner, passed around the wetland boundary marker signs produced by the Planning Department. These signs will be sold to Wetland CUP applicants to be placed where they are shown on future plans on their properties to warn of sensitive wetland areas. The purchase of these signs will directly support the Conservation Commission and future conservation land acquisition.

[2:00:36] Chair McMillan mentioned that she will be representing the Commission at the Planning Board meeting tomorrow for the CIP plans.

[2:01:12] Chair McMillan also mentioned an upcoming flooding management workshop that will occur in January for all City staff and boards that she encourages everyone to attend.

Chair McMillan updated the group on land use and ordinance changes. The City Council will be informed of the Commission's plans to propose ordinance changes. Then a study group will form

from Commission members, a small group that will avoid a quorum. This group will then come up with recommendations which they will showcase in a workshop with the Conservation Commission and will then work on with a future joint workshop with the Planning Board. These ordinance changes will eventually go to the City Council to be adopted.

A vote was needed to inform the City Council of the plans.

[2:05:06] A vote was called for all of those in favor of making a recommendation to City Council. The vote was unanimous.

VI. ADJOURNMENT

[2:05:21] Ms. Tanner made a motion to adjourn. Ms. Blasko seconded the motion. The motion passed unanimously.

Meeting adjourned at 5:31p.m.

Respectfully submitted,

Kate E. Homet Secretary for the Conservation Commission 5 January 2023

Wetland Inspector New Hampshire Department of Environmental Services Wetlands Bureau 29 Hazen Drive / P.O. Box 95 Concord, New Hampshire 03302

Re: NHDES Minor Impact Wetland Permit Application
Tax Map 207 Lot 5
393 New Castle Avenue
Portsmouth, New Hampshire

Dear Wetland Inspector:

This letter transmits a New Hampshire Department of Environmental Services (NHDES) Minor Impact Wetland Permit Application request to permit 2,450 sq. ft. of permanent impact and 1,085 sq. ft. of temporary construction impact to the previously developed 100' Tidal Buffer Zone for residential site improvements including installation of porous pavement for the existing and proposed driveway expansion, installation of an underground electric/communication line and replacement of the existing sewer line between the existing home and New Castle Avenue.

Attached to this application you will find a "NH DES Permit Plan-C2" which depicts the existing lot, jurisdictional areas, abutting parcels, existing structures, proposed work, temporary and permanent impact areas.

Per Env-Wt 306.05, Certified Wetland Scientist Steve Riker from Ambit Engineering, Inc. classified all jurisdictional areas and identified the predominant functions off all relevant resources. The Highest Observable Tide Line marks the reference line for the 100' TBZ, as well as the beginning of Tidal Wetland on the attached plan set.

The construction sequence for the proposed project is as follows:

- Mobilization of equipment and materials to the site via New Castle Avenue.
- Installation of erosion and sediment control devices.
- Remove existing portion of paved driveway, existing gravel driveway, and portion of porous paver driveway.
- Construct and prep new porous pavement driveway base.
- Excavate for underground electric/communications line and new sewer line.
- Install underground electric/communications line and new sewer line.

- Backfill underground electric/communications line, new sewer line and return to previous existing grade.
- Install porous pavement area.
- Remove sediment and erosion controls once disturbed areas are stabilized.

The project does not propose the removal of any vegetation within the 50' Waterfront Buffer to achieve construction goals. Under existing conditions the property does not any unaltered areas between the 50' Waterfront Buffer and the 150' Natural Woodland.

The project represents the alternative with the least adverse impacts to areas and environments while allowing reasonable use of the property.

Per Env-Wt 603.02(b), attached to this application you will find a plan set which depicts the existing lot, jurisdictional areas, all natural resources in the area, abutting parcels, existing structures, proposed structures, and temporary impact areas. Also included in this application are maps created in accordance with Env-Wt 603.03 and Env-Wt 603.05.

In order to complete the application package for this project, the DES Wetlands Bureau rules in Chapter Env-Wt 306.05 (a)(2) has been evaluated and addressed below.

(2) a. Contains any documented occurrences of protected species or habitat for such species, using the NHB DataCheck tool;

Attached to this application are the results of the NHB review and it was determined that there are rare species in the vicinity of the project site. Ambit Engineering will coordinate with NHB and provide DES with comment once available.

(2) b. Is a bog;

Utilizing the NH DES WPPT, the subject property is not a bog, nor does it contain any portion of a bog.

- (2) c. Is a floodplain wetland contiguous to a tier 3 or higher watercourse;

 Utilizing the NH DES WPPT, the subject property does contain a floodplain wetland contiguous to a tier 3 or higher watercourse.
- (2) d. Does the property contain a designated prime wetlands or a duly established 100-foot buffer; or The property does not contain a prime wetland or duly established 100 foot buffer.
- (2) e. Does the property contain a sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone; The property does not contain a sand dune or undeveloped tidal buffer zone. The property does contain a tidal wetland and tidal waters.

The DES Wetlands Bureau rules in Chapter Env-Wt 306.05 (a)(4) and (a)(7) has been evaluated and addressed below.

(4) a. Is the subject property within LAC jurisdiction;

The property does not fall within an area of LAC jurisdiction.

(4) b. Does the subject property fall within or contain any areas that are subject to time of year restrictions under Env-Wt 307;

The property does not fall within or contain any areas that are subject to time of year restrictions.

(7) Does the project have potential to impact impaired waters, class A waters, or outstanding resource waters;

I do not believe the nature of the proposed project has the potential to impact an impaired water. The project reduces the amount of impervious surface on the lot that will serve to improve stormwater quality that leaves the site.

The DES Wetlands Bureau rules in Chapter Env-Wt 603.02 (e) & (f) have been evaluated and addressed below.

(e)(1) The project meets the standard conditions in Env-Wt 307;

The project meets the standard conditions in Env-Wt 307 as the proposed project meets the standards of Env-Wq 1000, RSA 483-B and Env-Wq 1400. Sediment and erosion controls will also be used and maintained during the proposed construction ensuring protection of water quality on the site. Under Env-Wt 306.05 (a)(2)a. a NHB review has been performed to ensure there are no impacts to protected species or habitats of such species. The protection of Prime Wetlands or Duly-Established 100 foot buffers does not apply as none exist on or adjacent to the subject lot.

(e)(2) The project meets the approval criteria in Env-Wt 313.01;

The project meets the approval criteria in Env-Wt 313.01 as the project meets the avoidance and minimization requirements specified in Env-Wt 313.03, does not require compensatory mitigation, meets applicable conditions specified in Env-Wt 307 (above), meets project specific criteria listed in Env-Wt 600 (above), and the project is located entirely within the boundary of the applicants property.

(f)(1) The project design narrative as described in Env-Wt 603.06;

The project design narrative is provided above.

(f)(2) Design plans that meet the requirements of Env-Wt 603.07;

The design plans meet the above standard.

(f)(3) The water depth supporting information required by Env-Wt 603.08;

The design plans do not provide water depth information as it is non-applicable to the proposed project.

(f)(4) A statement regarding impact on navigation and passage required by Env-Wt 603.09.

Navigation and passage is not applicable to the proposed project.

Please contact me if you have any questions or concerns regarding this application.

Respectfully submitted,

Steven D. Riker, CWS

NH Certified Wetland Scientist/Permitting Specialist

Ambit Engineering, Inc.

2 January, 2023

To Whom It May Concern

RE: New Hampshire Department of Environmental Services Application for residential site improvements for David A. Sinclair, 393 New Castle Avenue, Portsmouth, NH.

This letter is to inform the New Hampshire Department of Environmental Services in accordance with State Law that Ambit Engineering is authorized to obtain approvals in regards to the above referenced property.

Please feel free to call me if there is any question regarding this authorization.

Sincerely,

David A. Sinclair

PO Box 577

Portsmouth, NH 03802



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: David A. Sinclair

TOWN NAME: Portmouth

			File No.:
Administrative	Administrative	Administrative	Check No.:
Use Only	Use Only	Use Only	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 <u>Waiver Request Form</u>.

SEC	TION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))	
Plea	ase use the Wetland Permit Planning Tool (WPPT), the Natural Heritage Bureau (NHB) DataCheck Too	ol, the <u>Aquatic</u>
Rest	toration Mapper, or other sources to assist in identifying key features such as: priority resource areas	s (PRAs),
prot	tected species or habitats, coastal areas, designated rivers, or designated prime wetlands.	
Has	the required planning been completed?	Xes No
Doe	es 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? o If yes, species or habitat name(s): Marsh elder (Iva frutescens), Atlantic sturgeon (Acipenser oxirinchus), shortnose sturgeon (Acipenser brevirostrum) o NHB Project ID #: 22-2537	⊠ 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?	Xes No
Is th	ne property within a Designated River corridor? If yes, provide the following information:	☐ Yes ⊠ No
•	Name of Local River Management Advisory Committee (LAC):	

A copy of the application was sent to the LAC on Month: Day: Year: N/A	
For dredging projects, is the subject property contaminated? • If yes, list contaminant:	☐ 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 plelow.	
The project proposes 2,450 sq. ft. of permanent impact and 1,085 sq. ft. of temporary construction impareviously developed 100' Tidal Buffer Zone for residential site improvements including installation of ppavement for the existing and proposed driveway expansion, installation of an underground electric/cor line and replacement of the existing sewer line between the existing home and New Castle Avenue.	orous
SECTION 3 - PROJECT LOCATION	
Separate wetland permit applications must be submitted for each municipality within which wetland im	pacts occur.
ADDRESS: 393 New Castle Avenue	
TOWN/CITY: Portsmouth	
TAX MAP/BLOCK/LOT/UNIT: Map 207, Lot 5	
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Piscataqua River N/A	
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): X: 1,201,063.2099° No	orth

Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095
www.des.nh.gov

		Y: 230,382.7430°	West
SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INF	FORMATION (Env-Wt 311.0	4(a))	
If the applicant is a trust or a company, then complete w	vith the trust or company in	formation.	
NAME: David A. Sinclair			
MAILING ADDRESS: 765 Middle Street			
TOWN/CITY: Portsmouth		STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: sleddiver@gmail.com			
FAX:	PHONE: 720-244-2095		
ELECTRONIC COMMUNICATION: By initialing here: relative to this application electronically.	, I hereby authorize NHDE	S to communicat	e all matters
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-V	Wt 311.04(c))		
LAST NAME, FIRST NAME, M.I.: Riker, Steven, D.			
COMPANY NAME: Ambit Engineering, Inc.			
MAILING ADDRESS: 200 Griffin Road, Unit 3			
TOWN/CITY: Portsmouth		STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: sdr@ambitengineering.com			
FAX:	PHONE: 603-430-9282		
ELECTRONIC COMMUNICATION: By initialing here 5/2 to this application electronically.	, I hereby authorize NHDES	to communicate	e all matters relative
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFF If the owner is a trust or a company, then complete with Same as applicant		•)))
NAME:			
MAILING ADDRESS:			
TOWN/CITY:		STATE:	ZIP CODE:
EMAIL ADDRESS:			
FAX:	PHONE:		
ELECTRONIC COMMUNICATION: By initialing here to this application electronically.	, I hereby authorize NHDES	to communicate	e all matters relative

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): Please see attached narrative.
SECTION 8 - AVOIDANCE AND MINIMIZATION
Impacts within wetland jurisdiction must be avoided to the maximum extent practicable (Env-Wt 313.03(a)).* Any project with unavoidable jurisdictional impacts must then be minimized as described in the Wetlands Best Management Practice Techniques For Avoidance and Minimization and the Wetlands Permitting: Avoidance, Minimization and Mitigation Fact Sheet. For minor or major projects, a functional assessment of all wetlands on the project site is required (Env-Wt 311.03(b)(10)).* Please refer to the application checklist to ensure you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). Use the Avoidance and Minimization Checklist, the Avoidance and Minimization Narrative, or your own avoidance and minimization narrative.
*See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.
SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02) If unavoidable jurisdictional impacts require mitigation, a mitigation pre-application meeting must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.
Mitigation Pre-Application Meeting Date: Month: Day: Year:
(N/A - Mitigation is not required)
SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)
Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: I confirm submittal. I N/A – Compensatory mitigation is not required)
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Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095
www.des.nh.gov

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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		
JUK	SDICTIONAL AREA	SF	LF	ATF	SF	LF	ATF
	Forested Wetland						
	Scrub-shrub Wetland						
Wetlands	Emergent Wetland						
	Wet Meadow						
×	Vernal Pool						
	Designated Prime Wetland						
	Duly-established 100-foot Prime Wetland Buffer						
<u>_</u>	Intermittent / Ephemeral Stream						
Surface Water	Perennial Stream or River						
Se V	Lake / Pond						
rfa	Docking - Lake / Pond						
Su	Docking - River						
	Bank - Intermittent Stream						
Banks	Bank - Perennial Stream / River						
Ba	Bank / Shoreline - Lake / Pond						
	Tidal Waters						
	Tidal Marsh						
Tidal	Sand Dune						
ï	Undeveloped Tidal Buffer Zone (TBZ)						
	Previously-developed TBZ	2,450			1,085		
	Docking - Tidal Water						
	TOTAL	2,450			1,085		
SEC	TION 12 - APPLICATION FEE (RSA 482-A:3, I)						
	MINIMUM IMPACT FEE: Flat fee of \$400.						
	NON-ENFORCEMENT RELATED, PUBLICLY-FUNI					CTS, REGARD	LESS OF
	IMPACT CLASSIFICATION: Flat fee of \$400 (refe			(c) for restric	tions).		
	MINOR OR MAJOR IMPACT FEE: Calculate using	g the table	below:				
	Permanent and temporar	y (non-doc	king): 3	,535 SF		× \$0.40 =	\$ 1,414
	Seasonal do	ocking struc	cture:	SF		× \$2.00 =	\$
	Permanent do	ocking struc	cture:	SF		× \$4.00 =	\$
	Projects pro	oposing sh	oreline st	ructures (inc	luding docks) add \$400 =	\$
						Total =	\$ 1,414
The	application fee for minor or major impact is t	he above c	alculated	total or \$40	0, whicheve	r is greater =	\$

	3 - PROJECT CLASSIFICATION (Env-Wt 30 e project classification.	06.05)			
_	Minimum Impact Project Minor Project Major Project				
_	<u> </u>	<u> </u>		Wajor r roject	
	- REQUIRED CERTIFICATIONS (Env-Wt 3	311.11)			
	box below to certify:				
Initials: To the best of the signer's knowledge and belief, all required notifications have been provided.					
Initials:	The information submitted on or with the application is true, complete, and not misleading to the best of the				best of the
Initials:	 The signer understands that: The submission of false, incomple Deny the application. Revoke any approval that is g If the signer is a certified weth practice in New Hampshire, reestablished by RSA 310-A:1. The signer is subject to the penalt currently RSA 641. The signature shall constitute auth Department to inspect the site of projects and minimum impact trainspect the site pursuant to RSA 4 	ranted based on the and scientist, licer efer the matter to ies specified in New horization for the the proposed projects, where	ne informationsed surveyor the joint boa w Hampshire municipal con ject, except fo	on. r, or professional engineer ard of licensure and certific e law for falsification in off nservation commission an or minimum impact forest	r licensed to cation ficial matters, d the cry SPN
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.				ertification by	
SECTION 15	- REQUIRED SIGNATURES (Env-Wt 311.	04(d); Env-Wt 31	1.11)		
SIGNATURE (OWNER):	PRINT NAME LEGI	BLY:		DATE:
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGI	BLY:		DATE:
	AGENT, IF APPLICABLE): N. Riker	PRINT NAME LEGIBLY: Steven D. Riker DATE: 1/5/2023			DATE: 1/5/2023
SECTION 1	6 - TOWN / CITY CLERK SIGNATURE (Env	-Wt 311.04(f))			
-	by RSA 482-A:3, I(a)(1), I hereby certify four USGS location maps with the town/			our application forms, fou	ır detailed
•	Y CLERK SIGNATURE:	•		ΛΕ LEGIBLY:	
TOWN/CIT	Y:		DATE:		

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(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".

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SHORELAND APPLICATION WORKSHEET

This worksheet *must* be submitted to the NHDES Wetlands Bureau with every Shoreland Permit Application. A separate shoreland application worksheet must be submitted for each individual lot of record where impacts are proposed.

For the purposes of this worksheet, "**pre-construction**" impervious surface area³ means all human made impervious surfaces⁴ currently present within the protected shoreland of a lot, whether to be removed or to remain after the project is completed. "**Post-construction**" impervious area means all impervious surfaces that will exist within the protected shoreland of a lot upon completion of the project, including both new and any remaining pre-construction impervious surfaces. All answers shall be given in square feet.

Calculating the Impervious Area of a Lot

CALCULATING THE IMPERVIOUS AREA OF A LOT WITHIN 250 FEET OF THE REFERENCE LINE (Env-Wq 1406.12)				
	STRUCTURE DESCRIPTION	PRE-CONSTRUCTION IMPERVIOUS AREAS	POST-CONSTRUCTION IMPERVIOUS AREAS	
PRIMARY STRUCTURE(S) House and all attached decks and porches.	Main/Decks/Porch	3457 FT ²	3457 FT ²	
ACCESSORY STRUCTURES All other impervious surfaces	Stairs/Landings	120 FT ²	75 FT ²	
excluding lawn furniture, well heads, and fences. Common	Paved Driveway	406 FT ²	0 FT ²	
accessory structures include, but are not limited to:	Gravel Driveway	520 FT ²	0 FT ²	
driveways, walkways, patios, and sheds.	Ret walls/concrete	104 FT ²	104 FT ²	
		FT ²	FT ²	
		FT ²	FT ²	
	TOTAL:	(A) 4607 FT ²	(B) 3636 FT ²	
Area of the lot located within 250 feet of reference line:			(C) 14919 FT ²	
Percentage of lot covered by pre-construction impervious area within 250 feet of the reference line: [divide (A) by (C) x 100]			(D) 30.9 %	
Percentage of lot to be covered by post-construction impervious area within 250 feet of the reference line upon completion of the project: [divide (B) by (C) x 100]			(E) 24.4 %	

³ "Impervious surface area" as defined in Env-Wq 1402.13 means, for purposes of the impervious surface limitation specified in RSA 483-B:9, V(g), the sum total of the footprint of each impervious surface that is located within the protected shoreland.

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⁴ "Impervious Surface" as defined in RSA 483-B:4, VII-b means any modified surface that cannot effectively absorb or infiltrate water. Examples of impervious surfaces include, but are not limited to, roofs, and unless designed to effectively absorb or infiltrate water, decks, patios, and paved, gravel, or crushed stone driveways, parking areas, and walkways.

Stormwater Management Requirements

THE IMPERVIOUS AREA THRESHOLDS (RSA 483-B:9, V(g))
A net decrease or no net increase in impervious area is proposed (If line E is less than or equal to line D).
The percentage of post-construction impervious area (line E) is less than or equal to 20%.
This project does not require a stormwater management plan and does not require a plan demonstrating that each waterfront buffer grid segment at least meets the minimum required tree and sapling point score.
A net increase in impervious area is proposed and the percentage of post-construction impervious area (line E) is greater than 20%, but less than 30%.
This project requires a stormwater management but, does not require a plan demonstrating that each waterfront buffer grid segment at least meets the minimum required tree and sapling point score.
See details on the Application Checklist
A net increase in impervious area is proposed and the percentage of post-construction impervious area (line E) is greater than 30%.
This project requires a stormwater management plan designed and certified by a professional engineer and requires plans demonstrating that each waterfront buffer grid segment meets at least the minimum required tree and sapling point score.
See details on the Application Checklist

Natural Woodland Area Requirement

DETERMINING THE AREA TO REMAIN AS NATURAL WOODLAND		
Total area of the lot between 50 feet and 150 feet of the reference line within which the vegetation currently exists as natural woodland ⁵ (see definition below).	(F)	0 FT ²
Total area of the lot between 50 feet and 150 feet from the reference line.	(G)	5299 FT ²
At least 25% of area (G) must remain in as natural woodland. [0.25 x G]	(H)	1,325 FT ²
Place the lesser of area (F) and calculation (H) on this line. In order to remain compliant with the natural woodland area requirement , this is the minimum area that must remain as natural woodland between 50 feet and 150 feet from the reference line. This area must be represented on all plans and this area, exclusive of existing lawn, must remain in an unaltered state ⁶ .	(1)	O FT ²
Name of person who prepared this worksheet: Steven D. Riker, CWS		
Name and date of the plan this worksheet is based upon: NH DES Permit Plan-Sheet C1 1/3/23		

⁵ "Natural Woodland" means a forested area consisting of various species of trees, saplings, shrubs, and ground covers in any combination and at any stage of growth (483-B:4, XI).

⁶ "Unaltered State" means native vegetation allowed to grow without cutting, limbing, trimming, pruning, mowing, or other similar activities except as needed for renewal or to maintain or improve plant health (483-B:4, XXIV-b).



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.: Sinclair, David, A.

Applicability: 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 including 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 project proposes residential site improvements including installation of porous pavement for the existing and proposed driveway expansion, installation of an underground electric/communication line and replacement of the existing sewer line between the existing home and New Castle Avenue.

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For standard permit projects, provide:
A Coastal Functional Assessment (CFA) report (refer to Section 3); and
A vulnerability assessment (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 603.04, Env-Wt 311.07, and Env-Wt 313.
A Coastal Vulnerability Assessment and Coastal Functional Assessment is attached to this application per Env-Wt 603.04 and Env-Wt 603.05. An Avoidance & Minimization Form is attached to this application, and also described in the attached narrative letter per Env-Wt 311.07 and Env-Wt 313.
Provide a narrative showing how the project meets the standard conditions in Env-Wt 307 and the approval criteria in Env-Wt 313.01.
The project plan set, specifically the Details-Sheet D1 includes all notes demonstrating compliance with Env-Wt 307
and Env-Wt 313.01.

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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 completed project will result in a porous pavement driveway surface that will need to be maintained by cleaning and vaccuming in order for the surface to infiltrate stormwater as intended (see Porous Pavement detail and maintenance requirements on Details-Sheet D1).
 ✓ 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.

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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		
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 <i>Highway Methodology Workbook Supplement</i> , 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 or tidal waters or associated sand dunes, the applicant shall:

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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, crustacea, 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:
a. Determine the time period over which the project is designed to serve;
A Coastal Vulnerability Assessment is attached to this appication.
 b. 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; See attached CVA

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c.	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;
	See attached CVA
d.	Identify areas of the proposed project site subject to flooding from SLR;
	See attached CVA
	Identify areas as wearth, leasted within the 100 years flandalain and subject to exceed fland view.
e.	Identify areas currently located within the 100-year floodplain and subject to coastal flood risk; See attached CVA
f.	Describe how the project design will consider and address the selected SLR scenario within the project design life, including in the design plans; See attached CVA
g.	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

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



Water Division/Land Resources Management Wetlands Bureau

Check the Status of your Application

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

APPLICANT LAST NAME, FIRST NAME, M.I.: Sinclair, David, A.

Attachment A can be used to satisfy some of the additional requirements for minor and major projects regarding avoidance and minimization, as well as functional assessment.

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 PROJECT PROPOSES RESIDENTIAL SITE IMPROVEMENTS INCLUDING INSTALLATION OF POROUS PAVEMENT FOR THE EXISTING AND PROPOSED DRIVEWAY EXPANSION, INSTALLATION OF AN UNDERGROUND ELECTRIC/COMMUNICATION LINE AND REPLACEMENT OF THE EXISTING SEWER LINE BETWEEN THE EXISTING HOME AND NEW CASTLE AVENUE. SINCE A GREAT PORTION OF THE DRIVEWAY TO BE CONVERTED TO POROUS PAVEMENT IS EXISTING, AND THE PROPOSED UTILITY IMPROVMENTS ARE EXISTING, ALTERNATIVES THAT WOULD PROVIDE THE SAME FUNCTION ARE EXTREMELY LIMITED. THE CONVERSION TO POROUS PAVEMENT DOES RESULT IN A REDUCTION OF IMPERVIOUS SURFACE ON THE SITE WHICH WILL PROVIDE A STORMWATER TREATMENT COMPONENT THAT WILL IMPROVE WATER QUALITY THAT LEAVES THE SITE AND ENTERS THE ADJACENT WETLAND RESOURCE.

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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, crustacea, shellfish and wildlife of significant value.
The proposed project does not impact any salt marshes.
The proposed project does not impact any suit maisness.
SECTION I.III – HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))
SECTION I.III – HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3)) Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.
Describe how the project maintains hydrologic connections between adjacent wetland or stream systems. The proposed project does not impact any wetlands and/or streams. The project impacts the previously developed
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SECTION I.IV - JURISDICTIONAL IMPACTS (Env-Wt 313.03(b)(4)) Describe how the project avoids and minimizes impacts to wetlands and other areas of jurisdiction under RSA 482-A, especially those in which there are exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of concern, or any combination thereof. The project proposes impacts to the previously developed 100' Tidal Buffer Zone and does not propose any impacts to exemplary natural communities or vernal pools. Per the NHB Review, marsh elder, shortnose sturgeon (Acipenser brevirostrum) and Atlantic sturgeon (Acipenser oxyrinchus) have been identified as sensitive species on or near the project site. Coordination with NHB and NHF & G in regards to the above protected species is expected and comments from those departments will be forwarded to NH DES upon receipt.

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

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

The proposed project does not impede recreation, public commerce, or navigation as it is located entirely on provate property.

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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 does not propose any impacts to floodplain wetlands as it is located entirely within uplands providing no decrease in flood storage potential.
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.

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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 wetland resources associated with the project site are not hydrologically connected to a groundwater aquifer or drinking water supply.
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 project does not propose any impacts to stream channels.

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PART II: FUNCTIONAL ASSESSMENT

REQUIREMENTS

applicable:

Ensure that project meets requirements of Env-Wt 311.10 regarding functional assessment (Env-Wt 311.04(j); Env-Wt 311.10).

FUNCTIONAL ASSESSMENT METHOD USED:

Wetland functions and values were assessed using the Highway Methodology Workbook, Wetland Functions and Values: A Descriptive Approach. U.S. Army Corps of Engineers. 1999. The Highway Methodology Workbook Supplement, Wetland Functions and Values: A Descriptive Approach. U.S. Army Corps of Engineers. New England Division. 32pp. NAEEP-360-1-30a.

NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: STEVEN D. RIKER, NH CWS #219

DATE OF ASSESSMENT: OCTOBER 14, 2022

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

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 LAST NAME, FIRST NAME, M.I.: Sinclair, David, A.

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 this narrative (attach additional pages if needed). Alternatively, the applicant may attach a completed Avoidance and Minimization Checklist (NHDES-W-06-050) to the permit application.

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

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

No, the project does not propose a water access 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. This is not applicable.

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?

Since the proposal includes improvements to an existing developed lot, his is not applicable.

2019-12-11 Page 1 of 2

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 on the subject property or on other property that is reasonably available to the applicant as described in the *Wetlands Best Management Practice Techniques for Avoidance and Minimization*?

THE PROJECT PROPOSES RESIDENTIAL SITE IMPROVEMENTS INCLUDING INSTALLATION OF POROUS PAVEMENT FOR THE EXISTING AND PROPOSED DRIVEWAY EXPANSION, INSTALLATION OF AN UNDERGROUND ELECTRIC/COMMUNICATION LINE AND REPLACEMENT OF THE EXISTING SEWER LINE BETWEEN THE EXISTING HOME AND NEW CASTLE AVENUE. SINCE A GREAT PORTION OF THE DRIVEWAY TO BE CONVERTED TO POROUS PAVEMENT IS EXISTING, AND THE PROPOSED UTILITY IMPROVMENTS ARE EXISTING, ALTERNATIVES THAT WOULD PROVIDE THE SAME FUNCTION ARE EXTREMELY LIMITED. THE CONVERSION TO POROUS PAVEMENT DOES RESULT IN A REDUCTION OF IMPERVIOUS SURFACE ON THE SITE WHICH WILL PROVIDE A STORMWATER TREATMENT COMPONENT THAT WILL IMPROVE WATER QUALITY THAT LEAVES THE SITE AND ENTERS THE ADJACENT WETLAND RESOURCE.

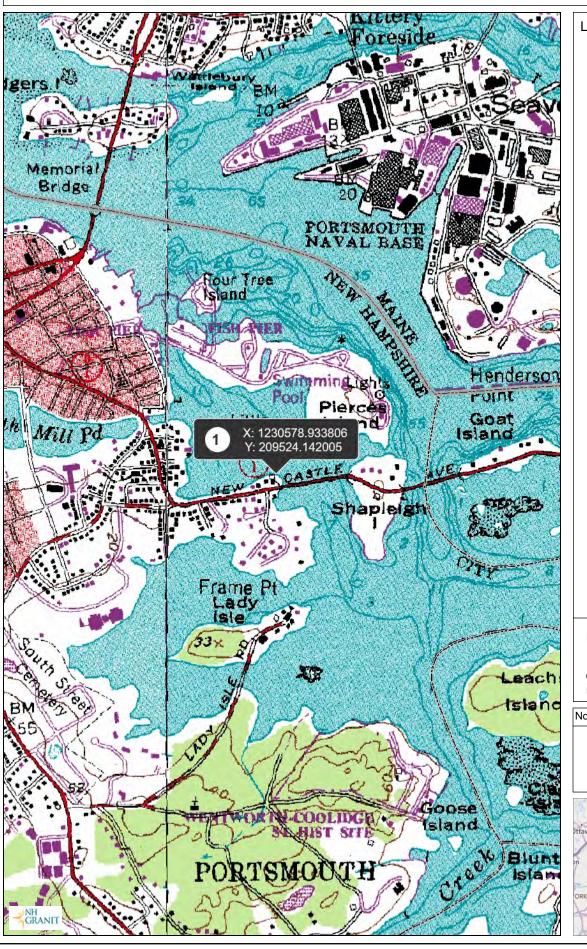
SECTION 5 - CONFORMANCE WITH Env-Wt 311.10(c) (Env-Wt 311.07(b)(4))

How does the project conform to Env-Wt 311.10(c)? Please note that for a minimum impact project, the applicant may replace this explanation with a certification signed by a certified wetland scientist that the project is located and designed to minimize impacts to wetlands functions and values.

The proposed project located within the previously developed 100' Tidal Bufer Zone will not impact the nearby tidal resources ability to maintain its current functions and values. The improvements will not impede tidal flow or alter hydrology, it will not deter use by wildlife species that currently use the wetland area, and it will not impede any migrational fish movement. As a result, The project will have no impact on the functions and values of the adjacent tidal wetland.

2019-12-11 Page 2 of 2

Map by NH GRANIT



Legend

- State
- County
- \square City/Town

Map Scale

1: 12,988



© NH GRANIT, www.granit.unh.edu Map Generated: 8/4/2022

Notes





Property Information

Property ID 0207-0005-0000 Location 393 NEW CASTLE AVE Owner

SINCLAIR DAVID A



MAP FOR REFERENCE ONLY NOT A LEGAL DOCUMENT

City of Portsmouth, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 3/9/2022 Data updated 3/9/2022

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

David A. Sinclair 393 New Castle Avenue Portsmouth, NH

Applicant/Owner(s)

Мар	Lot	Deed	Owner (s) First/Trust	Owner(s) Last, Trustee	Mailing Address	City	State	Zip
207	5		David	Sinclair	765 Middle Street	Portsmouth	NH	03801

Engineer	Ambit Engineering Civil Engineers & Land Surveyors	200 Griffin Road, Unit #3	Portsmouth	NH	03801
Other Consultants					
Other Consultants					
Other Consultants					

Job#	3050.53		Abutters					
Мар	Lot	Deed	Owner(s) First/Trust	Owner(s) Last /Trustee	Mailing Address	City	State	Zip
207	4		Todd & Jan	Peters	379 New Castle Avenue	Portsmouth		03801

5 January 2023

Todd & Jan Peters 379 New Castle Avenue Portsmouth, NH 03801

RE: New Hampshire Wetland Application for site improvements for David A. Sinclair, 393 New Castle Avenue, Portsmouth, NH.

Dear Property Owner,

Under NH RSA 482-A, this letter is to inform you in accordance with State Law that a Wetlands Permit will be filed with the New Hampshire Department of Environmental Services (DES) Wetlands Bureau for a permit to perform residential site improvements, on behalf of your abutter, David A. Sinclair.

This letter is sent to inform you as an abutter to the above-referenced property (according to local Municipal records) that **David A. Sinclair** proposes a project that requires construction in the previously developed tidal buffer zone, and jurisdictional wetland areas.

Plans are on file at this office, and once the application is filed, plans that show the proposed project and wetland and other jurisdictional impacts will be available for viewing during normal business hours at the office of the **Portsmouth** clerk, **Portsmouth** city offices, or once received by DES, at the offices of the DES Wetlands Bureau, (8 a.m. to 4 p.m.) (603) 271-2147. It is suggested that you call ahead to the appropriate office to ensure the application is available for review.

Please feel free to call if you have any questions or comments.

Sincerely,

Steven D. Riker

NH Certified Wetland Scientist – Permitting Specialist

CERTIFIED MAIL/Return Receipt Requested

30	U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only 1893.02
56	For delivery information, visit our website at www.usps.com®.
6196	Certified Mail Fee
2000	Extra Services & Fees (check box, add fee as appropriate) Return Recelpt (electronic) \$ Certified Mail Restricted Delivery \$ Adult Signature Required \$ Adult Signature Restricted Delivery \$
0470	Postage \$ Total Postage and Fees \$
7022	Sent To PETERS Street and Apt. No., or PO Box No. 319 New CASTLE AVENUE City, State, ZIP+4*
	PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

2.2

B =













Memo

NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.

Maps and NHB record pages are confidential and should be redacted from public documents.

To: John Chagnon, Ambit Engineering, Inc.

200 Griffin Road

Unit 3

Portsmouth, NH 03801

From: NHB Review, NH Natural Heritage Bureau

Date: 8/30/2022 (valid until 08/30/2023)

Re: Review by NH Natural Heritage Bureau

Permits: NHDES - Wetland Standard Dredge & Fill - Major, USACE - General Permit

NHB ID: NHB22-2537 Town: Portsmouth Location: 393 New Castle Avenue

Description: The project proposes an extension of the existing tidal docking structure.

cc: NHFG Review

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

Comments NHB: Please indicate if work will be completed by a barge and/or if any shoreland areas will be used for construction access and/or staging. F&G: Please indicate proposed project timing. Please refer to NHFG consultation requirements below.

Plant species	State ¹	Federal	Notes
marsh elder (Iva frutescens)	T		Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
Vertebrate species	State ¹	Federal	Notes
Atlantic Sturgeon (Acipenser oxyrinchus oxyrinchus)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).
Shortnose Sturgeon (Acipenser brevirostrum)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet

Memo

NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.

Maps and NHB record pages are confidential and should be redacted from public documents.

been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

For all animal reviews, refer to 'IMPORTANT: NHFG Consultation' section below.

Disclaimer: 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.

IMPORTANT: NHFG Consultation

If this NHB Datacheck letter DOES NOT include <u>ANY</u> wildlife species records, then, based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

If this NHB Datacheck letter includes a record for a threatened (T) or endangered (E) wildlife species, consultation with the New Hampshire Fish and Game Department under Fis 1004 may be required. To review the Fis 1000 rules (effective February 3, 2022), please go to https://wildlife.state.nh.us/wildlife/environmental-review.html. All requests for consultation and submittals should be sent via email to NHFGreview@wildlife.nh.gov or can be sent by mail, and must include the NHB Datacheck results letter number and "Fis 1004 consultation request" in the subject line.

If the NHB DataCheck response letter does not include a threatened or endangered wildlife species but includes other wildlife species (e.g., Species of Special Concern), consultation under Fis 1004 is not required; however, some species are protected under other state laws or rules, so coordination with NH Fish & Game is highly recommended or may be required for certain permits. While some permitting processes are exempt from required consultation under Fis 1004 (e.g., statutory permit by notification, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule), coordination with NH Fish & Game may still be required under the rules governing those specific permitting processes, and it is recommended you contact the applicable permitting agency. For projects not requiring consultation under Fis 1004, but where additional coordination with NH Fish and Game is requested, please email: Kim Tuttle kim.tuttle@wildlife.nh.gov with a copy to NHFGreview@wildlife.nh.gov, and include the NHB Datacheck results letter number and "review request" in the email subject line.

Contact NH Fish & Game at (603) 271-0467 with questions.

CONFIDENTIAL – NH Dept. of Environmental Services review

NHB22-2537 Atlantic Sturgeon Shortnose Sturgeon marsh elder marsh elder Legend Site bounds Plant Animal Community System towns ource: Es d, Waxar, Earinstar ©eographies, and 0.025 0.05 0.075 0.1 0.125 Miles

NHB22-2537 EOCODE: PDAST58090*005*NH

New Hampshire Natural Heritage Bureau - Plant Record

marsh elder (Iva frutescens)

Conservation Status Legal Status

Global: Demonstrably widespread, abundant, and secure Federal: Not listed

Imperiled due to rarity or vulnerability

Description at this Location

Listed Threatened

State:

Conservation Rank: Excellent quality, condition and landscape context ('A' on a scale of A-D). This rank may be for the state rather than relative to others in the region. Comments on Rank:

2021: Lady Isle: Plants intermittently distributed along the westernmost portion of the island. Detailed Description:

> 2020: Tidal Pool: Species observed in flower. 2017: Leachs Island: Several thousand plants spread along 800+ feet of shoreline. 10-20% dieback, 10-15% yellowing, 65-80% normal to

vigorous. Aphids observed on 80% of clumps. 2016: Peirce Island: Additional

subpopulations located, raising total number of plants to over 600. Plants appear to be in much better health than 2014, with all individuals in fruit and in good vigor. Shaws Hill: Several clumps over an area approximately 30 x 15 feet. Estimated at over 200 individuals. Tidal Pool: Plants in 3 areas along shoreline near tidal pool. 2014 Peirce Island: Over 500 plants were observed, all stunted, with approximately 50-60% dead stems, mostly confined

to the upper portions of the plants. 1996: Constant observation since 1953 reported,

including all stages of phenology and age structure. 1982: Good clump observed. 2017: Leachs Island: Upper edge of brackish marsh/rocky shore. Plants absent from areas

with broader expanse of marsh. Rocks present in most areas where the plants are growing. Associated species include black oak (Ouercus velutina), saltmarsh rush (Juncus gerardii), sea-blite (Suaeda sp.), hastate-leaved orache (Atriplex cf. prostrata), smooth cordgrass (Spartina alterniflora), Carolina sea-lavender (Limonium carolinianum), and seaside

band immediately above the highest observed wrack line along the shore. Associated upland species include staghorn sumac (*Rhus hirta*), autumn-olive (*Elaeagnus umbellata* var. parvifolia), Asian bittersweet (Celastrus orbiculatus), and speckled alder (Alnus incana ssp. rugosa). The saline areas downslope of the marsh elder contained over 50% unvegetated

plantain (Plantago maritima ssp. juncoides). 2016: Peirce Island: Population forms a narrow

substrate, as well as a mixture of cordgrass (Spartina sp.) and saltgrass (Distichlis spicata). Shaws Hill: Surrounding land use is developed. All plants below highest observable tide line in high salt marsh, located among saltmeadow cordgrass (Spartina patens), smooth cordgrass (Spartina alterniflora), and seaside goldenrod (Solidago sempervirens). Tidal

Pool: Sagamore Creek/Great Bay shoreline, with smooth cordgrass (Spartina alterniflora), saltmarsh rush (Juncus gerardii), saltmeadow cordgrass (Spartina patens), seaside goldenrod (Solidago sempervirens), and sea-blite (Suaeda spp.). 1996: On shores of several islands and peninsulas in the more or less enclosed bay system. Associated plant species: Solidago

sempervirens (seaside goldenrod), Juncus gerardii (salt marsh rush), Spartina patens (saltmeadow cord-grass), Triglochin maritimum (arrow-grass), Elymus virginicus (Virginia wild rye), Atriplex patula (narrow-leaved orach), and Artemisia vulgaris (common mugwort).

Substrate: gravel and marsh peat and muck. 1982: On shore at Pleasant Point.

2021: Lady Isle: Site is referred to Belle Isle on reporting form, and appears as Belle Island on some maps, but is called Lady Isle on USGS topo. 2016: Peirce Island: "The population

currently appears to be in good health, although the results of the June 2014 surveys indicated that there may be some intermittent pressure on this population. The propensity of this species to grow in a very narrow band along the tide line does not allow for rapid adaptation to changing sea levels, storm events, or polluted runoff that a larger, robust population may resist. If sea levels gradually rise as expected, the marsh elder will be unable to move inland due to a small but steep cut bank that forms the upland break adjacent to the marsh elder population. The remaining subpopulations may also be getting shaded by the

adjacent upland vegetation, which appears to be encroaching on the shoreline. This vegetation is comprised of large shrub species and the invasive Oriental bittersweet that is

capable of overtaking the native plants in the area."

General Area:

General Comments:

NHB22-2537 EOCODE: PDAST58090*005*NH

Management

Comments:

Location

Survey Site Name: Little Harbor, back channel

Managed By: Little Harbor Trust

County: Rockingham Town(s): Portsmouth

Size: 61.4 acres Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2021: Lady Isle: Shoreline along western end of Lady Isle. 2017: Leachs Island: Island in New

Castle only accessible by boat. Plants observed on south shore of island. 2016: Peirce Island: Along the southern shore of Peirce Island, along the edge of a small cove west of the wastewater treatment facility. Shaws Hill: Take Laurel Lane off New Castle Avenue, bear left onto driveway right-of-way servicing 51A and 51B Laurel Lane. At end of right-of-way, 51B will be located on the right. Tidal Pool: Along Sagamore Creek shoreline on Creek Farm Reservation property in Portsmouth. In the vicinity of Rte. 1B which encircles the Little Harbor back channel from Portsmouth to New Castle

and Rye. Many of the sites are visible only by boat.

Dates documented

First reported: 1953 Last reported: 2021-02-10

EOCODE: NHB22-2537 AFCAA01042*003*NH

New Hampshire Natural Heritage Bureau - Animal Record

Atlantic Sturgeon (Acipenser oxyrinchus oxyrinchus)

Conservation Status Legal Status

Federal: Listed Threatened Global: Rare or uncommon

Listed Threatened State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank:

Detailed Description: 2016: 1 individual, sex unknown, detected in the lower Piscataqua River. 2015: 1 individual,

sex unknown, detected in Portsmouth Harbor. 2012: 1 individual, sex unknown, detected in

Little Bay.

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataqua River.

General Comments: Management

Comments:

Location

Survey Site Name: Piscataqua River

Managed By:

County:

Town(s): Out-Of-State

Size: 7749.3 acres Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataqua River.

Dates documented

First reported: 2012-06-02 Last reported: 2016-05-27

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.

NHB22-2537 EOCODE: AFCAA01010*001*NH

New Hampshire Natural Heritage Bureau - Animal Record

Shortnose Sturgeon (Acipenser brevirostrum)

Legal Status Conservation Status

Federal: Listed Endangered Global: Rare or uncommon

State: Listed Endangered State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank: --

Detailed Description: 2016: 2 individuals, 1 female and 1 sex unknown, detected in Portsmouth Harbor and the

lower Piscataqua River. 2015: 3 females and 2 other individuals, sex unknown detected in Portsmouth Harbor. 2014: 1 female detected moving from Portsmouth Harbor up the Piscataqua River to the mouth of the Cocheco River. 2012: 1 female detected in Little Bay.

2011: 1 female detected in Little Bay. 2010: 1 female detected in Little Bay.

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataqua River.

General Comments: ---Management ---

Comments:

Location

Survey Site Name: Piscataqua River

Managed By:

County:

Town(s): Out-Of-State

Size: 7749.3 acres Elevation:

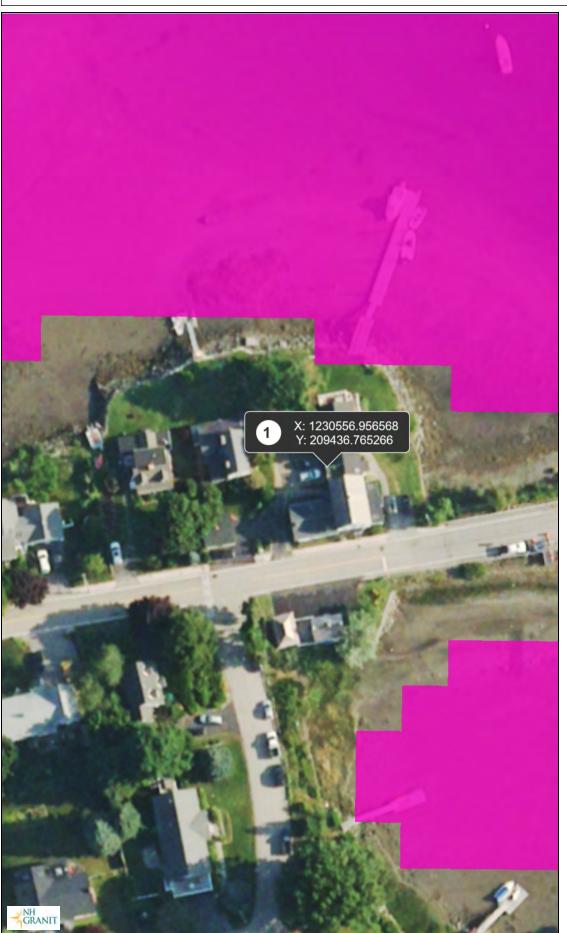
Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataqua River.

Dates documented

First reported: 2010-11-03 Last reported: 2016-10-20

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.



Legend

- State
- County
- \square City/Town

WAP 2020: Highest Ranked Wildlife Habitat

- 1 Highest Ranked Habitat in NH
 2 Highest Ranked Habitat in Regior
- 3 Supporting Landscape

Coastal 2019 1-foot RGB

Map Scale

1: 812



© NH GRANIT, www.granit.unh.edu Map Generated: 1/6/2023

Notes

Highest Ranked Wildlife Habitat



Book: 6052 Page: 2161



19045728 10/31/2019 02:25:11 PM Book 6052 Page 2161 Page 1 of 2 Register of Deeds, Rockingham County

LCHIP ROA468893 25.00
TRANSFER TAX RO092577 28,200.00
RECORDING 14.00
SURCHARGE 2.00

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS: That 393 New Castle Avenue LLC, a New Hampshire Limited Liability Company, with a mailing address of PO Box 393, City of Portsmouth, County of Rockingham and State of New Hampshire 03802, for consideration paid grant(s) to David A. Sinclair and Nicole J. Giusto, husband and wife, of 765 Middle Street, City of Portsmouth, County of Rockingham, and State of New Hampshire 03801 as joint tenants with rights of survivorship, with WARRANTY COVENANTS:

A certain tract or parcel of land and flats with the buildings thereon situated in Portsmouth, in the County of Rockingham and State of New Hampshire being more particularly bounded and described as follows:

Bounded Northerly and Easterly by the Piscataqua River; Southerly by New Castle Avenue, one hundred eleven (111) feet, more or less; Westerly one hundred fourteen (114) feet, more or less, by lane or way sixteen (16) feet wide separating this property and that of one Burke; with a right-of-way over, in and upon said lane or way; together with the benefit of any other easements or rights-of-way appurtenant to the premises to be conveyed and subject to any easements or rights-of-way which may exist in favor of others.

SUBJECT TO and with the benefit of a certain Memorandum of Understanding between to City of Portsmouth, New Hampshire and Kenneth Rothwell and Alida Rothwell dated September 22, 1995, recorded in the Rockingham County Registry of Deeds at Book 3120, Page 2672 to the extent applicable in light of the March 16, 2017 City of Portsmouth Planning Board approval of a Conditional Use Permit associated with 390 New Castle Ave.

Meaning and intending to describe and convey the same premises conveyed to 393 New Castle Avenue LLC from 393 New Castle Avenue LLC by virtue of a deed dated February 19, 2018 and recorded on February 23, 2018 in the Rockingham County Registry of Deeds at Book 5894, Page 1193.

The property is not the residence of the grantor or the grantor's spouse and is not subject to homestead rights.

Book: 6052 Page: 2162

	· 1/2	
Executed this	00_	day of October, 2019.

393 New Castle Avenue LLC

Mark P. Hepp Revocable Trus

Managing Member Mark P. Hepp, Trustee Ellen M. Hepp Revocable Trust Managing Member Ellen M. Hepp, Trustee

State of New Hampshire County of Rockingham

Then personally appeared before me on this day of October, 2019, Mark P. Hepp, Trustee of the Mark P. Hepp Revocable Trust, and Ellen M. Hepp, Trustee of the Ellen M. Hepp Revocable Trust as the duly authorized managing members of the 393 New Castle Avenue LLC, and acknowledged the foregoing to be their free act and deed.

ELIZABETH A. MOREAU Notary Public-New Hampshire My Commission Expires May 01, 2024

Notary Public/Justice of the Peace Commission expiration: 5/1/2021

Coastal Vulnerability Assessment

Prepared for:

David A. Sinclair 393 New Castle Avenue Portsmouth, New Hampshire 03801

Prepared By:
Ambit Engineering, Inc
200 Griffin, Unit 3
Portsmouth, New Hampshire 03801



Introduction

This Coastal Vulnerability Assessment (CVA) is being provided in support of a New Hampshire Department of Environmental Services (NHDES) Wetland Permit Application for residential site improvements including installation of porous pavement for the existing and proposed driveway expansion, installation of an underground electric/communication line and replacement of the existing sewer line between the existing home and New Castle Avenue. (herein referred to as "project site"). The project site is a residential lot located on the northern side of New Castle Avenue with an occupied residential dwelling. The surrounding land use is residential with similar accessory structures, driveways and landscaped areas.

Methods

On October 14, 2022, Steven D. Riker, CWS from Ambit Engineering, Inc. conducted a site visit to evaluate coastal characteristics of the project site, as well as the functions and values of the tidal wetland area (see attached Coastal Functions and Values assessment). This CVA was completed utilizing the NH Coastal Flood Risk Science and Technical Advisory Panel (2019). New Hamsphire Coastal Flood Risk Summary Part: Guidance for Using Scientific Projections. Report Published by the University of New Hampshire (herein referred to as Guidance Document).

Part 1.1 – Project Type

This project proposes site improvements on the residential lot adjacent to the Piscataqua River. The purpose of the site improvements are to provide the owner/applicant with suitable on-site parking for vehicles as well as adequate space for vehicles to access/egress to New Castle Avenue. For more details regarding construction and construction sequences; please refer to the NH DES Wetlands Bureau Application Letter to the Wetlands Inspector and attached NHDES Permit Plan – C2 and Detail Sheet D1.

Part 1.2 - Project Location

The project location is 393 New Castle Avenue, Tax Map 207, Lot 5 and consists of .34 acres of residential upland and shoreline frontage along the Piscataqua River Access to the project site will be from New Castle Avenue for the staging of equipment and materials.

Part 1.3 – Timeline for Desired Useful Life

The desired useful life for this project is considered to be 2100 (50-100 years) due to the fact that the proposed improvements have a life expectancy of approximately 50-75 years.

2.1 – Project Risk Tolerance

The proposed project is considered to have a high risk tolerance considering that the site improvements have a relatively low cost, are relatively easy to modify, propose little to no implications on public function and/or safety; and has relatively low sensitivity to inundation given the existing elevation of the proposed improvements relative to the elevation of MHW.

2.2 - Risk Tolerance of Important Access and Service Areas

The risk tolerance of surrounding access and service areas is not applicable to this project, as the project occurs on a residential, private lot and is intended for private use; primary access of which would be by foot from the residence.

3.1 – Relative Sea Level Rise Scenario (RSLS)

Based on Table 3 in the Guidance Document (see table below), the RSLS for this project (based on the previously determined high risk tolerance) is considered to be on the lower magnitude, and higher probability. The following table depicts the probable see level rise from 2000 through 2150.

Table 3 from the Guidance Document:

Risk Tolerance	High	Medium	Low	Extremely Low
Example Project	Walking Trail	Local Road	Wastewater	Hospital
	*Docking structure	Culvert	Treatment Facility	
	& Stone Revetment		•	
Timeframe	Ma	nage to the follow	ving sea level rise (f	t*)
	Со	000		
	Lower magnitude	4		Higher magnitude
	Higher probability			Lower probability
2030	0.7	0.9	1.0	1.1
2050	1.3	1.6	2.0	2.3
2100	2.9	3.8	5.3	6.2
2150	4.6	6.4	9.9	11.7

^{*}Added by Ambit Engineering, Inc. based on the application of the Guidance Document towards our project.

3.2 – RSLR Impacts to the Project Evaluation

Projected SLR's as shown above added to the existing elevation of MHW (8.25) provide a future elevation for which the proposed project should be evaluated upon. Relative to surrounding topography and considering the High Risk Tolerance of this project; it is not expected the projected RSLR for this project needs to be a strong consideration. The proposed driveway will be constructed at approximate elevation 14. The projected sea level rise in year 2100 is 2.9 feet resulting in future MHW elevation of 11.15 feet.

3.3 – Other Factors

Other factors were evaluated in conjunction with RSLR including surface water levels, groundwater levels, and current velocities which will increase with sediment erosion and deposition, which will also change. The projects position in the landscape was also considered relative to other infrastructure. The closest surface water to the project site is the adjacent Piscataqua River, projections of RSLR of which have already been depicted and discussed. The proposed project is also located outside of the Flood Hazard Zone (see Existing Conditions Plan-Sheet C1). MHW associated with the project site is located approximately at elevation 8.25. Considering a 2.9 foot RSLR in the year 2100 resulting in an elevation of 11.15, and the proposed driveway constructed at approximate elevation 14, the pervious technology associated with the driveway will function as intended throughout the expected useful life of the residential structure it will serve, simply by the elevation at which it will be constructed.

4.1 – RSLR and Coastal Storms

Due to the project site location being immediately adjacent to the Piscataqua River, it is anticipated that RSLR and storm surge on the proposed project site will be comparable to adjacent properties with similar structures. Considering the high risk tolerance of this project, it is not anticipated that

this project has a significant level of vulnerability to RSLR and coastal storms given the elevation at which the driveway will be constructed.

4.2 – Other Factors

Other factors such as surface water levels, groundwater levels, wind and current velocities have been considered. Considering the high risk tolerance of this project, it is not anticipated that this project has a significant level of vulnerability to groundwater levels, wind and current velocities given the elevation at which the driveway will be constructed.

5.1 - Projected RSL-Induced Groundwater Rise

Based on the Sea-Level Rise Mapper, there is projected groundwater rise associated with RSLR on the project site, however given that the driveway will be constructed at elevation 14, we do not believe groundwater rise should be a strong consideration (see 5.2 below).

5.2 – Projected Groundwater Depth at the Project Location

Determining Groundwater Depth on the site would require geotechnical drilling, however, given knowledge of typical groundwater depths in similar soil parent materials on the NH seacoast, groundwater would likely be encountered between 3 and 5 feet below the soil surface. A test pit was performed on October 14, 2022 and it was determined that Estimated Seasonal High Water Table (ESHWT) is at 32" below the soil surface. Please note that ESHWT is an "estimate" and is certainly subject to seasonal fluctuations, variations in weather & precipitation and various other factors. Please also note that the main purpose of performing the test pit was to assess depth to ledge as shallow depth to bedrock would indicate that the location would not be suitable for a pervious technology. NH Granit does not have RSLR Induced Groundwater Rise data mapped for the project site, but does have data mapped in very proximity which would likely also apply to the subject site. NH Granit indicates that a 1.2-2.2 foot groundwater rise would likely be induced by a 2 foot RSLR. Using an average of 4 feet for a groundwater depth as described above, adding 2.2 for induced groundwater rise, resulting in a projected groundwater depth of 22" below the soil surface. Given this separation to the soil surface, we believe the pervious technology for the proposed driveway will function as intended as the base needed for porous pavement is 22" thick.

6.1 – Best Available Precipitation Estimates

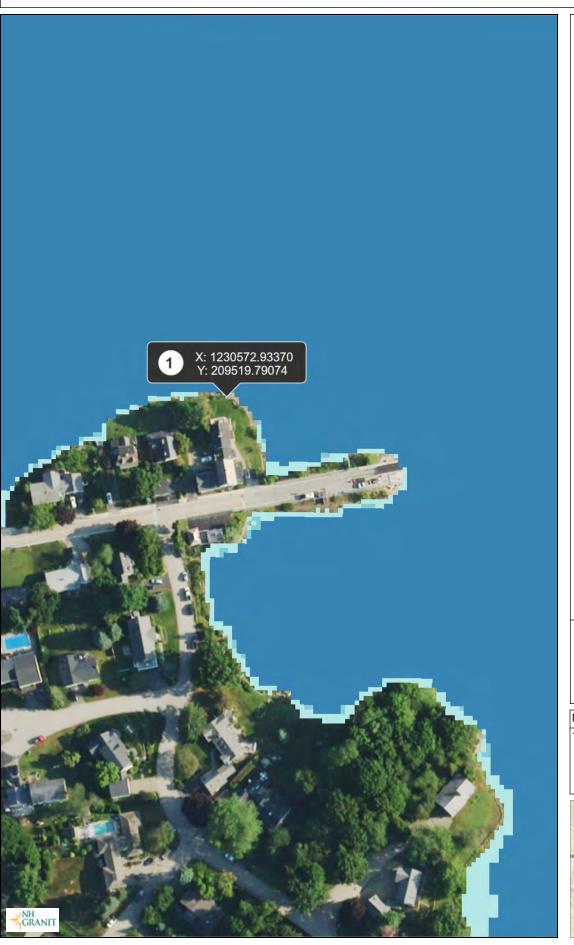
Please see the attached Extreme Precipitation Tables from the Northeast Regional Climate Center.

7.1 – Cumulative Coastal Flood Risk to the Project

Based on the high risk tolerance of this project combined with all other factors including RSLR, coastal storms, RSLR-induced groundwater rise, extreme precipitation and/or freshwater flooding occurring together; this project is not considered to be at high risk from coastal flooding.

7.2 – Possible Actions to Mitigate Coastal Flood Risk

Given the high risk tolerance of the proposed project, it is not anticipated that it is necessary to mitigate for coastal flood risk beyond what has already been incorporated into the design plan for the proposed site improvements. The projected SLR scenario through 2100 is 2.9' and the proposed improvements have been designed to account for this projection.



Legend

MHHW + 1-ft SLR

0 - 2

4-6

8 - 10 Coastal 2019 1-foot RGB

Map Scale

1: 1,624

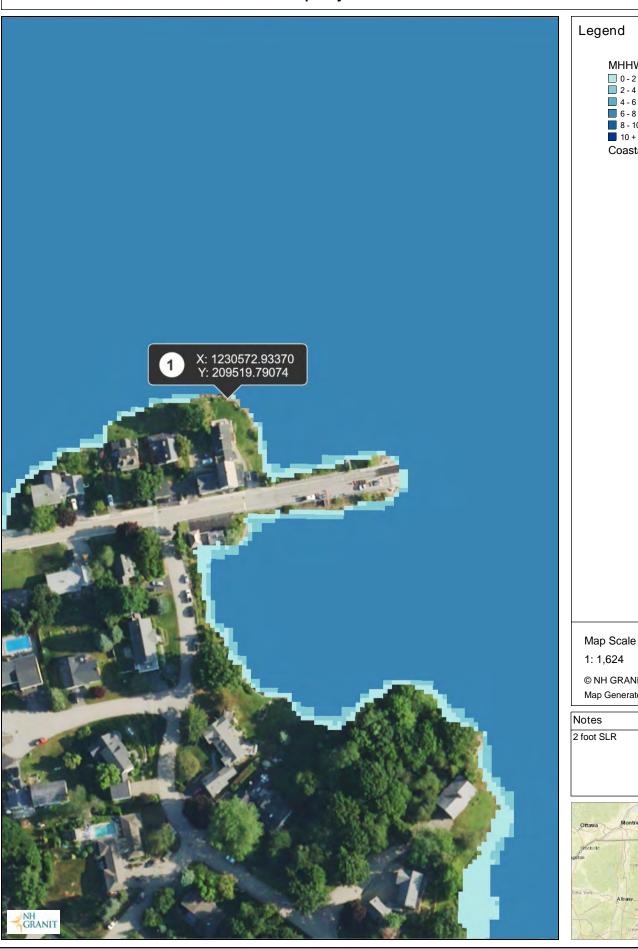


© NH GRANIT, www.granit.unh.edu Map Generated: 8/4/2022

Notes

1 foot SLR





MHHW + 2-ft SLR

0 - 2 2 - 4

4 - 6

6 - 8 8 - 10

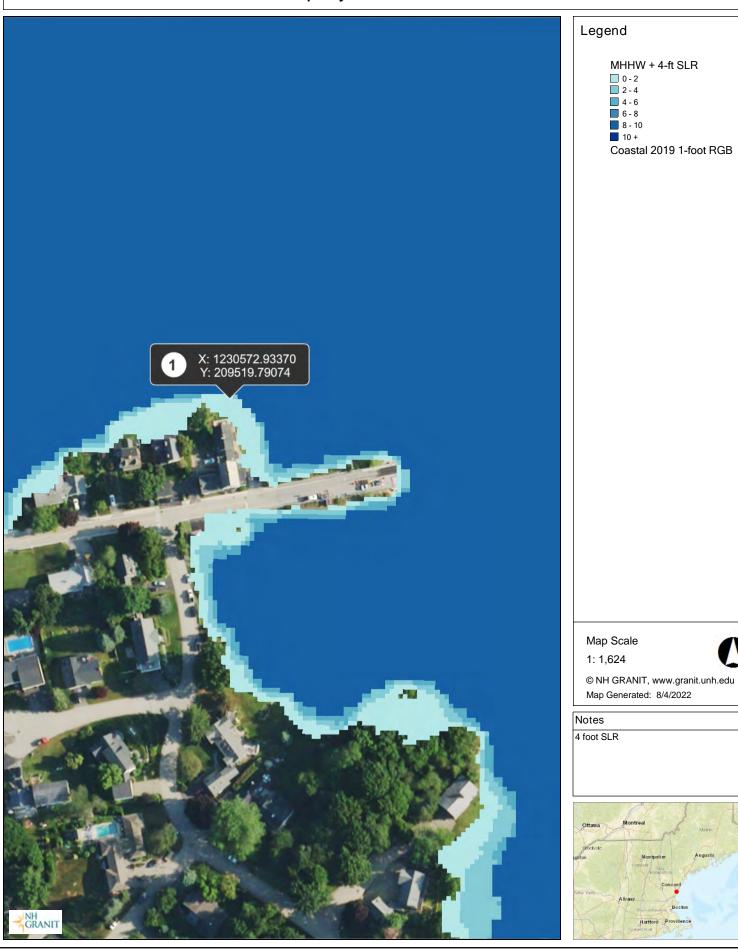
10 +

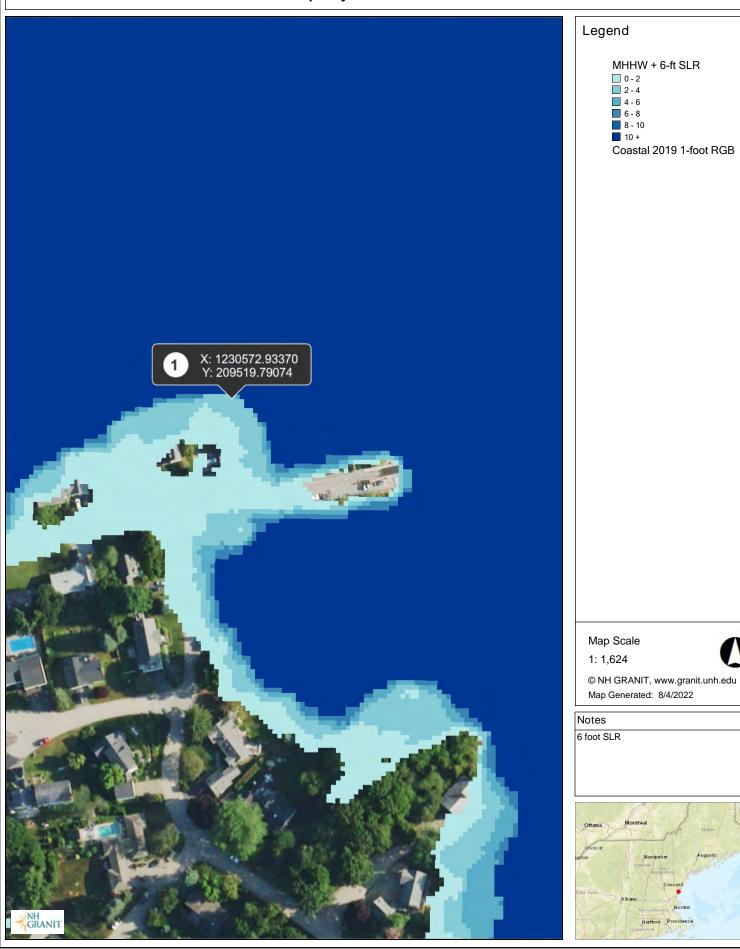
Coastal 2019 1-foot RGB

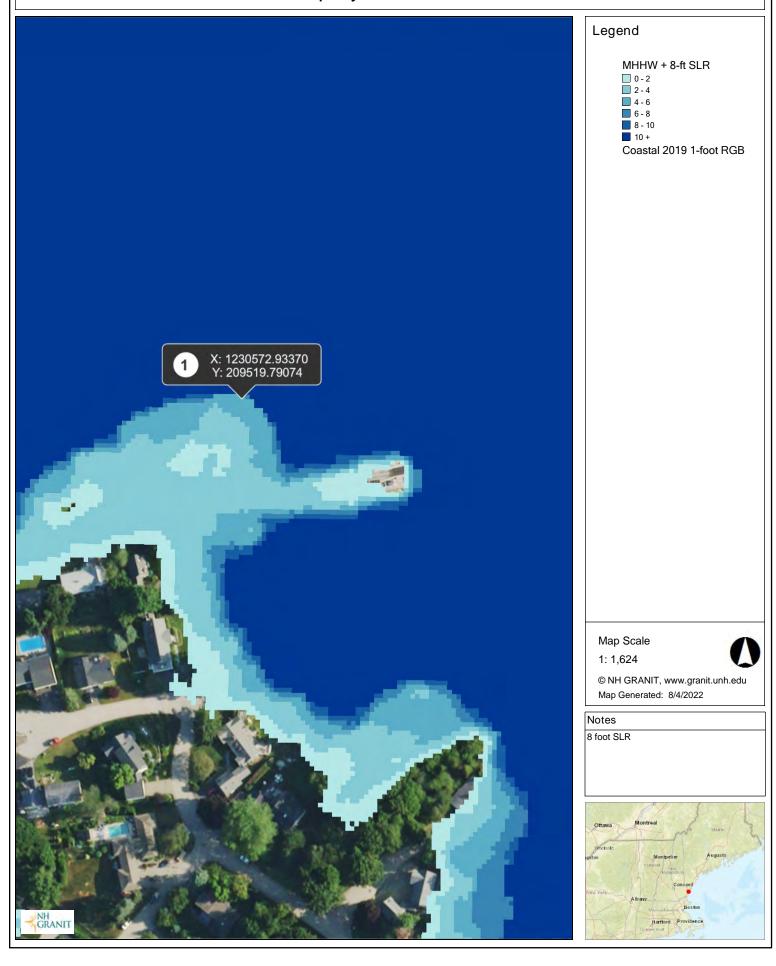


© NH GRANIT, www.granit.unh.edu Map Generated: 8/4/2022









Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches,

Smoothing Y State Location

Longitude 70.745 degrees West Latitude 43.071 degrees North

Elevation 0 fee

Date/Time Tue, 21 Jan 2020 12:37:30 -0500

Precipitation estimates multiplied by 1.15 are listed below:

1-yr: 3.06 2-yr: 3.69 10-yr: 5.59 50-yr: 8.49

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1br	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.04	lyr	0.70	0.98	1.21	1.56	2.03	2.66	2,92	1yr	2.35	2,81	3,22	3.94	4.55	lyr
2yr	0.32	0.50	0.62	0.81	1.02	1.30	2yr	0.88	1.18	1.52	1.94	2.49	3.21	3.57	2yr	2.84	3.43	3.94	4.68	5.33	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.61	5yr	1.08	1.47	1.89	2.43	3.14	4.07	4.58	5yr	3,60	4.40	5.04	5,94	6.70	5yr
10yr	0.41	0.65	0.82	1.12	1.45	1.89	10yr	1.25	1.73	2.23	2,90	3.75	4.86	5.53	10yr	4.30	5.32	6.09	7.11	7.98	10yr
25yr	0.48	0.76	0.97	1.34	1.78	2.34	25yr	1.54	2.15	2.78	3.64	4.74	6.17	7.10	25yr	5.46	6.83	7.81	9.02	10.05	25yr
50yr	0.54	0.86	1.10	1.54	2.08	2.77	50yr	1.79	2.53	3.30	4.33	5.67	7,38	8.58	50yr	6.54	8.25	9.43	10.81	11.97	50yr
100yr	0,60	0.97	1.25	1.78	2.43	3.27	100yr	2.09	2.99	3.92	5.17	6.77	8.85	10.37	100yr	7.83	9.98	11.39	12.96	14.26	100yr
200yr	0,68	1,11	1.43	2.05	2.84	3.85	200yr	2.45	3.53	4.63	6.14	8.09	10.60	12.54	200yr	9.38	12.06	13.76	15.54	17.00	200yr
500yr	0.80	1.32	1.72	2.50	3.50															21.47	

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		Hir	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
lyr	0.23	0.36	0.44	0.59	0.72	0.88	1yr	0.62	0.86	0.93	1.33	1.69	2,25	2.48	1yr	1 99	2.38	2.87	3.20	3.91	Lyr
2yr	0.31	0.49	0.60	0.81	1.00	1.19	2yr	0,86	1,16	1,37	1.82	2,33	3.06	3.45	2yr	2.71	3.32	3.82	4.55	5.09	2yr
5yr	0.35	0.54	0.67	0.92	1.17	1.40	5yr	1.01	1.37	1,61	2.11	2.73	3 78	4.18	5yr	3.35	4.02	4.72	5.53	6.23	5yr
10yr	0.39	0.59	0.73	1.03	1.33	1.60	10yr	1.14	1.56	1.80	2.38	3.05	4,36	4.85	10yr	3.86	4.66	5 43	6.40	7.18	10yr
25yr	0.44	0.67	0.83	1.19	1.56										25yr						25yr
50yr	0.48	0.73	0.91	1.31	1.76	2.16	50yr	1.52	2 12	2.34	3.06	3.91	5.36	6.76	50yr	4 75	6.50	7.69	9.01	9 99	50yr
100yr	0.53	0.81	1,01	1.46	2.01	2.46	100yr	1 73	2.41	2.62	3.40	4.32	6.03	7.80	100yr	5.34	7.50	8.92	10.47	11.53	100yr
200yr	0.59	0.89	1.13	1.63	2.27	2,81	200yr	196	2.75	2.93	3.76	4.76	6.77	8.99	200yr	5.99	8.64	10.34	12.17	13.33	200yr
500yr	0.68	1.02	1.31	1.90	2.70	3.36	500yr	2.33	3.28	3.41	4.28	5.40	7,89	10.84	500yr	6 99	10,43	12,56	14.89	16.15	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		thr	2hr	3hr	6hr	12hr	24hr	48hr		Iday	2day	4day	7day	10day	
lyr	0.29	0.44	0.54	0.72	0.89	1.09	lyr	0.77	1.06	1 26	1.74	2.20	2,97	3.17	lyr	2.63	3,05	3.58	4.37	5.04	1yr
2yr	0.34	0.52	0.64	0.87	1_07	1.27	2yr	0.92	1.24	1.48	196	2.52	3.42	3.71	2yr	3 03	3.57	4.10	4.84	5.62	2yr
5yr	0.40	0.62	0.77	1.05	1.34	1.62	5yr	1 15	1.59	1.89	2.54	3.26	4.34	4.97	5yr	3.84	4.78	5,38	6.39	7.17	5yr
10yr	0.47	0.72	0.89	1.25	1.61	1.98	10yr	1.39	1.94	2.29	3.11	3.97	5.34	6.22	10yr	4.72	5 98	6.84	7.86	8.77	10yr
25yr	0.58	0.88	1.09	1.56	2.05	2.58	25yr	1.77	2.52	2.96	4.08	5.17	7.74	8.37	25yr	6.85	8.05	9.20	10.36	11.43	25yr
50yr	0.67	1.03	1.28	1,84	2.47	3.14	50yr	2,13	3.07	3.61	5.02	6.35	9.69	10.50	50yr	8.57	10.10	11.51	12.76	13.99	50yr
100yr	0.79	1,20	1.50	2.17	2.98																
200yr	0.93	1.40	1.77	2.57	3.58	4.68	200yr	3.09	4.57	5.36	761	9.61	15,19	16.53	200yr	13.44	15.89	18.08	19.41	20.97	200yr
500yr	1.16	1.72	2.21	3.21	4.57	6.07	500yr	3.94	5.94	6.96	10.07	12,67	20.50	22.33	500yr	18 14	21.48	24 39	25 60	27.40	500yr



Wetland Functions and Values Assessment

Prepared for:

David A. Sinclair 393 New Castle Avenue Portsmouth, New Hampshire 03801

Prepared By:
Ambit Engineering, Inc
200 Griffin, Unit 3
Portsmouth, New Hampshire 03801



Date: October 14, 2022

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INTRODUCTION

The applicant is proposing residential site improvements including installation of porous pavement for the existing and proposed driveway expansion, installation of an underground electric/communication line and replacement of the existing sewer line between the existing home and New Castle Avenue.

The purpose of this report is to present the existing functions and values of the tidal wetlands and to assess any impacts the proposed project may have on their ability to continue to perform these functions and values. The tidal wetlands being impacted were assessed with consideration to their association with the Piscataqua River and the larger marine ecosystem and was not limited to the tidal wetlands immediately on-site.

METHODS

DATA COLLECTION

The tidal wetlands associated with this project area were identified and characterized through field survey and review of existing information. Ambit Engineering, Inc. (Ambit) conducted a site visits in May & October of 2022 to characterize the tidal wetlands and collect the necessary information to complete a functions and values assessment. In addition, Ambit contacted the New Hampshire Natural Heritage Bureau (NHB) regarding existing information of documented rare species or natural communities within the vicinity of the project site.

WETLAND FUNCTIONS AND VALUES ASSESSMENT

Ambit assessed the ability of the tidal wetlands to provide certain functions and values and analyzed the potential affects the proposed project may have on their ability to continue to provide those functions and values. Wetland functions and values were assessed using the *Highway Methodology Workbook, Wetland Functions and Values: A Descriptive Approach.*¹ This method bases function and value determinations on the presence or absence of specific criteria for each of the 13 wetland functions and values (see definitions below). These criteria are assessed through direct field observations and a review of existing resource maps and databases. As part of the evaluation, the most important functions and values associated with the on-site wetlands are identified. In addition, the ecological integrity of the wetlands is evaluated based on the existing levels of disturbance and the overall significance of the wetlands within the local watershed.

° Groundwater Interchange (Recharge/Discharge)

This function considers the potential for the project area wetlands to serve as groundwater recharge and/or discharge areas. It refers to the fundamental interaction between wetlands and aquifers, regardless of the size or importance of either.

Floodwater Alteration (Storage and Desynchronization)

This function considers the effectiveness of the wetlands in reducing flood damage by attenuating floodwaters for prolonged periods following precipitation and snow melt events.

° Fish and Shellfish Habitat

This function considers the effectiveness of seasonally or permanently flooded areas within the subject wetlands for their ability to provide fish and shellfish habitat.

° Sediment/Toxicant Retention

This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland to function as a trap for sediments, toxicants, or pathogens, and is generally related to factors such as the type of soils, the density of vegetation, and the position in the landscape.

° Nutrient Removal/Retention/Transformation

This wetland function relates to the effectiveness of the wetland to prevent or reduce the adverse effects of excess nutrients entering aguifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

¹ U.S. Army Corps of Engineers. 1999. *The Highway Methodology Workbook Supplement, Wetland Functions and Values: A Descriptive Approach*. U.S. Army Corps of Engineers. New England Division. 32pp. NAEEP-360-1-30a.

Production Export (Nutrient)

This function relates to the effectiveness of the wetland to produce food or usable products for humans or other living organisms.

Sediment/Shoreline Stabilization

This function considers the effectiveness of a wetland to stabilize stream banks and shorelines against erosion, primarily through the presence of persistent, well-rooted vegetation.

° Wildlife Habitat

This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and/or migrating species must be considered.

Recreation (Consumptive and Non-Consumptive)

This value considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other active or passive recreational activities.

° Educational/Scientific Value

This value considers the effectiveness of the wetland as a site for an "outdoor classroom" or as a location for scientific study or research.

° Uniqueness/Heritage

This value relates to the effectiveness of the wetland or its associated water bodies to provide certain special values such as archaeological sites, unusual aesthetic quality, historical events, or unique plants, animals, or geologic features.

° Visual Quality/Aesthetics

This value relates to the visual and aesthetic qualities of the wetland.

Endangered Species Habitat

This value considers the suitability of the wetland to support threatened or endangered species.

FUNCTIONS AND VALUES ASSESSMENT

Results of the wetland functions and values assessment are presented below. This assessment includes a discussion of potential changes to existing wetland functions and values that may occur as a result of the proposed project:

Groundwater Interchange (Recharge/Discharge)

Because there is no identified sand and gravel aquifer underlying the project area, and the wetlands are not underlain by sands or gravel, it is unlikely that significant groundwater recharge is occurring within the tidal wetlands.

Floodwater Alteration (Storage and Desynchronization)

The tidal wetlands associated with the Piscataqua River receive floodwaters from the surrounding watershed and connected waterways; therefore, is considered a principal function considering the large size of the combined waterways.

Fish and Shellfish Habitat

The greater tidal wetland does provide fish and shellfish habitat, is associated with the Piscataqua River; therefore, is considered a principal function.

Sediment/Toxicant Retention

The greater tidal wetland contains dense vegetation and a significant source of sediments or toxicants; therefore, is considered a principal function.

Nutrient Removal/Retention/Transformation

The greater tidal wetland contains dense vegetation and a significant source of sediments or toxicants; therefore, is considered a principal function.

Production Export (Nutrient)

Production export is a wetland function that typically occurs in the form of nutrient or biomass transport via watercourses, foraging by wildlife species, and removal of timber and other natural products. Because the greater tidal wetland provides fish and wildlife habitat, commercial and recreational fisheries opportunities, and nutrients are transferred over several trophic levels in the marine ecosystem, this is considered a principal function.

Sediment/Shoreline Stabilization

Due to the tidal nature and wave action of this wetland; sediment/shoreline stabilization is considered a principal function.

Wildlife Habitat

The greater tidal wetland and the Piscataqua River provide a variety of coastal and marine habitats, therefore would be considered a principal function.

Recreation (Consumptive and Non-Consumptive)

The greater tidal wetland and the Piscataqua River provides a variety of consumptive and non-consumptive recreational opportunities including hunting, fishing and bird watching; therefore, would be considered a principal function.

Education/Scientific Value

The greater tidal wetland and the Piscataqua River are part of a larger marine ecosystem with multiple areas of public access making this a principal value.

Uniqueness/Heritage

The tidal wetland and the Piscataqua River are unique to the seacoast area. Additionally, there are pre and post-colonial historical components associated with the Piscataqua River and the surrounding areas making this a principal value.

Visual Quality/Aesthetics

The Piscataqua River provides aesthetically pleasing coastal views that are viewable from surrounding uplands as well as from the water, making this a principal function.

Endangered Species Habitat

An online inquiry with the NHB resulted in possible rare species in the vicinity of the project site. Ambit Engineering will coordinate with NHB and provide DES with comment once available.

PROPOSED IMPACTS

This report is accompanying a New Hampshire Department of Environmental Services (NHDES) Minimum Impact Wetland Permit Application request 2,450 sq. ft. of permanent impact and 1,085 sq. ft. of temporary construction impact to the previously developed 100' Tidal Buffer Zone for residential site improvements including installation of porous pavement for the existing and proposed driveway expansion, installation of an underground electric/communication line and replacement of the existing sewer line between the existing home and New Castle Avenue.

SUMMARY AND CONCLUSIONS

The jurisdictional tidal wetland is part of a large marine system and provides eleven principal functions and values when evaluated as a whole. These functions and values include: floodflow alteration, fish and shellfish habitat, production export, sediment/shoreline stabilization, wildlife habitat, recreation, education/scientific value, uniqueness/heritage, and visual quality aesthetics. While the entire marine system provides these principal functions and values, the proposed impacts associated with the driveway conversion and expansion will not have any effect on its ability to continue to provide them.

The proposed impacts have been minimized to the greatest extent practicable, while allowing reasonable use of the property. The proposed driveway expansion and conversion to a pervious technology will not contribute to additional storm water or pollution. It is anticipated that there will be no effect on any fish or

wildlife species that currently use the site for food, cover, and/or habitat. The proposed site improvements will not impede tidal flow or alter hydrology, it will not deter use by wildlife species that currently use the wetland area. The proposed driveway expansion and conversion to a pervious technology reduces the impervious surface on the lot from 30.9% to 24.4% (911 sq. ft.). The pervious technology also provides a stormwater quality function that will improve water quality that enters the nearby wetland resource.

Based on our assessment of the current functions and values and the proposed site improvements; it is our belief that the proposed project will have no significant impact on the tidal wetlands or greater marine systems ability to continue to provide their functions and values.

APPENDIX A

WETLAND FUNCTION - VALUE EVALUATION FORM

Wetland Function – Value Evaluation Form

Wetland Description: Wetland A is a tidal wetland associated with the Piscataqua River.	File number: 1893.02	
	Wetland identifier: Wetland A	
	Latitude:X:1,230,578.93	Longitude:Y:209,524
	Preparer(s): Ambit Engineering, Inc.	
	200 Griffin Road	
	Date : October 14, 2022	

Function/Value	Capal Y	bility N	Summary	Principal Yes/No
Groundwater Recharge/Discharge		X	This wetland does not possess the characteristics needed to provide this function as there are no identified underlying sand or gravel aquifers.	_
Floodwater Alteration	X		The tidal wetland and Piscataqua River do receive floodwater from the surrounding watershed and connected waterways; therefore, this would be considered a principal function.	Y
Fish and Shellfish Habitat	X		The tidal wetland and Piscataqua River are part of a larger coastal marine system and provide both fish and shellfish habitat. This is considered a Principal Function.	Y
Sediment/Toxicant Retention	X		The Piscataqua River and greater tidal wetland contains dense vegetation and a source of sediments and toxicants, therefore a principal function.	Y
Nutrient Removal	X		The Piscataqua River and greater tidal wetland contains dense vegetation and a source of nutrients, therefore a principal function.	Y
Production Export	X		Because the greater tidal wetland provides fish and wildlife habitat, commercial and recreational fishing opportunities, and nutrients are transferred over several trophic levels in the marine ecosystem, this is considered a principal function.	Y
Sediment/Shoreline Stabilization	X		Due to the tidal nature and wave action of this wetland; sediment/shoreline stabilization is considered a principal function.	Y
Wildlife Habitat	X		The greater tidal wetland and the Piscataqua River provides a variety of coastal and marine habitat, therefore would be considered a principal function.	Y
Recreation	X		The greater tidal wetland provides a variety of consumptive and non-consumptive recreational opportunities including hunting, fishing and bird watching; therefore, would be considered a principal function.	Y
Education/Scientific Value	X		The greater tidal wetland and Piscataqua River are part of a larger marine ecosystem with multiple areas of public access making this a principal value.	Y
Uniqueness/Heritage	X		The tidal wetland and Piscataqua River are unique to the seacoast area. Additionally, there are pre and post-colonial historical components associated with the Piscataqua River and the surrounding areas making this a principal value.	Y
Visual Quality/Aesthetics	X		The Piscataqua River provides aesthetically pleasing coastal views that are seeable from surrounding uplands as well as from the water, making this a principal function.	Y
ES Endangered Species Habitat	X		An online inquiry with the NH Natural Heritage Bureau resulted in an occurrence of a sensitive species near the project area. Ambit Engineering will coordinate with NHB and NHF & G and will forward comment to NH DES upon receipt.	_
Other				

Notes: * Attach list of considerations.

APPENDIX B

Рното Log













APPENDIX C

NEW HAMPSHIRE NATURAL HERITAGE BUREAU CORRESPONDENCE

Memo

NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.

Maps and NHB record pages are confidential and should be redacted from public documents.

To: John Chagnon, Ambit Engineering, Inc.

200 Griffin Road

Unit 3

Portsmouth, NH 03801

From: NHB Review, NH Natural Heritage Bureau

Date: 8/30/2022 (valid until 08/30/2023)

Re: Review by NH Natural Heritage Bureau

Permits: NHDES - Wetland Standard Dredge & Fill - Major, USACE - General Permit

NHB ID: NHB22-2537 Town: Portsmouth Location: 393 New Castle Avenue

Description: The project proposes an extension of the existing tidal docking structure.

cc: NHFG Review

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

Comments NHB: Please indicate if work will be completed by a barge and/or if any shoreland areas will be used for construction access and/or staging. F&G: Please indicate proposed project timing. Please refer to NHFG consultation requirements below.

Plant species	State ¹	Federal	Notes
marsh elder (Iva frutescens)	T		Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
Vertebrate species	State ¹	Federal	Notes
Atlantic Sturgeon (Acipenser oxyrinchus oxyrinchus)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).
Shortnose Sturgeon (Acipenser brevirostrum)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet

Memo

NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.

Maps and NHB record pages are confidential and should be redacted from public documents.

been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

For all animal reviews, refer to 'IMPORTANT: NHFG Consultation' section below.

Disclaimer: 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.

IMPORTANT: NHFG Consultation

If this NHB Datacheck letter DOES NOT include <u>ANY</u> wildlife species records, then, based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

If this NHB Datacheck letter includes a record for a threatened (T) or endangered (E) wildlife species, consultation with the New Hampshire Fish and Game Department under Fis 1004 may be required. To review the Fis 1000 rules (effective February 3, 2022), please go to https://wildlife.state.nh.us/wildlife/environmental-review.html. All requests for consultation and submittals should be sent via email to NHFGreview@wildlife.nh.gov or can be sent by mail, and must include the NHB Datacheck results letter number and "Fis 1004 consultation request" in the subject line.

If the NHB DataCheck response letter does not include a threatened or endangered wildlife species but includes other wildlife species (e.g., Species of Special Concern), consultation under Fis 1004 is not required; however, some species are protected under other state laws or rules, so coordination with NH Fish & Game is highly recommended or may be required for certain permits. While some permitting processes are exempt from required consultation under Fis 1004 (e.g., statutory permit by notification, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule), coordination with NH Fish & Game may still be required under the rules governing those specific permitting processes, and it is recommended you contact the applicable permitting agency. For projects not requiring consultation under Fis 1004, but where additional coordination with NH Fish and Game is requested, please email: Kim Tuttle kim.tuttle@wildlife.nh.gov with a copy to NHFGreview@wildlife.nh.gov, and include the NHB Datacheck results letter number and "review request" in the email subject line.

Contact NH Fish & Game at (603) 271-0467 with questions.

CONFIDENTIAL – NH Dept. of Environmental Services review

NHB22-2537 Atlantic Sturgeon Shortnose Sturgeon marsh elder marsh elder Legend Site bounds Plant Animal Community System towns ource: Es d, Waxar, Earinstar ®eographies, and 0.025 0.05 0.075 0.1 0.125 Miles

NHB22-2537 EOCODE: PDAST58090*005*NH

New Hampshire Natural Heritage Bureau - Plant Record

marsh elder (Iva frutescens)

Conservation Status Legal Status

Global: Demonstrably widespread, abundant, and secure Federal: Not listed

Imperiled due to rarity or vulnerability

Description at this Location

Listed Threatened

State:

Conservation Rank: Excellent quality, condition and landscape context ('A' on a scale of A-D). This rank may be for the state rather than relative to others in the region. Comments on Rank:

2021: Lady Isle: Plants intermittently distributed along the westernmost portion of the island. Detailed Description:

> 2020: Tidal Pool: Species observed in flower. 2017: Leachs Island: Several thousand plants spread along 800+ feet of shoreline. 10-20% dieback, 10-15% yellowing, 65-80% normal to

vigorous. Aphids observed on 80% of clumps. 2016: Peirce Island: Additional

subpopulations located, raising total number of plants to over 600. Plants appear to be in much better health than 2014, with all individuals in fruit and in good vigor. Shaws Hill: Several clumps over an area approximately 30 x 15 feet. Estimated at over 200 individuals. Tidal Pool: Plants in 3 areas along shoreline near tidal pool. 2014 Peirce Island: Over 500 plants were observed, all stunted, with approximately 50-60% dead stems, mostly confined

to the upper portions of the plants. 1996: Constant observation since 1953 reported,

including all stages of phenology and age structure. 1982: Good clump observed. 2017: Leachs Island: Upper edge of brackish marsh/rocky shore. Plants absent from areas

with broader expanse of marsh. Rocks present in most areas where the plants are growing. Associated species include black oak (Ouercus velutina), saltmarsh rush (Juncus gerardii), sea-blite (Suaeda sp.), hastate-leaved orache (Atriplex cf. prostrata), smooth cordgrass (Spartina alterniflora), Carolina sea-lavender (Limonium carolinianum), and seaside

band immediately above the highest observed wrack line along the shore. Associated upland species include staghorn sumac (*Rhus hirta*), autumn-olive (*Elaeagnus umbellata* var. parvifolia), Asian bittersweet (Celastrus orbiculatus), and speckled alder (Alnus incana ssp. rugosa). The saline areas downslope of the marsh elder contained over 50% unvegetated

plantain (Plantago maritima ssp. juncoides). 2016: Peirce Island: Population forms a narrow

substrate, as well as a mixture of cordgrass (Spartina sp.) and saltgrass (Distichlis spicata). Shaws Hill: Surrounding land use is developed. All plants below highest observable tide line in high salt marsh, located among saltmeadow cordgrass (Spartina patens), smooth cordgrass (Spartina alterniflora), and seaside goldenrod (Solidago sempervirens). Tidal

Pool: Sagamore Creek/Great Bay shoreline, with smooth cordgrass (Spartina alterniflora), saltmarsh rush (Juncus gerardii), saltmeadow cordgrass (Spartina patens), seaside goldenrod (Solidago sempervirens), and sea-blite (Suaeda spp.). 1996: On shores of several islands and peninsulas in the more or less enclosed bay system. Associated plant species: Solidago

sempervirens (seaside goldenrod), Juncus gerardii (salt marsh rush), Spartina patens (saltmeadow cord-grass), Triglochin maritimum (arrow-grass), Elymus virginicus (Virginia wild rye), Atriplex patula (narrow-leaved orach), and Artemisia vulgaris (common mugwort).

Substrate: gravel and marsh peat and muck. 1982: On shore at Pleasant Point.

2021: Lady Isle: Site is referred to Belle Isle on reporting form, and appears as Belle Island on some maps, but is called Lady Isle on USGS topo. 2016: Peirce Island: "The population

currently appears to be in good health, although the results of the June 2014 surveys indicated that there may be some intermittent pressure on this population. The propensity of this species to grow in a very narrow band along the tide line does not allow for rapid adaptation to changing sea levels, storm events, or polluted runoff that a larger, robust population may resist. If sea levels gradually rise as expected, the marsh elder will be unable to move inland due to a small but steep cut bank that forms the upland break adjacent to the marsh elder population. The remaining subpopulations may also be getting shaded by the

adjacent upland vegetation, which appears to be encroaching on the shoreline. This vegetation is comprised of large shrub species and the invasive Oriental bittersweet that is

capable of overtaking the native plants in the area."

General Area:

General Comments:

NHB22-2537 EOCODE: PDAST58090*005*NH

Management

Comments:

Location

Survey Site Name: Little Harbor, back channel

Managed By: Little Harbor Trust

County: Rockingham Town(s): Portsmouth

Size: 61.4 acres Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2021: Lady Isle: Shoreline along western end of Lady Isle. 2017: Leachs Island: Island in New

Castle only accessible by boat. Plants observed on south shore of island. 2016: Peirce Island: Along the southern shore of Peirce Island, along the edge of a small cove west of the wastewater treatment facility. Shaws Hill: Take Laurel Lane off New Castle Avenue, bear left onto driveway right-of-way servicing 51A and 51B Laurel Lane. At end of right-of-way, 51B will be located on the right. Tidal Pool: Along Sagamore Creek shoreline on Creek Farm Reservation property in Portsmouth. In the vicinity of Rte. 1B which encircles the Little Harbor back channel from Portsmouth to New Castle

and Rye. Many of the sites are visible only by boat.

Dates documented

First reported: 1953 Last reported: 2021-02-10

EOCODE: NHB22-2537 AFCAA01042*003*NH

New Hampshire Natural Heritage Bureau - Animal Record

Atlantic Sturgeon (Acipenser oxyrinchus oxyrinchus)

Conservation Status Legal Status

Federal: Listed Threatened Global: Rare or uncommon

Listed Threatened State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank:

Detailed Description: 2016: 1 individual, sex unknown, detected in the lower Piscataqua River. 2015: 1 individual,

sex unknown, detected in Portsmouth Harbor. 2012: 1 individual, sex unknown, detected in

Little Bay.

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataqua River.

General Comments: Management

Comments:

Location

Survey Site Name: Piscataqua River

Managed By:

County:

Town(s): Out-Of-State

Size: 7749.3 acres Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataqua River.

Dates documented

First reported: 2012-06-02 Last reported: 2016-05-27

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.

NHB22-2537 EOCODE: AFCAA01010*001*NH

New Hampshire Natural Heritage Bureau - Animal Record

Shortnose Sturgeon (Acipenser brevirostrum)

Legal Status Conservation Status

Federal: Listed Endangered Global: Rare or uncommon

State: Listed Endangered State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank: --

Detailed Description: 2016: 2 individuals, 1 female and 1 sex unknown, detected in Portsmouth Harbor and the

lower Piscataqua River. 2015: 3 females and 2 other individuals, sex unknown detected in Portsmouth Harbor. 2014: 1 female detected moving from Portsmouth Harbor up the Piscataqua River to the mouth of the Cocheco River. 2012: 1 female detected in Little Bay.

2011: 1 female detected in Little Bay. 2010: 1 female detected in Little Bay.

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataqua River.

General Comments: ---Management ---

Comments:

Location

Survey Site Name: Piscataqua River

Managed By:

County:

Town(s): Out-Of-State

Size: 7749.3 acres Elevation:

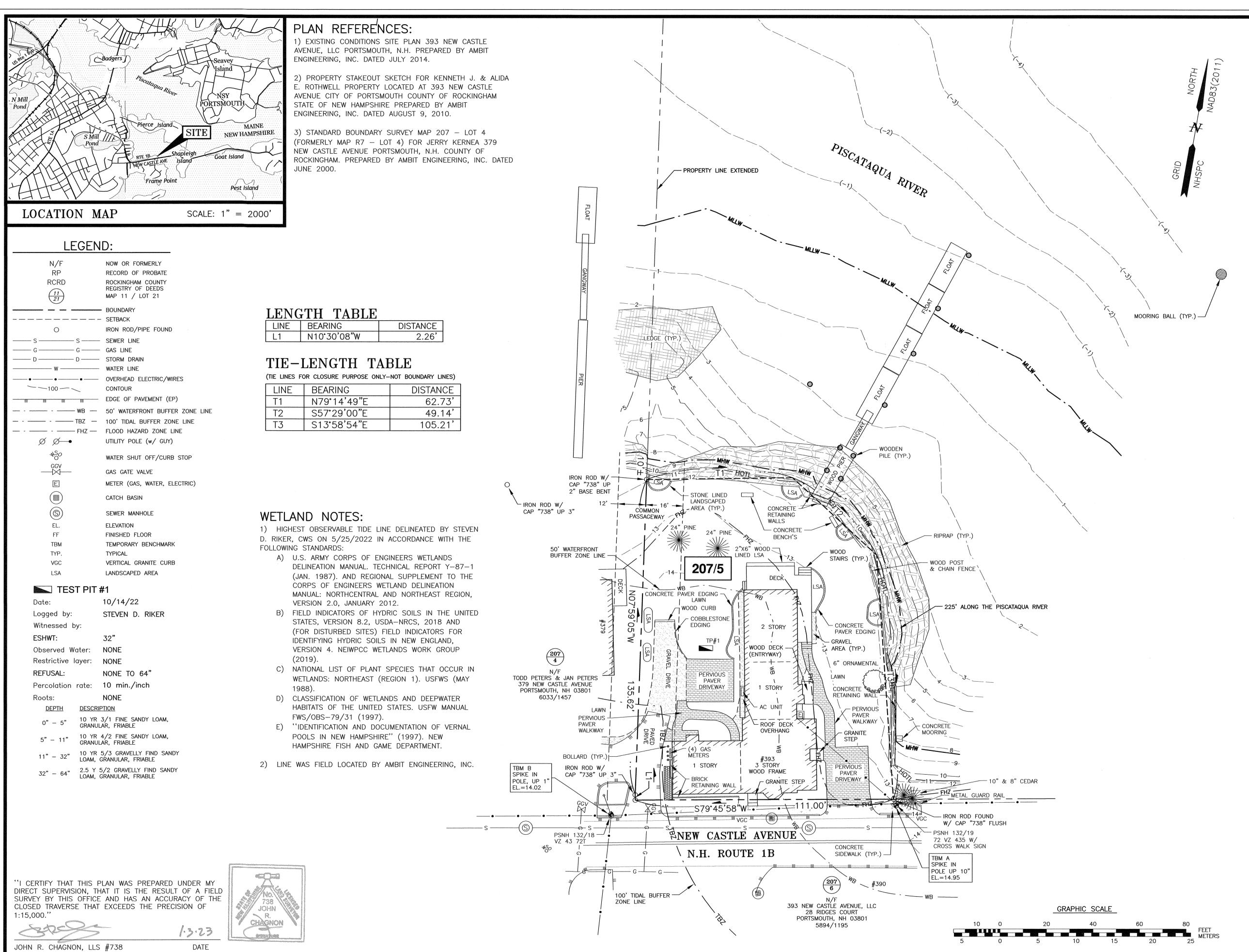
Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataqua River.

Dates documented

First reported: 2010-11-03 Last reported: 2016-10-20

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.





AMBIT ENGINEERING, INC.

Civil Engineers & Land Surveyors

200 Griffin Road - Unit 3 Portsmouth, N.H. 03801-7114 Tel (603) 430-9282 Fax (603) 436-2315

NOTES:

1) PARCEL IS SHOWN ON THE CITY PORTSMOUTH ASSESSOR'S MAP 207 AS LOT 5.

2) OWNERS OF RECORD:

DAVID A. SINCLAIR & NICOLE J. GIUSTO 765 MIDDLE STREET PORTSMOUTH, NH 03801 6052/2161

3) PARCEL IS PARTIALLY IN A SPECIAL FLOOD HAZARD AREA (AE EL.8 NAVD88) AS SHOWN ON FIRM PANEL 33015C0278F. DATED 1/29/2021.

4) EXISTING LOT AREA:

14,919 S.F. ± TO MHW 0.3425 ACRES ± TO MHW

5) PARCEL IS LOCATED IN THE SINGLE RESIDENCE B (SRB) ZONING DISTRICT AND THE HISTORIC OVERLAY DISTRICT.

6) DIMENSIONAL REQUIREMENTS: MIN. LOT AREA:

MIN. LOT AR	EA:	15,000 S.F.
FRONTAGE:		100 FEET
SETBACKS:		
	FRONT:	30 FEET
	SIDE:	10 FEET
	REAR:	30 FEET

SIDE: 10 FEET REAR: 30 FEET MAXIMUM STRUCTURE HEIGHT: 35 FEET MAXIMUM BUILDING COVERAGE: 20% MINIMUM OPEN SPACE: 40%

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON ASSESSOR'S MAP 207 LOT 5 IN THE CITY OF PORTSMOUTH.

8) VERTICAL DATUM IS MEAN LOWER LOW WATER (MLLW). MLLW REFERENCED ON NOAA STATION 8419870 SEAVEY ISLAND, PORTSMOUTH HARBOR, MLLW BEING 4.62 FEET LOWER THAN 0.0 NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.

SITE IMPROVEMENTS 393 NEW CASTLE AVENUE PORTSMOUTH, N.H.

		,			
1	ISSUED FOR APPROVAL	1/3/23			
0	ISSUED FOR COMMENT	8/18/22			
NO.	DESCRIPTION	DATE			
	REVISIONS				



SCALE: 1" = 20'

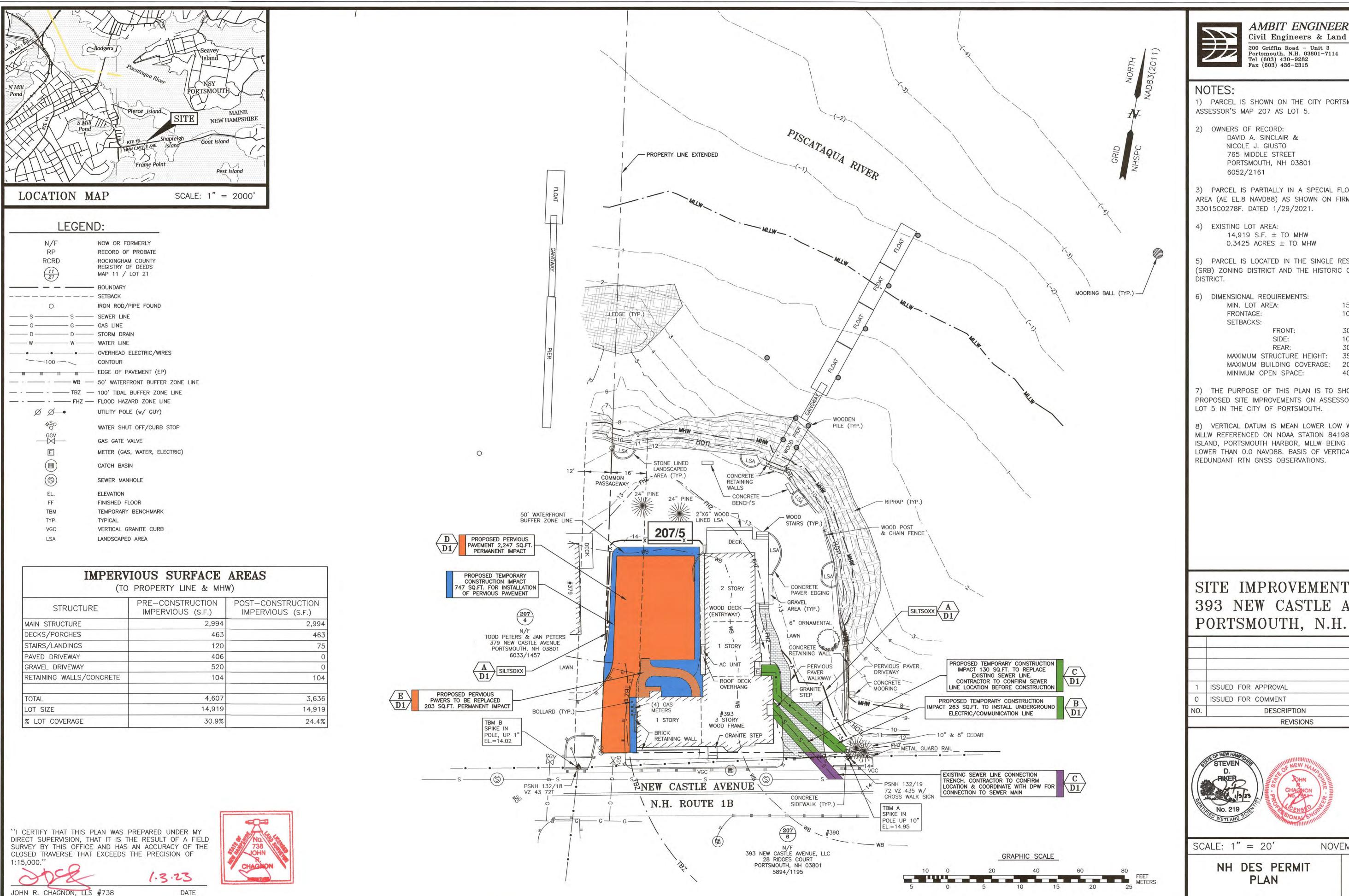
AUGUST 2022

EXISTING CONDITIONS PLAN

C1

FB 284 PG 52

3050.53



AMBIT ENGINEERING, INC.

Civil Engineers & Land Surveyors

1) PARCEL IS SHOWN ON THE CITY PORTSMOUTH

3) PARCEL IS PARTIALLY IN A SPECIAL FLOOD HAZARD AREA (AE EL.8 NAVD88) AS SHOWN ON FIRM PANEL

5) PARCEL IS LOCATED IN THE SINGLE RESIDENCE B (SRB) ZONING DISTRICT AND THE HISTORIC OVERLAY

> 15,000 S.F. 100 FEET 30 FEET 10 FEET 30 FEET MAXIMUM STRUCTURE HEIGHT: 35 FEET MAXIMUM BUILDING COVERAGE: 20% 40%

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE IMPROVEMENTS ON ASSESSOR'S MAP 207

8) VERTICAL DATUM IS MEAN LOWER LOW WATER (MLLW). MLLW REFERENCED ON NOAA STATION 8419870 SEAVEY ISLAND, PORTSMOUTH HARBOR, MLLW BEING 4.62 FEET LOWER THAN 0.0 NAVD88. BASIS OF VERTICAL DATUM IS

SITE IMPROVEMENTS 393 NEW CASTLE AVENUE

1/3/23 12/8/22 DATE



NOVEMBER 2022

FB 284 PG 52

CONSTRUCTION SEQUENCE

DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.

INSTALL SILTSOXX TO CONTROL EROSION AND SEDIMENTATION PRIOR TO ANY EARTH MOVING ACTIVITIES.

CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.

CUT AND REMOVE ALL TREES, SHRUBS, SAPLINGS, BRUSH, VINES AND OTHER DEBRIS AND RUBBISH AS REQUIRED.

BEST MANAGEMENT PRACTICES FOR ROADSIDE REMOVAL AND DISPOSAL OF INVASIVE PLANTS WILL BE PERFORMED ON POPULATIONS THAT EXIST WITHIN THE CONSTRUCTION AREA TO PREVENT FUTURE PROPAGATION ON-SITE, AS WELL AS THE SPREAD OF INVASIVE PLANT SEEDS OR VIABLE PLANT MATERIAL DURING TRANSPORTATION OFF SITE, OR AT FINAL PLACE OF DISPOSAL.

STRIP AND STOCKPILE LOAM FROM SITE. STOCKPILES SHALL BE SURROUNDED WITH SILT FENCE TO CONTROL SEDIMENT RUN

PERFORM SITE DEMOLITION.

CONSTRUCT SITE IMPROVEMENTS

LOAM AND SEED DISTURBED AREAS IN ACCORDANCE WITH VEGETATIVE PRACTICE AND GENERAL CONSTRUCTION NOTES. CUT AND FILL SLOPES SHALL BE SEEDED IMMEDIATELY AFTER THEIR CONSTRUCTION.

PLANT LANDSCAPING AS NEEDED.

REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

GENERAL CONSTRUCTION NOTES

THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT.

ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

DUST CONTROL: IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION. APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

SILT FENCES SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILT FENCES SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.

AVOID THE USE OF FUTURE OPEN SPACES (LOAM AND SEED AREAS) WHEREVER POSSIBLE DURING CONSTRUCTION CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF THE DRIVEWAY.

TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS. CONSTRUCT SILT FENCE AROUND TOPSOIL STOCKPILE.

AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL. STUMPS SHALL BE DISPOSED BY GRINDING OR FILL IN AN APPROVED FACILITY.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8 INCHES IN THICKNESS UNLESS OTHERWISE

FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL SHALL NOT BE INCORPORATED INTO FILLS.

FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.

DISTURBED AREAS SHALL BE SEEDED WITHIN 72 HOURS FOLLOWING FINISHED GRADING.

AT NO TIME SHALL ANY DISTURBED AREA REMAIN UNSTABILIZED FOR LONGER THAN 72 HOURS. ALL AREAS WHERE CONSTRUCTION IS NOT COMPLETE WITHIN THIRTY DAYS OF THE INITIAL DISTURBANCE SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

VEGETATIVE PRACTICE

FOR PERMANENT MEASURES AND PLANTINGS:

LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE.

FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER.

SEED SHALL BE SOWN AT THE RATES SHOWN IN THE TABLE BELOW. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE, AND SHALL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED SHALL BE RESEEDED. AND ALL NOXIOUS WEEDS REMOVED.

A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BF:

GENERAL COVER	PROPORTION	SEEDING RATE
CREEPING RED FESCUE KENTUCKY BLUEGRASS	50% 50%	100 LBS/ACRE

<u>SLOPE_SEED</u> (USED_ON_ALL_SLOPES_GREATER_THAN_OR_EQUAL_TO_3:1)

CREEPING RED FESCUE	42%	
TALL FESCUE	42%	48 LBS/ACRE
BIRDSFOOT TREFOIL	16%	•

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH APPLICABLE STATE AND FEDERAL SEED LAWS.

FOR TEMPORARY PROTECTION OF DISTURBED AREAS: MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES: PERENNIAL RYE: 0.7 LBS/1,000 S.F. MULCH: 1.5 TONS/ACRE

MAINTENANCE AND PROTECTION

THE CONTRACTOR SHALL MAINTAIN ALL LOAM & SEED AREAS UNTIL FINAL ACCEPTANCE AT THE COMPLETION OF THE CONTRACT MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REMOVAL OF STONES AND OTHER FOREIGN OBJECTS OVER 1/2 INCHES IN DIAMETER WHICH MAY APPEAR AND THE FIRST TWO (2) CUTTINGS OF GRASS NO CLOSER THEN TEN (10) DAYS APART. THE FIRST CUTTING SHALL BE ACCOMPLISHED WHEN THE GRASS IS FROM 2 1/2 TO 3 INCHES HIGH ALL BARE AND DEAD SPOTS WHICH BECOME APPARENT SHALL BE PROPERLY PREPARED, LIMED AND FERTILIZED, AND RESEEDED BY THE CONTRACTOR AT HIS EXPENSE AS MANY TIMES AS NECESSARY TO SECURE GOOD GROWTH. THE ENTIRE AREA SHALL BE MAINTAINED, WATERED AND CUT UNTIL ACCEPTANCE OF THE LAWN BY THE OWNER'S REPRESENTATIVE.

THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT IS DEVELOPING.

TO BE ACCEPTABLE, SEEDED AREAS SHALL CONSIST OF A UNIFORM STAND OF AT LEAST 90 PERCENT ESTABLISHED PERMANENT GRASS SPECIES, WITH UNIFORM COUNT OF AT LEAST 100 PLANTS PER SQUARE

SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.

THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.

THE SILT FENCE BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

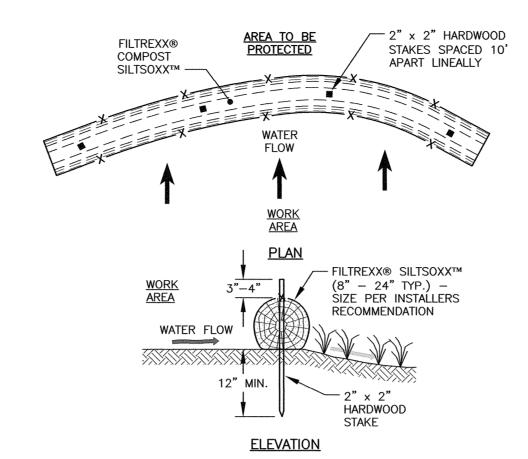
SILT FENCING SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED, AND DISTURBED AREAS RESULTING FROM SILT FENCE REMOVAL SHALL BE PERMANENTLY SEEDED.

WINTER NOTES

ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW

AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

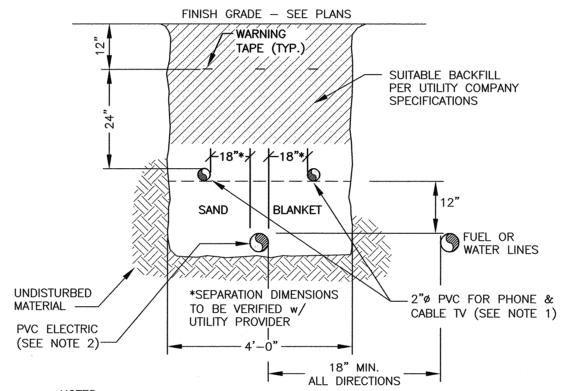


ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED

FILTREXX INSTALLER. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED

4. SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.

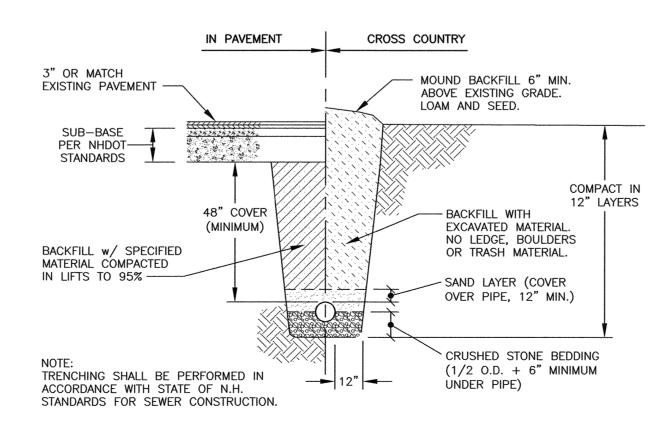
THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE FILTREXX® SILTSOXX™ FILTRATION SYSTEM



1) ALL CONDUIT TO BE U.L. LISTED, SCHEDULE 80 UNDER ALL TRAVEL

- WAYS. & SCHEDULE 40 FOR THE REMAINDER. 2) NORMAL CONDUIT SIZES FOR PSNH ARE 3 INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4 INCH FOR THREE PHASE SECONDARY, AND 5 INCH FOR THREE PHASE PRIMARY. 3) ALL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE
- (LATEST REVISION) 4) INSTALL A 200# PULL ROPE FOR EACH CONDUIT
- 5) VERIFY ALL CONDUIT SPECIFICATIONS WITH UTILITY COMPANY'S PRIOR





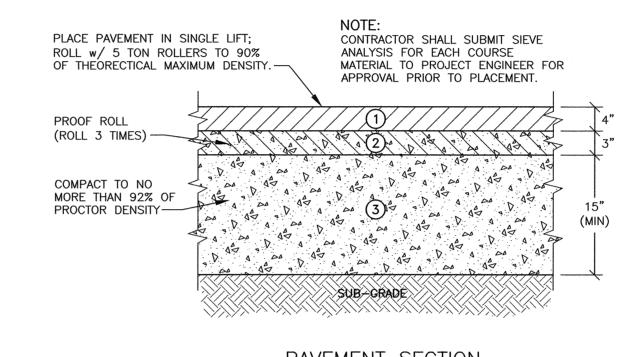
TRENCH DETAIL FOR SEWER CONNECTION

POROUS PAVEMENT SPECIFICAITONS

	1)	(2	2		3)
THE FO	VEMENT w/ LLOWING TIONS*	CHOKER/RESERVOIR COURSE w/ THE FOLLOWING GRADATIONS**		i	JRSE (Item essed Gravel)
SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE	PASSING BY WEIGHT (%)
3/4" (19mm)	100	1" (25mm)	100	3" (75mm)	100
1/2" (12.5mm)	85–100	3/4" (19mm)	45–55	2.0" (63mm)	95–100
3/8" (9.5mm)	55–75	1/2" (12.5mm)	40-50	1" (25mm)	55-85
No. 4 (4.75mm)	10-25	3/8" (9.5mm)	35-45	No. 4 (4.75mm)	27-52
No. 8 (2.36mm)	5-10	No. 4 (4.75mm)			
No. 200 (0.075mm)	2-4	No. 8 (2.36mm)	0-5	No, 200 (0.075 mm)	0-12 (in sand portion)

* WITH 6% PERFORMANCE GRADED ASPHALT BINDER CONTENT BY VOLUME. AIR VOIDS TO BE 20%

** CRUSHED QUARRY STONE SHALL CONTAIN AT LEAST 2 FRACTURED FACES, & SHALL BE WASHED WITH LESS THAN 1% BY WEIGHT PASSING No. 200 SIEVE.



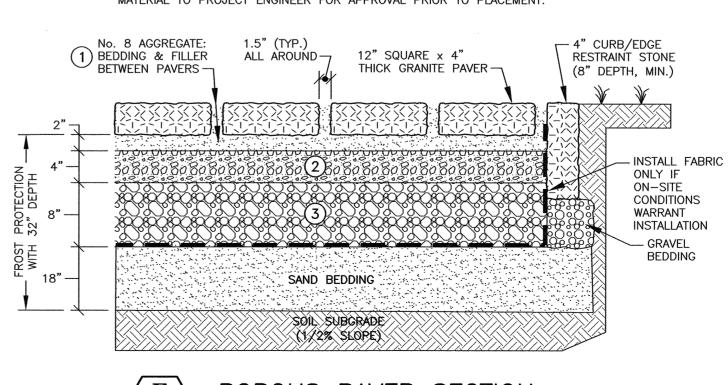
POROUS PAVING NTS

ASTM D 448 GRADATION TABLE

1		2		3	
ASTM No. 8 BEDDING & JOINT FILLER		ASTM No. 57 STONE OPEN GRADED BASE		ASTM No. 2 STONE SUBBASE	
SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE PASSING BY WEIGHT (%)		SIEVE SIZE	PASSING BY WEIGHT (%)
1/2" (12.5mm)	100	1.5" (37.5mm)	100	3" (75mm)	100
3/8" (9.5mm)	85-100	1" (25mm)	95-100	2.5" (63mm)	90-100
No. 4 (4.75mm)	10-30	1/2" (12.5mm)	25-60	2" (50mm)	35-70
No. 8 (2.36mm)	0-10	No. 4 (4.75mm)	0-10	1.5" 37.5mm)	0-15
No. 16 (1.16mm)	0-5	No. 8 (2.36mm)	0-5	3/4" (19mm)	0-5

1) PAVING SYSTEM BASE DESIGN IS SIMILAR TO BASE REQUIRED FOR THE UNI ECO-STONE PAVER. INSTALLATION SHALL FOLLOW MANUFACTURER'S INSTRUCTIONS FOR PLACEMENT OF BASE MATERIALS. 2) ALL STONE SHALL BE ANGULAR, WITH 90% FRACTURED FACES. STONE

SHALL BE WASHED WITH LESS THAN 1% PASSING THE 200 SIEVE. 3) CONTRACTOR SHALL SUBMIT SIEVE ANALYSIS FOR EACH COURSE MATERIAL TO PROJECT ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.



POROUS PAVER SECTION C2NTS



AMBIT ENGINEERING, INC.

Civil Engineers & Land Surveyors

200 Griffin Road - Unit 3 Portsmouth, N.H. 03801-7114 Tel (603) 430-9282 Fax (603) 436-2315

- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY
- UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

SITE IMPROVEMENTS 393 NEW CASTLE AVENUE PORTSMOUTH, N.H.

ISSUED FOR APPROVAL 1/3/23 ISSUED FOR COMMENT 11/23/22 DESCRIPTION DATE **REVISIONS**



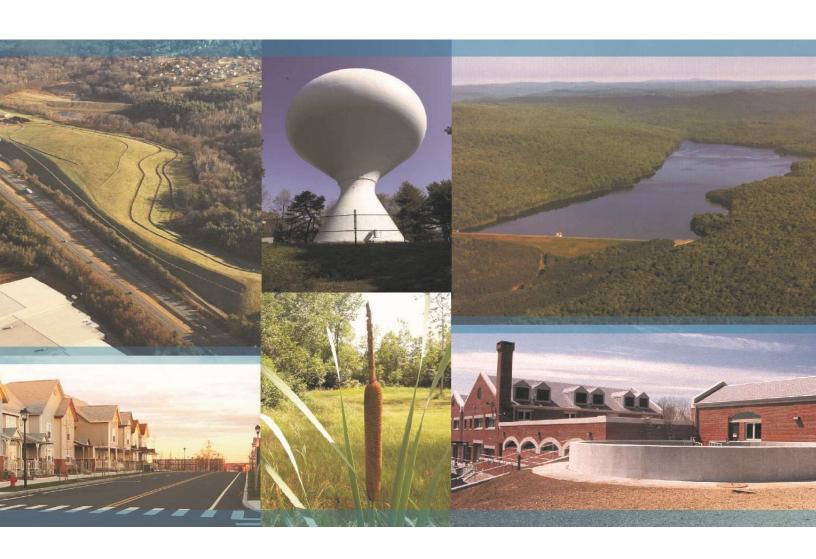
SCALE: AS SHOWN

NOVEMBER 2022

DETAIL PLAN

FB 284 PG 52

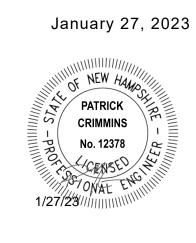
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Granite State Minerals 227 Market Street Portsmouth, New Hampshire

Wetland Impact Permit Application

Granite State Minerals January 27, 2023







E5027-002 January 27, 2023

State of New Hampshire DES Wetlands Bureau 29 Hazen Drive PO Box 95 Concord, New Hampshire 03302

Re: Wetland Application - Standard Major Impact Granite State Minerals, Portsmouth, NH

Dear Wetland Inspector:

On behalf of Granite State Minerals, we are pleased to submit the following information to relative to a Wetland Application for the above referenced project:

- One (1) original copy of the Wetland Application Major Impact dated January 27, 2023; and,
- One (1) check made payable to Treasurer-State of NH in the amount of \$2,670 for the application fee

The proposed project is located on a 2.80-acre lot at 227 Market Street in Portsmouth, New Hampshire. The site consists of a seaport/bulk terminal. The site is used for the transportation of dry bulk such as road salt, as well as the berthing of vessels, and the re-supply of ship stores. The cargo marshalled and stored on-site prior to transport consists of road salt.

The stormwater management upgrades are being constructed as part of the facility's stormwater management program under the EPA Multi-Sector General Permit (MSGP). The permit requires regular sampling of stormwater discharges and a stormwater plan to keep levels of certain analytes below benchmark limits established by the permit. The stormwater management system is designed to decrease concentrations of metals and other analytes in stormwater discharges to the river, consistent with MSGP requirements. It will also facilitate capture of cleaner and more accurate stormwater samples by providing an access point to grab samples from within a manhole rather than from the surface of the pavement.

Ground disturbing activities include the construction of two bollard moorings, a Contech stormwater filtration vault, drain manhole, and construction of pavement and asphalt curbing. The locations of all ground disturbing areas are located within the previously developed tidal buffer zone and tidal waters. The first of the two moorings is located on the northwestern end of the site and the second is located closer to the center of the site at the top of the existing stone revetment in an existing paved area. All drainage and stormwater treatment improvements are located near the second mooring near the center of the site. The drainage structures are located in an existing paved area with the outlet pipe to the Piscataqua River being located through the existing stone revetment within tidal waters. An asphalt curb is being constructed at the northeastern end of the site with the intent to direct storm water flow to the proposed catchbasin. No existing buildings are being disturbed as part of this project and no additional impervious area is being added.

We trust the enclosed information addresses the requirements for a Wetland Application – Standard Major Impact. If you have any questions or require any additional information, please contact me at 603-294-9213 or NAHansen@TigheBond.com.

Sincerely,

TIGHE & BOND, INC.

Neil A. Hansen, PE Project Manager Patrick M. Crimmins, PE Vice President

Enclosures

Cc: Granite State Minerals (via e-mail)

New Hampshire Port Authority (via e-mail)

Section	1 Wetland	Permit Appl	ication -	Standard	Review	(Major

- **Section 2 Owner & Applicant Letters of Authorization**
- Section 3 Minor and Major Impacts Attachment A
- **Section 4 Functional Assessment Worksheet**
- **Section 5 Avoidance and Minimization Checklist**
- **Section 6 Coastal Resource Worksheet**
- Section 7 Documentation from DRED Natural Heritage Bureau (NHB) & United States Fish and Wildlife Service
- Section 8 New Hampshire PGP: Appendix B Corps Secondary Impact Checklist
- Section 9 U.S. Geological Survey Topographic Map
- **Section 10 Photographs of Tidal Buffer Zone**
- **Section 11 City of Portsmouth Tax Map**
- **Section 12 Abutter Information**

12.1	Abutter Notice	12-1
12.2	Abutter List	12-1
12.3	Abutter Certified Mail Receipts	12-1

Section 13 Site Plan

Cover Letter

Impact)

Section 14 Mooring Improvement Plan

Section 15 Copy of Application Fee Check

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Section 1 Wetland Permit Application - Standard Review (Major Impact)



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: Granite State Minerals	TOWN NAME: Portsmouth
	File No.:

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

A person may request a waiver to 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. 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 <u>request form</u>.

SEC	SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))			
Res	ase use the <u>Wetland Permit Planning Tool (WPPT)</u> , the Natural Heritage Bureau (NHB) <u>DataCheck Toolstoration Mapper</u> , or other sources to assist in identifying key features such as: <u>priority resource areastected species or habitats</u> , coastal areas, designated rivers, or designated prime wetlands.			
Has	s the required planning been completed?	Xes No		
Doe	es 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? o If yes, species or habitat name(s): Atlantic Sturgeon, Shortnose Sturgeon NHB Project ID #: 22-0347	⊠ Yes □ No		
•	Bog?	☐ Yes ⊠ No		
•	Floodplain wetland contiguous to a tier 3 or higher watercourse?	Xes No		
•	Designated prime wetland or duly-established 100-foot buffer?	Yes No		
•	Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	Xes No		
Is t	he property within a Designated River corridor? If yes, provide the following information:	Yes No		
•	Name of Local River Management Advisory Committee (LAC):			
•	A copy of the application was sent to the LAC on Month: Day: Year:			

Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095
www.des.nh.gov

For dredging projects, is the subject property contaminated?If yes, list contaminant:	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 (se Wetland Permit Planning Tool or Stream Stats):
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 and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space below.	· · · · · · · · · · · · · · · · · · ·
The proposed project will provide necessary upgrades to the terminal including the replacement of two bollard moorings and the construction of stormwater management upgrades. The stormwater manage are being constructed as part of the facility's stormwater management program under the EPA Multi-Sr Permit (MSGP). The permit requires regular sampling of stormwater discharges and a stormwater plan certain analytes below benchmark limits established by the permit. The stormwater management systed decrease concentrations of metals and other analytes in stormwater discharges to the river, consistent requirements. It will also facilitate capture of cleaner and more accurate stormwater samples by provice point to grab samples from within a manhole rather than from the surface of the pavement.	ment upgrades ector General to keep levels of m is designed to with MSGP
SECTION 3 - PROJECT LOCATION	
Separate wetland permit applications must be submitted for each municipality within which wetland in	npacts occur.
ADDRESS: 227 & 555 Market Street	
TOWN/CITY: Portsmouth, NH	
TAX MAP/BLOCK/LOT/UNIT: Map 119, Lots 5 & 6	
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Piscataqua River N/A	
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): 43.08028° North	
70.75944° West	

2020-05 Page 2 of 7

SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFI	•		
NAME: Granite State Minerals			
MAILING ADDRESS: 227 Market Street			
TOWN/CITY: Portsmouth		STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: jmcnamee@easternminerals.com			
FAX:	PHONE: 978.764.2303		
ELECTRONIC COMMUNICATION: By initialing here: JM, I to this application electronically.	hereby authorize NHDES to	communicate al	l matters relative
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-	Wt 311.04(c))		
LAST NAME, FIRST NAME, M.I.: Neil A. Hansen			
COMPANY NAME: Tighe & Bond, Inc.			
MAILING ADDRESS: 177 Corporate Drive			
TOWN/CITY: Portsmouth		STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: nahansen@tighebond.com			
FAX:	PHONE: 603.294.9213		
ELECTRONIC COMMUNICATION: By initialing here NAH, to this application electronically.	I hereby authorize NHDES t	o communicate a	ıll matters relative
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFF If the owner is a trust or a company, then complete with Same as applicant	• •	•))
NAME: SEE ATTACHED LIST OF OWNERS			
MAILING ADDRESS:			
TOWN/CITY:		STATE:	ZIP CODE:
EMAIL ADDRESS:			
FAX:	PHONE:		
ELECTRONIC COMMUNICATION: By initialing here NAH, to this application electronically.	I hereby authorize NHDES t	o communicate a	Ill matters relative

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))

Control Control
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): The proposed project will provide necessary upgrades to the terminal including the replacement of two undersized bollard moorings and the construction of stormwater management upgrades. The proposed project will have no adverse impact on public commerce, navigation or recreation. The proposed project will have a positive effect on stormwater discharge to the Piscataqua River. There will be no impact on abutting owners. This project proposes the minimum area to be impacted. This project has been designed to avoid resource areas and minimize adverse impacts as it is located within an existing paved area and stone revetment. No impacts to wetlands; all impacts occur in previously distrubed tidal buffer.
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 that you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). You can use the Avoidance and Minimization Checklist, the Avoidance and Minimization Narrative, or your own avoidance and minimization narrative. *See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.
SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)
If unavoidable jurisdictional impacts require mitigation, a mitigation pre-application meeting must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.
Mitigation Pre-Application Meeting Date: Month: Day: Year:
(N/A - Mitigation is not required)
SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)
Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: I confirm submittal. (N/A – Compensatory mitigation is not required)

Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095
www.des.nh.gov

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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.

PERMANENT PERMANENT			TEMPORARY				
JUKI	SDICTIONAL AREA	SF	LF	ATF	SF	LF	ATF
	Forested Wetland						
	Scrub-shrub Wetland						
Wetlands	Emergent Wetland						
tlar	Wet Meadow						
We	Vernal Pool						
	Designated Prime Wetland						
	Duly-established 100-foot Prime Wetland Buffer						
er	Intermittent / Ephemeral Stream						
Surface Water	Perennial Stream or River						
ce V	Lake / Pond						
ırfa	Docking - Lake / Pond						
Su	Docking - River						
	Bank - Intermittent Stream						
Banks	Bank - Perennial Stream / River						
Bē	Bank / Shoreline - Lake / Pond						
	Tidal Waters				75		
	Tidal Marsh						
Tidal	Sand Dune						
Ţ	Undeveloped Tidal Buffer Zone (TBZ)						
	Previously-developed TBZ				6600		
	Docking - Tidal Water						
	TOTAL				6675		
SEC	TION 12 - APPLICATION FEE (RSA 482-A:3, I)						
	MINIMUM IMPACT FEE: Flat fee of \$400.						
	NON-ENFORCEMENT RELATED, PUBLICLY-FUN	DED AND S	SUPERVISE	D RESTORAT	TION PROJE	CTS, REGARDI	ESS OF
	IMPACT CLASSIFICATION: Flat fee of \$400 (refe	er to RSA 4	82-A:3, 1(c) for restrict	ions).		
\boxtimes I	MINOR OR MAJOR IMPACT FEE: Calculate using	g the table	below:				
	Permanent and temporar	y (non-doc	cking): 6,6	575 SF		× \$0.40 =	\$ 2,670
	Seasonal do	ocking stru	cture:	SF		× \$2.00 =	\$
Permanent docking structure: SF × \$4.00 = \$					\$		
	Projects pr	oposing sh	oreline str	uctures (incl	uding docks) add \$400 =	\$
Total = \$					\$ 2,670		
The application fee for minor or major impact is the above calculated total or \$400, whichever is greater =				\$ 2,670			

	3 - PROJECT CLASSIFICATION (Expression)	nv-Wt 306.05)			
	ım Impact Project	Minor Project		Major Project	
SECTION 14	4 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)			
Initial each	box below to certify:				
Initials:	To the best of the signer's know	edge and belief, a	all required notification	s have been provided.	
Initials:	The information submitted on o signer's knowledge and belief.	r with the applica	tion is true, complete, a	and not misleading to the	best of the
Initials:	practice in New Han established by RSA 3 The signer is subject to t currently RSA 641. The signature shall const Department to inspect t	n. I that is granted be ified wetland scient apphire, refer the sto-A:1. The penalties specifies authorization is site of the project trail project.	ased on the information tist, licensed surveyor matter to the joint boars of the in New Hampshire on for the municipal corosed project, except for where the signature		r licensed to cation ficial matters, and the try SPN
Initials:	If the applicant is not the owner the signer that he or she is awar	of the property, one of the application	each property owner si on being filed and does	gnature shall constitute on not object to the filing.	ertification by
SECTION 1	5 - REQUIRED SIGNATURES (Env	-Wt 311.04(d); E	nv-Wt 311.11)		
SIGNATURE		PRINT N	IAME LEGIBLY:		DATE:
See Owner's/Agent Letter of Authorization SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):		OWNER): PRINT	IAME LEGIBLY:		DATE:
SIGNATURE (AGENT, IF APPLICABLE): PRINT NAME LEGIBLY: Neil A. Hansen DATE: 1/27/23			200000000000000000000000000000000000000		
	16 - TOWN / CITY CLERK SIGNAT				
As require	ed by RSA 482-A:3, I(a),(1), I here I four USGS location maps with t	by certify that th	e applicant has filed f	our application forms, fo	our detailed
	TY CLERK SIGNATURE:	ne town/city mai		ME LEGIBLY: L. Barna	bu
TOWN	selli J Darnabil	portsm	OUT DATE: 1	127/2023	Y

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(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".

List of Owners

227 Market Street

Tax Map 119, Lot 6 Jaqueline Mahoney 227 Market Street LLC 27 Austin Street Portsmouth, NH 03801

315 Market Street

Tax Map 119, Lot 5 Geno Marconi NH State Port Authority 555 Market Street Portsmouth, NH 03801

Section 2 Owner & Applicant Letters of Authorization

Owner's Letter of Authorization

This letter is to authorize <u>Granite State Minerals Inc.</u> (Applicant) to represent the interest of <u>227 Market Street, LLC</u> (owner) in any and all permitting matters involving the City of Portsmouth and/or the State of New Hampshire in connection with (i) the mooring improvement project as shown on the Appledore Marine Engineering, LLC, Mooring Improvements plans dated June 4, 2019, and (ii) the stormwater improvement project as shown on the Tighe & Bond Proposed Stormwater Improvements plans dated March 8, 2022 (the "Projects") at 227 Market Street, LLC's property located at 227 Market Street, Portsmouth New Hampshire identified as Tax Map 119 Lot 6. This authorization shall relate to those activities that are required for local, state and federal permitting for the above project and include any required signatures for those applications. This authorization will be valid until and terminate on December 31, 2023 and will not be valid in the event of any material change to the projects, which will require further authorization.

	Sean Mahoney, as Power of	
1	Attorney for Jaqueline Mahoney,	
Sum Markonny	Manager of 227 Market Street LLC	4/27/2022
Signature	Print Name	Date
Jach Hex	Patricia Kelly	4/27/2022
Witness	Print Name	Date

Owner's/Agent Letter of Authorization

This letter is to authorize Tighe & Bond, Inc. (Civil Engineer), to represent and submit on behalf of Granite State Minerals (Applicant), applications and materials in all site design and permitting matters for the proposed project at 227 Market Street in Portsmouth, New Hampshire. These projects include (i) the mooring improvement project as shown on the Appledore Marine Engineering, LLC, Mooring Improvements plans dated June 4, 2019, and (ii) the stormwater improvement project as shown on the Tighe & Bond Proposed Stormwater Improvements plans dated December 29, 2022 (the "Projects") at 227 Market Street, LLC's property located at 227 Market Street, Portsmouth New Hampshire identified as Tax Map 119 Lot 6. This authorization shall relate to those activities that are required for local, state and federal permitting for the above project and include any required signatures for those applications. This authorization will be valid until and terminate on December 31, 2023 and will not be valid in the event of any material change to the projects, which will require further authorization.

Shelagh E. Mahoney Shelagh E. Mahoney 1/12/2023
Signature Print Name Date

Teresa Kelly
Witness
Witness
Print Name

1/12/2023

LICENSE AGREEMENT

BETWEEN

PEASE DEVELOPMENT AUTHORITY - DIVISION OF PORTS AND HARBORS

AND

GRANITE STATE MINERALS, INC.

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EXHIBITS TO LICENSE

Exhibit

"A" PLAN OF LICENSE AREA

"B" PLAN OF BOLLARD

"C" LIST OF ENVIRONMENTAL LAWS AND REGULATIONS

LICENSE

THIS LICENSE AGREEMENT ("License") is made by and between the PEASE DEVELOPMENT AUTHORITY - DIVISION OF PORTS AND HARBORS ("PDA-DPH") 55 International Drive, Portsmouth, New Hampshire 03801 and GRANITE STATE MINERALS, INC., c/o Eastern Salt Company, Inc., 134 Middle St., Suite 210, Lowell, MA 01852 ("GSM" or "Licensee") (PDA-DPH and GSM may be referred to jointly as the "Parties").

RECITALS

- A. PDA-DPH is an agency of the State of New Hampshire established pursuant to RSA ch. 12-G, "Pease Development Authority," and is authorized to enter into this License pursuant to the provisions contained therein, subject to the approval of the Governor and Executive Council. PDA-DPH operates the Market Street Marine Terminal at 555 Market Street, Portsmouth, NH 03801.
- B. GSM is a corporation duly organized and existing under the laws of the State of New Hampshire and is registered to do business in New Hampshire. GSM leases property at 227 Market Street, Portsmouth, NH 03801.

NOW, THEREFORE, in consideration of the covenants herein contained and other valuable consideration, the receipt of which is hereby acknowledged, PDA-DPH and GSM hereby agree as follows:

ARTICLE 1. LICENSE AREA

- 1.1. Description of License Area. PDA-DPH, for and in consideration of the covenants herein specified to be performed by GSM, hereby grants to GSM a non-exclusive license to use the 324 square foot area (18' x 18') specifically shown on the plan attached hereto and incorporated herein as Exhibit A, solely for the construction, installation, use, and maintenance of a bollard for the mooring of marine vessels docked at GSM's leased facility at 227 Market Street, Portsmouth, New Hampshire ("License Area" or "Licensed Premises"), consistent with the Plan of Bollard attached hereto and incorporated herein as Exhibit B.
- 1.2. All of the rights granted GSM to the areas and/or facilities described in Section 1.1 shall be subject to the additional restrictions set forth in Article 9 and other pertinent provisions of this License.

ARTICLE 2. CONDITION OF LICENSE AREA

2.1. GSM acknowledges that it has inspected the License Area, including any improvements and other facilities thereon, as of the date of execution of this License and that it has determined that the said License Area is in apparent good and tenantable condition and appropriate for the use intended under this License. GSM accepts said License Area in its present condition and without any representation or warranty by PDA-DPH as to its condition or as to the use or occupancy which may be made thereof and without obligation on the part of PDA-DPH to make any alterations, repairs or additions to said License Area that has not been fully set forth in this License. Further, PDA-DPH shall not be responsible for any latent or other defect not known by PDA-DPH or change of condition in said License Area, and the rent and fees hereunder shall in no event be withheld or diminished on account of any such defect nor any such change in their condition, nor, except as provided herein, for any damage occurring thereto. Except as specifically set forth in this License, GSM at its sole cost and expense, shall do all work necessary to prepare the Licensed Premises for its intended use.

ARTICLE 3. TERM COMMENCEMENT AND EXPIRATION

- 3.1. This License shall be effective upon execution and shall continue for a term commencing September 1, 2022 ("Term Commencement Date") and expiring at end of day on August 31, 2040 ("Base Term"), unless terminated earlier in accordance with the provisions of this License. Notwithstanding the foregoing, should GSM's leasehold interest in the property at 227 Market Street, Portsmouth, NH 03801 terminate, or otherwise end, during the Base Term, this License shall automatically terminate as of the same date.
- <u>3.2.</u> Unless the context clearly indicates otherwise when used in this License the phrase "term of this License" shall mean the Base Term plus any duly exercised allowable extensions thereof.

ARTICLE 4. (RESERVED)

ARTICLE 5. IMPOSITIONS

5.1. During the Term of this License, GSM shall pay when due, all taxes, charges, excises, license and permit fees, assessments, and other governmental charges, general and special, ordinary and extraordinary, unforeseen, as well as foreseen, of any kind and nature whatsoever, which during the term of this License are assessed or imposed upon GSM or become due and payable by GSM with respect to its operations on the Licensed Premises, or imposed on any personal property, equipment or other facility used in GSM's operations on the Licensed Premises (all of which taxes, charges, excises, fees, assessments and other governmental charges are hereinafter collectively referred to as "Impositions"). If, by law, any such Imposition is payable, or may at the option of GSM be paid in installments, GSM may pay the same together with any accrued interest on the unpaid balance of such Imposition in installments as the same respectively become due and before any fine, penalty, interest or cost may be added thereto for the nonpayment of any such installment and interest. Any Imposition relating to a fiscal period of the taxing authority a part of which period is included prior to the commencement of the term of this License, shall be prorated as between PDA-DPH and GSM so that GSM shall pay only the portion thereof attributable to any period during the Term.

Notwithstanding the preceding paragraph, the Parties acknowledge that PDA-DPH shall have no right to assess any rentals, charges, fees or other obligations in PDA-DPH's proprietary capacity (as distinct from its governmental capacity) against GSM other than as specified or allowed in other sections of this License.

<u>5.2.</u> GSM covenants to furnish to PDA-DPH within fourteen (14) days of receipt of a written request from PDA-DPH, official receipts of the appropriate taxing authority, or other proof satisfactory to PDA-DPH, evidencing the payment thereof.

ARTICLE 6. SURRENDER OF LICENSE AREA

<u>6.1.</u> On the expiration or termination of this License, GSM shall surrender to PDA-DPH the License Area, including title to and ownership of the bollard and any other improvements thereon, free of all materials, in good order, condition and repair, reasonable wear and tear excepted. GSM's obligation under this Article 6 and the related provisions of Article 9 shall survive the expiration or termination of this License. Once installed, the bollard shall not be removed without the written permission of PDA-DPH.

ARTICLE 7. INSURANCE

- <u>7.1.</u> <u>Insurance</u>. During the term of this License, GSM, its subcontractors and agents shall at their expense carry and maintain:
 - (1) Commercial general liability insurance, including operating liability insurance against claims for personal injury, bodily injury, death or property damage, occurring upon, in or about the License Area and other portions of the PDA-DPH utilized by GSM including, without limitation, any improvements thereon and the common areas, sidewalks, streets, parking areas and passageways, such insurance to afford immediate minimum protection at the time of the Term Commencement Date, and at all times during the Term, to a limit of not less than four (\$4,000,000.00) million dollars per occurrence with respect to damage to property and four (\$4,000,000.00) million dollars per occurrence with respect to personal injury or death to any one or more persons and with no deductible or such deductible amount as may be approved by PDA-DPH. Such insurance shall also include coverage against liability for bodily injury or property damage arising out of or related to GSM's operations in connection with this License or on behalf of GSM, or any other person or organization, or involving any owned, non-owned, leased or hired automotive equipment in connection with GSM's activities at the PDA-DPH.
 - (2) Workers' compensation and employer's liability insurance in an amount and form which meets all applicable requirements of the labor laws of the State of New Hampshire, as amended from time to time, and which specifically covers the persons and risks involved in this License.
 - (3) Longshore and Harbor Workers' Compensation Act insurance coverage for all maritime employment related activities in connection with the rights granted under this License.
 - (4) Automobile liability insurance in amounts approved from time to time by PDA-DPH, but not less than One Million Dollars (\$1,000,000) combined single limit for owned, hired and non-owned automobiles.
- 7.2. All policies of insurance required to be carried under this Article shall be effected under valid and enforceable policies, in such forms and amounts as may, from time to time, be required under this License, issued by insurers of recognized responsibility. The policies of insurance required in Section 7.1 shall be for the mutual benefit of PDA-DPH, the State of New Hampshire and GSM with PDA-DPH and State of New Hampshire named as an additional insureds under the commercial general liability and automobile liability insurance policies. Upon the execution of this License (and thereafter not less than fifteen (15) days prior to the expiration date of each policy required pursuant to this Article), GSM shall provide PDA-DPH with certificates of insurance setting forth requisite coverages and coverage amounts for each policy required pursuant to Section 7.1. The certificates of insurance shall bear a notation evidencing payment of premiums or shall

be accompanied by other evidence reasonably satisfactory to PDA-DPH of such payment. The requirement to produce certificates of insurance shall be in lieu of producing copies of the underlying insurance policies. In the event reasonable business necessity requires the production of any policy of insurance GSM agrees to allow PDA-DPH, within five (5) business days of its written request to GSM, to review such policies during normal business hours at a location designated by PDA-DPH.

7.3. All policies or certificates issued by the respective insurers shall provide that any losses shall be payable notwithstanding any act or failure to act or negligence of PDA-DPH, the State of New Hampshire or any other person, provide that the insurer shall have no right of subrogation against PDA-DPH or the State of New Hampshire, provide that the policies shall not be canceled without first providing PDA-DPH with thirty (30) days advance written notice, except in cases involving the non-payment of a premium, in which case ten (10) days shall be acceptable, a provision that any liability insurance coverage required to be carried shall be primary and non-contributing with respect to any insurance, self-insured or otherwise, carried by PDA and be reasonably satisfactory to the PDA-DPH in all other respects. In no circumstances will the Licensee be entitled to assign to any third party rights of action which licensee may have against PDA-DPH.

ARTICLE 8. PDA-DPH'S RIGHT TO PERFORM GSM'S COVENANTS AND RIGHT OF USE

- 8.1. If GSM shall at any time fail to pay when due any Imposition or other charge or to pay for or maintain any of the insurance policies required under Article 7, or to make any other payment or perform any other act on GSM's part required by this License, then PDA-DPH, after ten (10) days' written notice to GSM (or, in case of any emergency, without notice, or with such notice as may be reasonable under the circumstances) and without waiving or releasing GSM from any obligation of GSM hereunder, may (but shall not be required to):
 - (i) pay such Imposition or other charge, or
 - (ii) pay for and maintain such insurance policies, or
 - (iii) make such other payment on GSM's part to be made under this License, or
 - (iv) perform such other act on GSM's part to be performed as provided in this License following reasonable notice to GSM and an opportunity to cure, and may enter upon the License Area for such purpose and take all such action as may be deemed or appropriate by PDA-DPH to correct such failure of GSM.
- <u>8.2.</u> All sums so paid by PDA-DPH and all reasonable costs and expenses incurred by PDA-DPH in connection with the performance of any such act (together with interest thereon at the rate specified in Section 26.1 from the respective date(s) of PDA-DPH's making of each such payment or incurring of each cost or expenses) shall constitute additional rent payable by GSM under this License and shall be paid by GSM to PDA-DPH on demand.
- <u>8.3</u>. PDA-DPH shall have the right to utilize the bollard for mooring marine vessels in emergency situations without interference to GSM.

ARTICLE 9. USE OF LICENSE AREA - OBLIGATIONS IN CONNECTION WITH SUCH USE

9.1. The License Area is solely for the construction, installation, use, and maintenance of a bollard, at GSM's sole expense, for the mooring of marine vessels docked at GSM's leased facility 227 Market Street, Portsmouth, New Hampshire, consistent with the Plan of Bollard attached hereto and incorporated herein as Exhibit B. All bollard design and construction plans shall be reviewed and approved by the PDA-DPH prior to construction, who may at its discretion retain an outside marine engineering firm, at GSM's expense, to conduct said review. Once installed/constructed, GSM shall regularly inspect the bollard to ensure it is functioning consistent with its design and intended use, and shall regularly maintain the bollard, including but not limited to regular cleaning and painting to protect the bollard from the marine environment. No less than at least once every five (5) years, GSM shall have the bollard inspected by a licensed marine engineer to ensure proper functionality and provide a written inspection report to PDA-DPH. GSM shall maintain and repair as necessary the security fence and signage between the bollard and the parking lot to its west in accordance with 33 CFR and applicable United States Coast Guard regulations.

Subject expressly to approval by the PDA Board of Directors, PDA-DPH may authorize GSM to conduct any uses not expressly authorized under this License subject to the execution of an appropriate agreement which shall include a provision requiring the payment of established fees and charges that may be applicable to any such additional uses consented to by PDA-DPH. GSM is prohibited from any use of the License Area not specifically granted in this Section 9.1.

GSM warrants that it holds, or will hold prior to undertaking activities permitted under this License, all certificates, permits, licenses or other entitlement required by federal, state or local laws in order to allow GSM to conduct the permitted uses hereunder, and that the same are, and will be, kept current, valid and complete. GSM further warrants that it shall at all times abide by and conform with all terms of the same and that it shall give immediate notice to PDA-DPH of any additions, renewals, amendments, suspensions or revocations. In the use and occupation of the License Area and the conduct of such business thereon, GSM, at its sole cost and expense, shall promptly comply with all present and future laws, ordinances, orders, rules, regulations and requirements of all federal, state and municipal governments, courts, departments, commissions and boards, any national, state or local Board of Fire Underwriters, or any other body exercising functions similar to those of any of the foregoing.

9.2. GSM, its employees, contractors, subcontractors, agents, servants and invitees shall comply with all federal, state and local laws, rules and regulations which apply to the conduct of the uses contemplated herein. GSM, its employees, agents, contractors, subcontractors or assigns shall also comply with any rules and regulations promulgated by PDA-DPH for operation of the PDA-DPH as the same may be from time to time established or amended. Responsibility for compliance with all federal, state and local laws required by this Article rests exclusively with GSM. PDA-DPH assumes no enforcement or supervisory responsibility except with respect to

matters committed to its jurisdiction and authority. At all times, GSM will remain in compliance with the Maritime Transportation Security Act (MTSA) and the Marine Terminal Security Plan.

9.3. Notwithstanding any other provision of this License, the rights of GSM herein shall be subordinate to PDA-DPH's rights to manage the PDA-DPH property and other common areas and access, which rights shall include, without limitation, the right to impose rules and regulations or issue management directives relating to use of the PDA-DPH property and the right to add, delete, alter or otherwise modify the designation and use of all property of the PDA-DPH.

ARTICLE 10. RIGHT OF PDA-DPH TO INSPECT AND REPAIR

- 10.1. GSM will permit PDA-DPH and its authorized agents and representatives to enter the License Area at all reasonable times and upon reasonable notice for the purpose of: (i) inspecting the same; and (ii) making any necessary repairs and performing any other work that may be necessary as determined in PDA-DPH's discretion.
- 10.2. Although not obligated to do so, PDA-DPH may undertake construction, repair or other activities related to the operation, maintenance and repair of the PDA-DPH property, including the Licensed Premises, which will require temporary accommodation by GSM. GSM agrees to accommodate PDA-DPH in such matters, so long as GSM is given a reasonable notice and opportunity to coordinate with PDA-DPH and so long as no such activity by PDA-DPH shall interfere with the active docking/loading of a ship in port or results in the payment of any fee or security for extension of the storage period as a result of such activity, even though GSM's own activities may be inconvenienced or partially impaired, and GSM agrees that no liability shall attach to PDA-DPH, its members, employees or agents by reason of such inconvenience or impairment, unless such activities of PDA-DPH hereunder are performed in a negligent manner.

ARTICLE 11. GENERAL INDEMNIFICATION

11.1. In addition to any other obligation of GSM under this License to indemnify, defend and hold harmless PDA-DPH, GSM agrees to indemnify, defend and hold harmless PDA-DPH against and from any and all claims, judgments, damages, penalties, fines, assessments, costs and expenses, liabilities and losses (including, without limitation, diminution in value of the PDA-DPH, damages for the loss or restriction on the use of the PDA-DPH, sums paid in settlement of claims, attorneys' fees, consultants' fees and experts' fees) (collectively, "Losses") resulting or arising during the term of this License:

- 1. from any condition of the PDA-DPH resulting from GSM's occupancy of the PDA-DPH property or exercise of any of its rights under this License;
- 2. from any breach or default on the part of GSM in the performance of any covenant or agreement on the part of GSM to be performed pursuant to the terms of this License, or from any act or omission of GSM, or any of its agents, contractors, servants, employees, sublessees, licensees or invitees; or
- 3. from any accident, injury, death or damage whatsoever caused to any person by or arising from the acts or omissions of GSM occurring during the term of this License, on or about the License Area or any portion of the PDA-DPH property.

Notwithstanding the preceding provisions of this Section 11.1, GSM shall be under no obligation to indemnify PDA-DPH to the extent such matters included in this Section (i) were in existence prior to the effective date of this Agreement, or (ii) arise out of the gross negligence or willful misconduct of PDA-DPH, its officers, agents, contractors, servants, invitees or employees. GSM shall be under no obligation to indemnify PDA-DPH for any claim for diminution in value of the PDA-DPH resulting from GSM's occupancy of the PDA-DPH or exercise of any rights as contemplated herein.

In the event that any action or proceeding is brought against PDA-DPH, that is GSM's responsibility pursuant to this Section 11.1, GSM, upon notice from PDA-DPH, covenants to resist or defend such action or proceeding with counsel acceptable to PDA-DPH, as its interests may require.

11.2. The term "Person" as used in this Article and Article 19 shall include individuals, corporations, partnerships, governmental units and any other legal entity entitled to bring a claim, action or other demand or proceeding on its own behalf or on behalf of any other entity.

ARTICLE 12. ALTERATIONS

12.1. GSM shall not place or construct any improvements, changes, structures, alterations or additions (cumulatively referred to in this Article as "Alterations") in, to or upon the License Area or at any other area of the PDA-DPH, not including the bollard permitted under Article 1.1 (see Exhibit B), without PDA-DPH's prior written consent, which consent shall be at PDA-DPH's sole and exclusive discretion.

ARTICLE 13. DESTRUCTION AND RESTORATION

- 13.1. In the event any portion of the License Area shall be damaged by fire or other casualty to such an extent as to preclude GSM from conducting its operations at the License Area, or to reduce the total level of utilization for its operations by a factor greater than fifty percent (50%), as determined solely and reasonably by an independent recognized expert in related operations, acceptable to the Parties, GSM shall have the election to terminate this License.
- 13.2. In the event GSM elects to terminate this License as allowed in Section 13.1, it shall provide written notice of such termination to PDA-DPH within thirty (30) days following the occurrence of such damage or destruction, which termination shall be effective on the thirtieth day following the date of receipt of such notice.
- 13.3. Except as otherwise expressly provided in this Article, no destruction of, or damage to the License Area, or other improvements or facilities located on the PDA-DPH by fire or any other cause shall permit GSM to surrender this License or shall relieve GSM from its obligations to pay the rent and fees payable under this License or from any of its other obligations under this License, and GSM waives any rights now or hereafter conferred upon it by statute or otherwise to quit or surrender this License or any suspension, diminution, abatement or reduction of rent or fees on account of any such destruction or damage other than as allowed under this Article.

ARTICLE 14. DEFAULT BY PDA-DPH

14.1. The occurrence of the following events shall constitute a default and breach of this License by PDA-DPH ("Event of PDA-DPH Default"):

The failure by PDA-DPH to observe or perform any covenant required to be observed or performed by it where such failure continues for thirty (30) working days after written notice thereof by GSM to PDA-DPH, provided that if the default is such that the same cannot reasonably be cured within such 30-day period, PDA-DPH shall not be deemed to be in default if it shall have commenced the cure and thereafter diligently prosecutes the same to completion. Notwithstanding the foregoing, GSM shall not owe any amounts hereunder, during the period beginning with such failure and continuing until it has been cured, if such default materially affects GSM's ability to operate its business on the Licensed Premises, and, furthermore, GSM shall have the right to terminate this License if such condition continues for more than 30 days.

- 14.2. If an Event of PDA-DPH Default occurs, GSM may elect among any of the following remedies:
 - 1. termination of this License by written notice to PDA-DPH;
 - a rental abatement based on the degree of inability to use the License Area for its intended use caused by PDA-DPH's default which abatement will be calculated from the date the Premises becomes unusable in whole or in part;
 - 3. subject to available legal and factual defenses,
 - a decree or order of a court of competent jurisdiction compelling specific performance by PDA-DPH of its obligations under the License; or
 - a decree or order by a court of competent jurisdiction restraining or enjoining the breach by PDA-DPH of any of its obligations under the License.
- 14.3. No delay or omission of GSM to exercise any right or remedy shall be construed as a waiver of any such right or remedy or of any default by PDA-DPH.

ARTICLE 15. DEFAULT BY GSM

- 15.1. The occurrence of any of the following events shall constitute a default and breach of this License by GSM ("Event of GSM Default"):
- A. The failure by GSM to pay when due any payment required to be made by GSM to PDA-DPH hereunder where such failure continues for seven (7) working days after written notice thereof by PDA-DPH to GSM.
- B. The abandonment or vacation of the License Area by GSM while in breach or default of any provision of this License or that lasts for seven (7) days or more.
- C. The failure by GSM to observe and perform any other material provision of this License (including without limitation compliance with federal, state and local laws and regulations) to be observed or performed by GSM, where such failure continues for seven (7) working days after written notice thereof by PDA-DPH to GSM; provided that if the nature of such default is such that the same cannot reasonably be cured within such seven-day period, GSM shall not be deemed to be in default if GSM shall within such period commence such cure and thereafter diligently prosecutes the same to completion and provided further, that if the nature of any breach creates, in PDA-DPH's sole determination, danger of injury to persons or property, GSM shall cure such breach as expeditiously as feasible following receipt of notice from PDA-DPH.
- E. The making by GSM of any general assignment for the benefit of creditors; the filing by or against GSM of a petition to have GSM adjudged a bankrupt or of a petition for reorganization or arrangement under any law relating to bankruptcy where possession is not restored to GSM within thirty (30) days; or the attachment, execution or other judicial seizure of substantially all of GSM's assets located at the PDA-DPH or of GSM's interest in this License, where such seizure is not discharged within thirty (30) days.
- F. The failure of GSM to carry and provide proof of the required insurance coverages under this License.
- G. The occurrence of a breach and failure of GSM to cure within the specified time under any other agreement to which GSM and PDA-DPH are parties.
- 15.2. If an Event of GSM Default occurs, PDA-DPH may elect among any one or more of the following remedies, without limiting any other remedies available to PDA-DPH:
 - 1. subject to available legal and factual defenses,
 - a decree or order of a court of competent jurisdiction compelling specific performance by GSM of its obligations under the License;

- a decree or order by a court of competent jurisdiction restraining or enjoining the breach by GSM of any of its obligations under the License; and
- 2. to the extent allowed by law, the right to undertake to cure GSM's default, in which event GSM shall pay PDA-DPH the reasonable costs incurred in such undertaking. Except for emergency conditions, PDA-DPH shall provide GSM with five (5) business days prior written notice of its intent to exercise the right to undertake to cure GSM's default. In the event GSM commences to cure such default within this five (5) day period and diligently prosecutes the same to completion, PDA-DPH shall refrain from exercising the right to undertake its own cure of GSM's default.

In exercising any right to cure under this Section, PDA-DPH may enter upon the License Area for such purpose and take all such action as may be deemed or appropriate by PDA-DPH to correct such failure of GSM.

Nothing herein shall imply any duty upon the part of PDA-DPH to do any such corrective action and performance thereof by PDA-DPH shall not constitute a waiver of GSM's default in failing to perform the same. PDA-DPH may during the progress of such work keep and store in or on the License Area all necessary materials, tools, supplies and equipment. PDA-DPH shall not be liable for inconvenience, annoyance, disturbance, loss of business or other damage of GSM by reason of making such repairs or the performance of any such work, on or account of bringing materials, tools, supplies or equipment into or through the License Area during the course thereof and the obligations of GSM under this License shall not be affected thereby.

3. termination of this License by the provision of written notice to GSM.

In the event that PDA-DPH shall elect to so terminate this License, then PDA-DPH may recover from GSM:

- (i) Any unpaid fees up to the effective date of termination; plus
- (ii) Any other amount necessary to compensate PDA-DPH for all the damages directly and proximately caused by GSM's default of its obligations under this License; plus
- (iii) PDA-DPH shall provide GSM with notice of any damage claims sought to be asserted by PDA-DPH under this section within sixty (60) days of the effective date of termination and will assert such claim within one hundred and twenty (120) days of such notice.

- 15.3. The various rights and remedies reserved to PDA-DPH, including those not specifically described under this License, shall be cumulative, and, except as otherwise provided by New Hampshire statutory law in force and effect at the time of the execution of this License, PDA-DPH may pursue any or all of such rights and remedies, whether at the same time or otherwise.
- 15.4. No delay or omission of PDA-DPH to exercise any right or remedy shall be construed as a waiver of any such right or remedy or of any default by GSM.
- 15.5. Notwithstanding any other provision of this License, in the event the breach by GSM in the reasonable opinion of PDA-DPH affects or is likely to affect the efficient operation of the PDA-DPH or give rise to public safety concerns, in addition to any other remedy it may have under this Lease, PDA-DPH shall also be entitled (but shall not be obligated) to take whatever actions is deemed necessary by PDA-DPH to abate or cure such situation and GSM shall reimburse PDA-DPH for all costs incurred by PDA-DPH in taking such action.
- 15.6. [RESERVED].

ARTICLE 16. PROHIBITION AGAINST TRANSFERS - BANKRUPTCY

16.1. GSM shall not have the right to delegate any of its responsibilities or obligations, to assign any of its rights, to mortgage or otherwise transfer any of its rights or interests under this License or to mortgage any portion of the License Area, or to sublease the License Area.

16.2. If a petition is filed by or against GSM for relief under Title 11 of the United States Code. as amended (the "Bankruptcy Code"), and GSM (including for purposes of this Section GSM's successor in bankruptcy, whether a trustee or GSM as debtor-in-possession) assumes and proposes to assign, or proposes to assume and assign, this License pursuant to the provisions of the Bankruptcy Code to any person or entity who has made a bona fide offer to accept an assignment of this License, then notice of the proposed assignment setting forth (a) the name and address of the proposed assignee, (b) all of the terms and conditions of the offer and proposed assignment, and 8 the adequate assurance to be furnished by the proposed assignee of its future performance under the License, shall be given to PDA-DPH by GSM no later than twenty (20) days (or such other period of time as the court may allow) after GSM has made or received such offer, but in no event later than thirty (30) days (or such other period of time as the court may allow) prior to the date on which GSM applies to a court of competent jurisdiction for authority and approval to enter into the proposed assignment. Any person or entity to which this License is assigned pursuant to the provisions of the Bankruptcy Code shall be deemed, without further act or documentation, to have assumed all of GSM's obligations arising under this License on and after the date of such assignment. Any such assignee shall, upon demand, execute and deliver to PDA-DPH an instrument confirming such assumption. No provision of this License shall be deemed a waiver of PDA-DPH's rights or remedies under the Bankruptcy Code to oppose any assumption and/or assignment of this License, to require a timely performance of GSM's obligations under this License, or to regain possession of the Premises if this License has neither been assumed nor rejected within sixty (60) days after the date of the order for relief or within such additional time as a court of competent jurisdiction may have fixed. Notwithstanding anything in this License to the contrary, all amounts payable by GSM to or on behalf of PDA-DPH under this License. whether or not expressly denominated as rent, shall constitute rent for the purposes of Section 502(b)(6) of the Bankruptcy Code.

ARTICLE 17. NOTICES

Whenever PDA-DPH or GSM shall desire to give or serve upon the other any notice, demand, request or other communication with respect to this License or with respect to the License Area each such notice, demand, request or other communication shall be in writing and shall not be effective for any purpose unless same shall be given or served by personal delivery to the party or parties to whom such notice, demand, request or other communication is directed or by mailing the same to such party or parties by certified mail, postage prepaid, return receipt requested, addressed as follows:

If to PDA-DPH:

Pease Development Authority

55 International Drive Portsmouth, NH 03801

Attention: Executive Director

With a copy to:

Division of Ports and Harbors

555 Market Street Portsmouth, NH 03801

Attention: Director, Division of Ports and Harbors

If to GSM:

Granite State Minerals, Inc. c/o Eastern Salt Company, Inc. 134 Middle Street, Suite 210

Lowell, MA 01852

Attention: Shelagh Mahoney, President

or at such other address or addresses as PDA-DPH or GSM may from time to time designate by notice given by certified mail.

Every notice, demand, request or communication hereunder sent by mail shall be deemed to have been given or served as of the second business day following the date of such mailing.

ARTICLE 18. (RESERVED)

ARTICLE 19. ENVIRONMENTAL PROTECTION

- 19.1. GSM and any assignee of GSM shall comply with all federal, state, and local laws, regulations, and standards that are or may become applicable to GSM's or sublessee's or assignee's activities at the PDA-DPH, including the License Area, including but not limited to, the applicable environmental laws and regulations identified in Exhibit C, as amended from time to time.
- 19.2. GSM and any assignee of GSM shall be solely responsible for obtaining at their cost and expense any environmental permits required for their operations under this License or any sublease or assignment, independent of any existing PDA-DPH permits. GSM shall review and update, as necessary, but no less than quarterly, its control procedures and best management practices to assure compliance with all environmental regulations.
- 19.3. GSM shall indemnify, defend and hold harmless PDA-DPH against and from all claims, judgments, damages, penalties, fines, costs and expenses, liabilities and losses (including, without limitation, diminution in value of the Premises, damages for the loss or restriction on the use of the Premises, and sums paid in settlement of claims, attorneys' fees, consultants' fees and experts' fees), resulting or arising from discharges, emissions, spills, releases, storage or disposal of any substance or matter, or any other action by GSM, giving rise to PDA-DPH liability, civil or criminal, or responsibility under federal, state or local environmental laws.

Subject to the preceding paragraph, this indemnification of PDA-DPH by GSM includes, without limitation, any and all claims, judgment, damages, penalties, fines, costs and expenses, liabilities and losses incurred by PDA-DPH in connection with any investigation of site conditions, or any remedial or removal action or other site restoration work required by any federal, state or local governmental unit or other person for or pertaining to any discharges, emissions, spills, releases, storage or disposal of Hazardous Substances arising or resulting from any act or omission of GSM at the PDA-DPH, including the License Area after the date GSM takes possession of the Premises under this Agreement.

The provisions of this Section shall survive the expiration or termination of the License, and GSM's obligations hereunder shall apply whenever PDA-DPH incurs costs or liabilities for GSM's actions of the types described in this Article.

19.4. As used in this License, the term "Hazardous Substances" means any hazardous or toxic substance, material or waste oil or petroleum product which is or becomes regulated by any local governmental authority, the State of New Hampshire or the United States Government. The term "Hazardous Substances" includes, without limitation, any material or substance which is (i) defined as a "hazardous waste," under New Hampshire RSA ch.147-A, (ii) defined as a "hazardous substance" under New Hampshire RSA ch.147-B, (iii) oil, gasoline or other petroleum product, (iv) asbestos, (v) listed under or defined as hazardous substance pursuant to Part Hc. P 1905 ("Hazardous Waste Rules") of the New Hampshire Code of Administrative Rules, (vi) designated as a "hazardous substance" pursuant to Section 311 of the Federal Water Pollution Control Act

(33 U.S.C. '1317, (vii) defined as a "hazardous waste" pursuant to Section 1004 of the Federal Resource Conservation and Recovery Act, 42 U.S.C. '6901 et seq. (42 U.S.C. '6903), or (viii) defined as a "hazardous substance" pursuant to Section 101 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. '9601 et seq. (42 U.S.C. '9601) and (ix) so defined in the regulations adopted and publications promulgated pursuant to any of such laws, or as such laws or regulations may be further amended, modified or supplemented (collectively "Hazardous Substance Laws").

As used in this License, the terms "release" and "storage" shall have the meanings provided in RSA 147-B:2, as amended, and the term "disposal" shall have the meaning provided in RSA 147-A:2.

- 19.5. PDA-DPH's rights under this License specifically include the right for PDA-DPH to inspect the License Area and improvements thereon for compliance with environmental, safety, and occupational health laws and regulations, whether or not PDA-DPH is responsible for enforcing them. Such inspections are without prejudice to the right of duly constituted enforcement officials to make such inspections and shall be made in accordance with Article 12.
- 19.6. GSM, and any assignee of GSM whose operations utilize Hazardous Substances, shall have a completed and approved plan for responding to Hazardous Substances spills prior to commencement of operations on the License Area. Such plan shall be independent of, but not inconsistent with, any plan or other standard of PDA-DPH applicable to the PDA-DPH and except for initial fire response and/or spill containment, shall not rely on use of the PDA-DPH or PDA-DPH personnel or equipment. Should PDA-DPH provide any personnel or equipment, whether for initial fire response and/or spill containment or otherwise, on request of GSM, or because GSM was not, in the opinion of PDA-DPH, conducting timely cleanup actions, GSM agrees to reimburse PDA-DPH for its costs.
- 19.7. Unless GSM provides sufficient evidence to the contrary of its actual date of entering or taking possession of the Licensed Premises, the date set forth in Article 3 shall be construed as the date on which GSM enters or takes possession of the Licensed Premises.

ARTICLE 20. (RESERVED)

ARTICLE 21. MISCELLANEOUS

- 21.1. All sums which may from time to time become due and payable by GSM to PDA-DPH under any of the provisions of this License shall be made payable to the "Pease Development Authority Division of Ports and Harbors" and forwarded by GSM direct to PDA-DPH's Executive Director at the address specified in Article 17. All such rent and other sums if not paid on the due date or the date by which payment is due after notice shall bear interest from and after the due date thereof at the rate of eighteen percent (18%) per annum; provided, however, that such interest shall in no event exceed the maximum rate permitted by law.
- <u>21.2.</u> In all cases the language in all parts of this License shall be construed simply, according to its fair meaning and not strictly for or against PDA-DPH or GSM.
- <u>21.3.</u> The word titles underlying the Article designations contained herein are inserted solely for convenience and under no circumstances are they or any of them to be treated or construed as any part of this instrument.
- 21.4. If GSM should remain in possession of the License Area after the expiration or termination of this License and without executing a new license, then such holding over shall be on the same terms and conditions as this License, provided, however, that the rates for each of the fees or other charges due to PDA-DPH shall increase by two hundred percent (200%) and PDA-DPH shall have a right to cure GSM's holdover by removal of the bollard at the sole cost and expense of GSM and in accordance with the provisions of this License.
- <u>21.5.</u> Each individual executing this License on behalf of GSM represents and warrants that he or she is duly authorized to execute and deliver this License on behalf of said corporation, and that this License is binding upon said corporation in accordance with its terms.
- 21.6. This License covers in full each and every agreement of every kind or nature whatsoever between the Parties hereto concerning the License Area and other rights at the PDA-DPH and all preliminary negotiations and agreements of every kind or nature whatsoever with respect to the License Area and other rights at the PDA-DPH; and no other person, firm or corporation has at any time had any authority from PDA-DPH or GSM to make any representations or promises on behalf of PDA-DPH or GSM, and PDA-DPH and GSM expressly agree that if any such representations or promises have been made by PDA-DPH or GSM or others, PDA-DPH and GSM hereby waive all right to rely thereon. No verbal agreement or implied covenant shall be held to vary the provisions hereof, any statute, law, or custom to the contrary notwithstanding. No provision of this License may be amended or added to except by an agreement in writing signed by the parties hereto or their respective successors in interest. GSM and PDA-DPH acknowledge that they have read this Section and understand it to be a waiver of any right to rely on any representations or agreements not expressly set forth in this License.

- <u>21.7.</u> Subject to the provisions hereof, this License shall be binding upon and shall inure to the benefit of the Parties hereto and their respective successors and assigns, and wherever a reference in this License is made to either of the Parties hereto such reference shall be deemed to include, wherever applicable, also a reference to the successors and assigns of such party, as if in every case so expressed.
- 21.8. Nothing contained in this License shall be deemed or construed by the Parties hereto or by any third person to create the relationship of principal and agent or of partnership or of joint venture or of any association between PDA-DPH and GSM, and neither the method of computation of rent nor any other provision contained in this License nor any acts of the Parties hereto shall be deemed to create any relationship between PDA-DPH and GSM other than the relationship of Licensor and Licensee.
- <u>21.9.</u> Each party hereto warrants to the other that it has no dealings with any real estate broker or agent in connection with the negotiation of this License.
- <u>21.10.</u> This License shall be construed and enforced in accordance with the laws of the State of New Hampshire.
- <u>21.11.</u> Any actions or proceedings with respect to any matters arising under or growing out of this License shall be instituted and prosecuted only in courts located in the State of New Hampshire. Nothing contained in this Article or any other provision of this License shall be deemed to constitute a waiver of the sovereign immunity of the State of New Hampshire, to the State of New Hampshire, provided, however, that PDA-DPH agrees to waive immunity for contractual claims under this License to the extent allowed under NHRSA 491:8, as the same may be amended.
- <u>21.12.</u> This instrument may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.
- <u>21.13.</u> GSM shall faithfully observe and comply with such rules and regulations as PDA-DPH may adopt for the operation of the PDA-DPH, which rules and regulations are reasonable and nondiscriminatory as well as all modifications thereof and additions thereto. PDA-DPH shall not be responsible to GSM for the violation or nonperformance by any other tenant of PDA-DPH of any of such Rules and Regulations.
- <u>21.14.</u> All obligations of GSM or PDA-DPH to indemnify, defend and hold harmless PDA-DPH or GSM, respectively, and to make any monetary payment to PDA-DPH or GSM, shall survive the termination or expiration of this License.

EXECUTION

of the	N WITNESSday of	WHEREOF,	PDA-DPH an 022.	d GSM have exe	cuted th	is License effec	tive as
			GRANITE	STATE MINEF	RALS, II	NC.	
			By: She	lagh E.M. Name: Shela	shor	rey	
			Print/Type N	Vame: <u>Shela</u>	94 E.	Mahon e	1
			Title: <u>fre.</u>	sident			
			By Paul	E. Brean utive Director	AUTHO	RITY	
			Approved as	to form, substant	ce, and e	xecution:	
			OFFICE OF	THE ATTORNE	Y GENE	ERAL	
	,		By:	ill Parlow	ب 	5/9/22	
			Title: Assoc	ciate Attorney Ge	neral		
GOVERN	OR AND CO	OUNCIL:	JUN 0 1	2022			
. (1	ME	2 0	ocretau	of State			

ACKNOWLEDGMENT

STATE OF NEW HAMPSHIRE COUNTY OF ROCKINGHAM	
Public in and for said County and State, pers- known to me (or proved to me on INGLEST of GRANITE STAT to the laws of the State of Hampshire and reg	onally appeared <u>Jk/agh E Mahone</u> , personally the basis of satisfactory evidence) to be the E MINERALS, INC. , a corporation formed pursuant istered to do business in New Hampshire, and on oath is instrument and acknowledged it to be his free and orth herein.
STATE OF NEW HAMPSHIRE COUNTY OF ROCKINGHAM	Notary Public in and for said County and State Printed Name: KAREN GIRARD MURPHY My Commission Expires: Notary Public Commonwealth of Massachusents My Commission Expires February 14, 2025
On this 2 day of 100000000000000000000000000000000000	nally appeared Paul E. Brean, personally known to ctory evidence) to be the Executive Director of the and on oath stated that he was authorized to execute a free and voluntary act for the uses and purposes set Notary Public in and for said County and State Printed Name: Raeline A. O'Neil

Raeline A. O'Neil

Justice of the Peace/Notary Public Expiration: October 11, 2022

My Commission Expires:

EXHIBIT "A"

PLAN OF LICENSE AREA

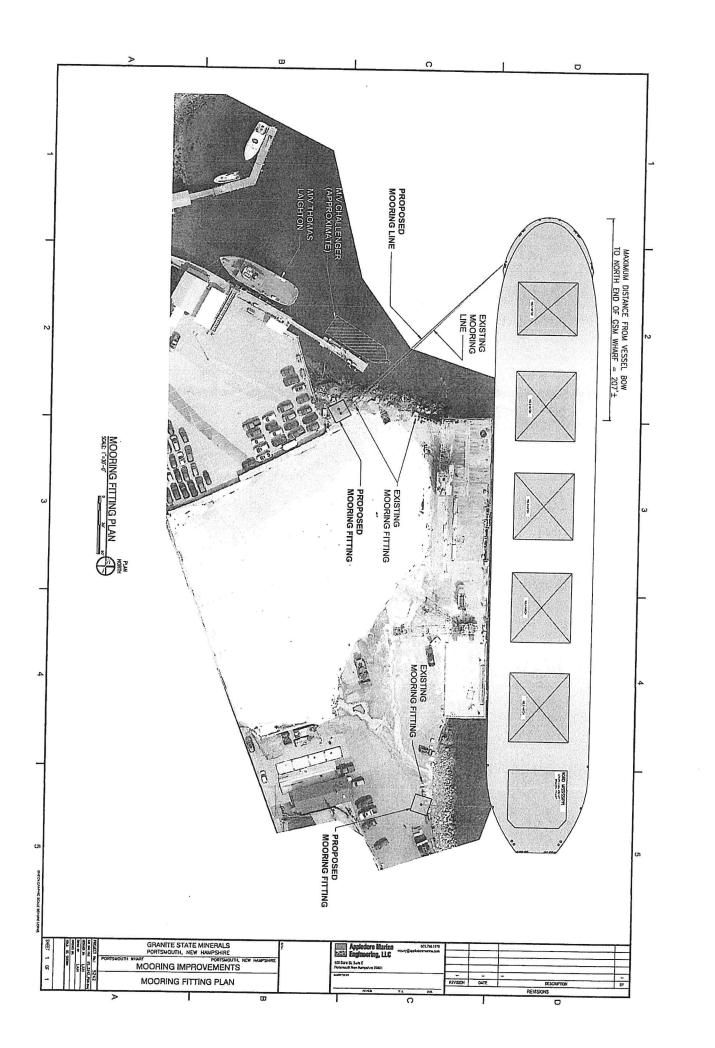
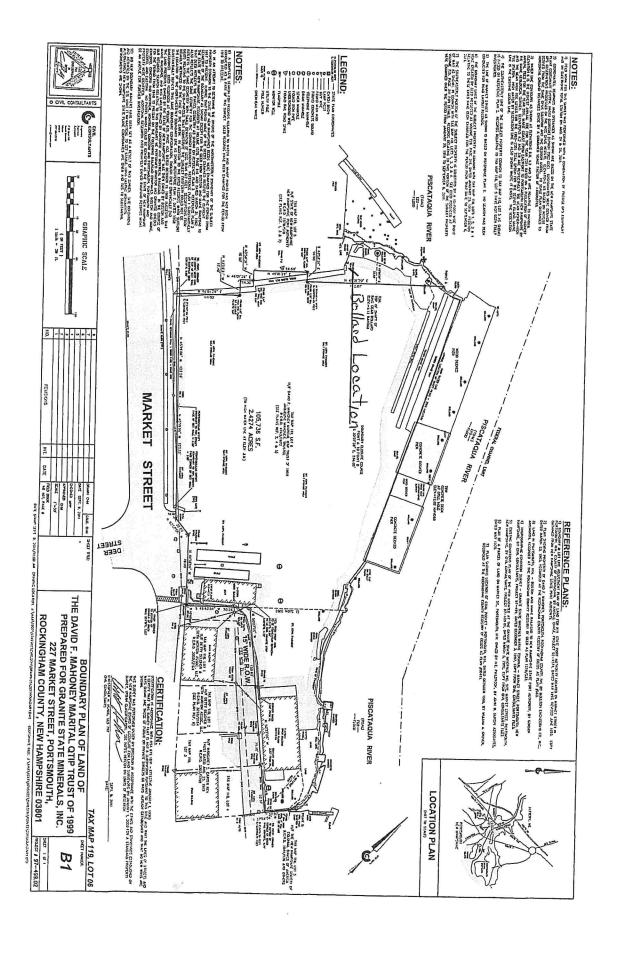
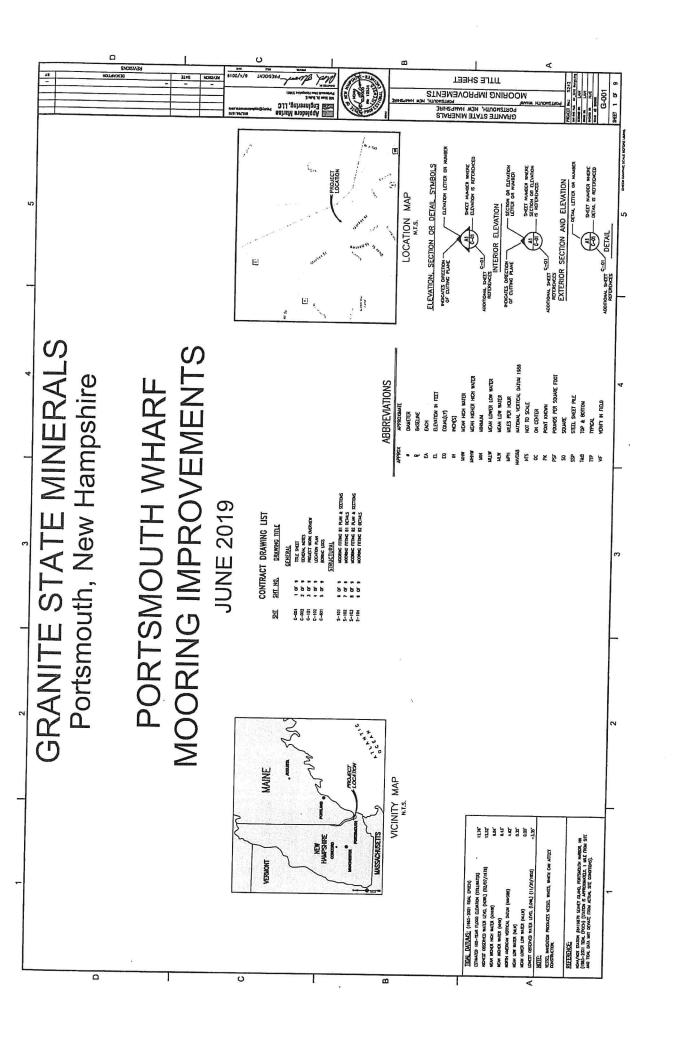


EXHIBIT "B"

PLAN OF BOLLARD





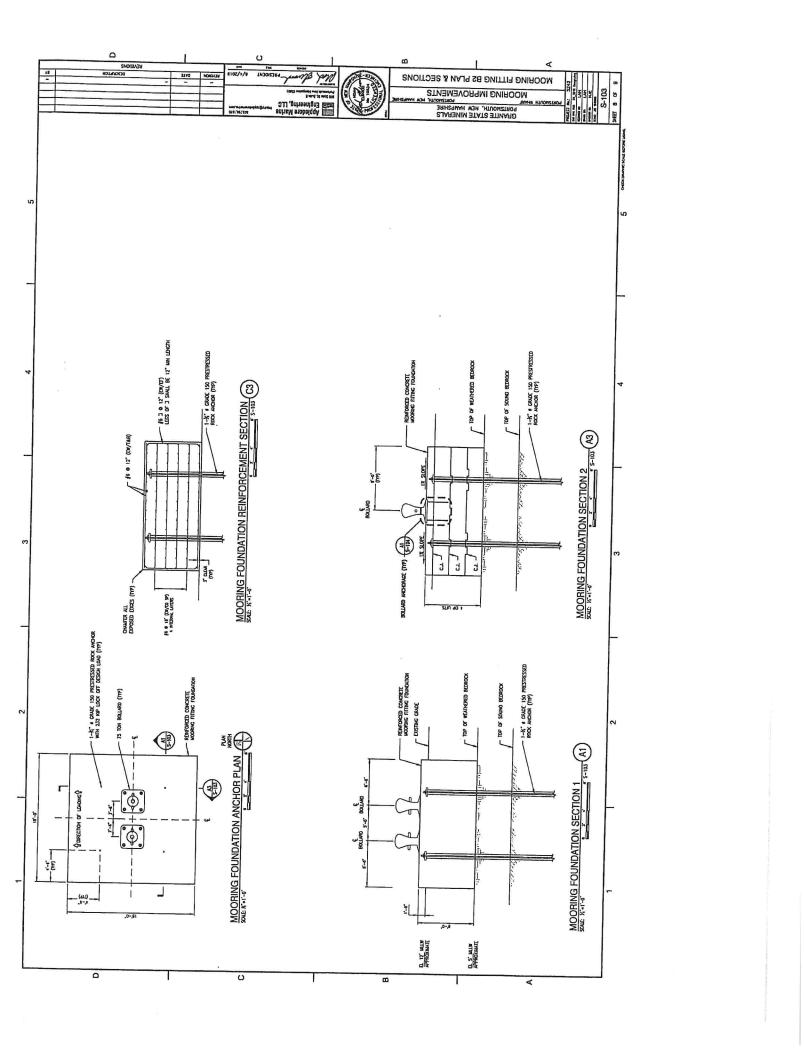


EXHIBIT "C" <u>LIST OF ENVIRONMENTAL LAWS AND REGULATIONS</u>

LIST OF I	211 VIIC	DINMENTAL LAWS AND REGULATIONS
Air Quality:	(b) (c) (d)	(a) Clean Air Act & Amendments, 42 U.S.C. 7401-7642 40 CFR Parts 50-52, 61, 62, 65-67, 81 RSA ch. 125-C, Air Pollution Control, and rules adopted thereunder RSA ch. 125-H, Air Toxic Control Act, and rules adopted thereunder
Hazardous Materials:	(b) (c) (d) (e)	(a) Hazardous Materials Transportation Act, 49 U.S.C. 1801-1813, and Department of Transportation Regulations thereunder Emergency Planning and Community Right-To-Know Act, 42 U.S.C. 11001-11050 49 CFR Parts 100-179 40 CFR Part 302 RSA ch. 277-A, Toxic Substances in the Workplace, and rules adopted thereunder
Hazardous Waste:	(b) (c) (d)	(a) Resource Conservation and Recovery Act (RCRA) of 1976 and RCRA Amendments of 1984, 42 U.S.C. 6901-6991i Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, 42 U.S.C. 9601-9675 40 CFR Parts 260-271, 300, 302 RSA ch. 147-A, Hazardous Waste Management and rules adopted thereunder
Water Quality:	(b)	(a) Federal Water Pollution Control Act (Clean Water Act) and Amendments, 33 U.S.C. 1251-1387 Safe Drinking Water Act, as amended, 42 U.S.C.
300f-300j-26	(c) (d) (e) (f)	40 CFR Title 100-143, 401 and 403 RSA ch. 146-A, Oil Spillage in Public Waters, and rules adopted thereunder RSA ch. 485, New Hampshire Safe Drinking Water Act, and rules adopted thereunder RSA ch. 485-A, Pollution and Waste Disposal, and rules

adopted thereunder

Corporate Resolution

(Name)
Granite State Minerals, Inc I hereby certify the following is a true copy of a (Name of Corporation or LLC)
vote taken at a meeting of the Board of Directors/shareholders, duly called and held onMarch(Month)
15,2022 at which a quorum of the Directors/shareholders were present and voting. (Day) (Year)
VOTED: ThatShelagh E. Mahoney (may list more than one person) is duly authorized to (Name and Title)
enter into contracts or agreements on behalf ofGranite State Minerals, Inc
the State of New Hampshire and any of its agencies or departments and further is authorized to execute any
documents which may in his/her judgment be desirable or necessary to effect the purpose of this vote.
I hereby certify that said vote has not been amended or repealed and remains in full force and effect as of
the date of the contract to which this certificate is attached. I further certify that it is understood that the State of
New Hampshire will rely on this certificate as evidence that the person(s) listed above currently occupy the
position(s) indicated and that they have full authority to bind the corporation. To the extent that there are any limits
on the authority of any listed individual to bind the corporation in contracts with the State of New Hampshire, all
such limitations are expressly stated herein.

DATED: March 15, 2022 ATTEST: Monay. Capillo, Asst. Secretary

State of New Hampshire Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that GRANITE STATE MINERALS, INC. is a New Hampshire Profit Corporation registered to transact business in New Hampshire on October 23, 1959. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 15631

Certificate Number: 0005749679



IN TESTIMONY WHEREOF,

I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 5th day of April A.D. 2022.

William M. Gardner

Secretary of State

RECEIVED AUG 23 2021

EASTMIN-01

CWOODSIDE

DATE (MM/DD/YYYY)

CERTIFICATE OF LIABILITY INSURANCE

8/17/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED

L	REI	PRESENTATIVE OR PRODUCER,	AND	THE					N THE ISSUING INSURER(S)	
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-		134 Middle Street				INSUE	ER C: Omoyi	ama Wanulaci	turers' Association Insurance Comp	any 12262
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•	-	COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR	1		,				EACH OCCURRENCE \$	1,000,000
		CLAIMS-MADE X OCCUR	X		ZOL-61M64165-21		8/15/2021	8/15/2022	DAMAGE TO RENTED PREMISES (Ea occurrence) \$	1,000,000
	-								MED EXP (Any one person) \$	10,000
	-								PERSONAL & ADV INJURY \$	1,000,000
	X	N'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE \$	2,000,000
		POLICY PRO- LOC							PRODUCTS - COMP/OP AGG \$	2,000,000
В	A117	OTHER: OMOBILE LIABILITY	1						\$	1,000,000
_	X	f .							COMBINED SINGLE LIMIT (Ea accident) \$	1,000,000
	_	ANY AUTO OWNED AUTOS ONLY SCHEDULED AUTOS			BA-3N649994-21-43-G		8/15/2021	8/15/2022	BODILY INJURY (Per person) \$	20,000
									BODILY INJURY (Per accident) \$	40,000
	\vdash	AUTOS ONLY NON-OWNED AUTOS ONLY							PROPERTY DAMAGE (Per accident) \$	
Α	Х	UMBRELLA LIAB X OCCUR	-						S	
		EXCESS LIAB CLAIMS-MADE			70D 44MC0004 04 ND				EACH OCCURRENCE \$	15,000,000
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	AND	KERS COMPENSATION EMPLOYERS' LIABILITY Y/N		.	202404 00 00 74 00				X PER OTH-	
	OFFIC	PROPRIETOR/PARTNER/EXECUTIVE CER/MEMBER EXCLUDED?	N/A	1	202101-09-00-71-2Y	- 1	7/1/2021	7/1/2022	E.L. EACH ACCIDENT \$	1,000,000
	If yes,	describe under RIPTION OF OPERATIONS below	1			1			E.L. DISEASE - EA EMPLOYEE \$	1,000,000
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lar ega ep ock	ern M ntic Sa Il Esta agen Chap ull Au	DN OF OPERATIONS / LOCATIONS / VEHICL ISUREDS (Continued): inerals, Inc. alt Company, Inc. attes, LLC, Inc. pel Marine, LLC tto Salvage, Inc. CHED ACORD 101	ES (AC	CORD 1	01, Additional Remarks Schedu	ule, may be	attached if more	space is require	d)	
ER	TIFIC	CATE HOLDER				CANCE	LLATION			
						CANCE	LLATION			
		Pease Development Authority Division of Ports & Harbors ar 55 International Drive	nd the	e Stat	te of NH	1111		DATE THE	SCRIBED POLICIES BE CANCELL REOF, NOTICE WILL BE DEL PROVISIONS.	ED BEFORE LIVERED IN
Portsmouth, NH 03801			AUTHORIZED REPRESENTATIVE							

ACORD 25 (2016/03)

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ACORD°	

AGENCY CUSTOMER ID: EASTMIN-01

LOC #: 1

CWOODSIDE

ADDITIONAL REMARKS SCHEDULE

Page 1 of

			. 490 01
AGENCY	License # 178086	NAMED INSURED	
HUB International New England		Eastern Salt Co., Inc. et.al	
POLICY NUMBER		134 Middle Street Lowell, MA 01852	
SEE PAGE 1		,	
CARRIER	NAIC CODE	-	
SEE PAGE 1	0== = :	EFFECTIVE DATE	
ADDITIONAL DEMARKS		EFFECTIVE DATE: SEE PAGE 1	

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

Description of Operations/Locations/Vehicles: Mahoney Marine Terminal, LLC Creekside Parking, Inc.
Granite State Minerals, Inc.
Oceanport, LLC
OSLO Shipping, LLC
201 Rover Street, LLC
Rollins Farm River Terminal, LLC
257 Chelsea Creek, LLC
15 Kill Van Kull, LLC

Pease Development Authority Division of Ports & Harbors and the State of NH are additional insured on a primary & non contributory basis on the General Liability as required by written contract. Waiver of Subrogation applies in favor of the additional insured in regards to the General Liability policy as required by executed contract prior to the loss/claim.

Section 3 Minor and Major Impacts – Attachment A



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: Granite State Minerals TOWN NAME: Portsmouth

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the <u>Avoidance and Minimization Narrative</u> or <u>Checklist</u> 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 ALTERNATIVE PROPOSED IS THE LEAST IMPACTFUL AS THE ENTIRETY OF THE PROPOSED DISTURBANCE IS LOCATED WITHIN PREVIOUSLY DISTRUBED TIDAL BUFFER ZONE. A MINIMAL AREA BELOW THE MEAN HIGH WATER LINE WILL BE DISTURBED FOR THE CONSTRUCTION OF THE OUTFALL TO THE RIVER. THIS AREA HAS ALSO BEEN PREVIOUSLY DISTURBED FOR THE CONSTRUCTION OF THE STONE REVETMENT.

THE PROPOSED PROJECT WILL PROVIDE NECESSARY UPGRADES TO THE TERMINAL INCLUDING THE REPLACEMENT OF TWO UNDERSIZED BOLLARD MOORINGS AND THE CONSTRUCTION OF STORMWATER MANAGEMENT UPGRADES. THE STORMWATER MANAGEMENT UPGRADES ARE BEING CONSTRUCTED AS PART OF THE FACILITY'S STORMWATER MANAGEMENT PROGRAM UNDER THE EPA MULTI-SECTOR GENERAL PERMIT (MSGP). THE PERMIT REQUIRES REGULAR SAMPLING OF STORMWATER DISCHARGES AND A STORMWATER PLAN TO KEEP LEVELS OF CERTAIN ANALYTES BELOW BENCHMARK LIMITS ESTABLISHED BY THE PERMIT. THE STORMWATER MANAGEMENT SYSTEM IS DESIGNED TO DECREASE CONCENTRATIONS OF METALS AND OTHER ANALYTES IN STORMWATER DISCHARGES TO THE RIVER, CONSISTENT WITH MSGP REQUIREMENTS. IT WILL ALSO FACILITATE CAPTURE OF CLEANER AND MORE ACCURATE STORMWATER SAMPLES BY PROVIDING AN ACCESS POINT TO GRAB SAMPLES FROM WITHIN A MANHOLE RATHER THAN FROM THE SURFACE OF THE PAVEMENT.

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.
Tidal harbor, not applicable
SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))
Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.
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2020-05 Page 2 of 9

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.

Proposed areas to be disturbed for this project are within a previously developed tidal buffer zone. A minimal area below the Mean High Water line will be disturbed for the construction of the outfall to the river. There will be no impact on plants or fish and wildlife due to the proposed project. A NHB review was conducted which was also review by the NH Fish and Game Marine Division for a potential impact to the Atlantic and Shortnose Sturgeon. The determination was made that proposed work will not negatively impact the surrounding natural community. The NHB and Marine Division responses are attached.

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.

There will be no impact on public commerce, navigation, and recreation as a result of the proposed project. The proposed project will not result in a change of use of the property.

2020-05 Page 3 of 9

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.
Tidal harbor, not applicable
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.
Tidal harbor, not applicable

2020-05 Page 4 of 9

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 proposed project will not impact the quanity or quality of surface and groundwater as it does not increase impervious coverage.
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.
Tidal harbor, not applicable

2020-05 Page 5 of 9

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.
No construction over surface waters is proposed.
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.
No docking structures are proposed

2020-05 Page 6 of 9

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.
No abutting properties will be impacted by this project
SECTION LYUI SUODELINE STRUCTURES COMMERCE AND DESPEATION (Fm., N/+ 242 02/a\/a\)
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,
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. Proposed project will have no impact to public's right to navagation, passage, and use of the resource for commerce
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2020-05 Page 7 of 9

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.
No aquatic vegetation or wildlife will be impacted by the proposed project
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.
No vegetation will be removed for the proposed project

2020-05 Page 8 of 9

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:

Tighe & Bond reviewed and assessed 800+/- linear feet of tidal buffer along the Piscataqua River. The review was limited to the property boundaries of the seaport/bulk terminal referenced above. Due to the extensive nature of the on-site disturbance (see attached photographs), a site visit was deemed unnecessary and was not conducted as part of this assessment. Functions and values were assessed remotely utilizing site photographs provided by others throughout the 100-foot tidal buffer

NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: JEREMY DEGLER (NH CWS #301)

DATE OF ASSESSMENT: 07/23/2019

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.

Section 4 Functional Assessment Worksheet

Introduction

The purpose of this coastal assessment is to characterize the portion of the Piscataqua River and its associated 100-foot tidal buffer within the vicinity of a 2.80-acre lot located at 227 Market Street in Portsmouth, New Hampshire. The site lies adjacent to the river and consists of a seaport/bulk terminal that is used for the transportation of dry bulk (such as road salt), the berthing of vessels, and the re-supply of ship stores. The proposed project consists of stormwater management upgrades and the replacement of two existing bollard moorings to support the existing use of the site. The stormwater management upgrades are being constructed under an EPA Multi-Sector General Permit. The following sections describe the 14 functions and values as they apply to the proposed project. For the sake of brevity, several functions and values may be combined into one section (e.g. flood storage and shoreline anchoring).

Methods

Tighe & Bond reviewed and assessed 800+/- linear feet of tidal buffer along the Piscataqua River. The review was limited to the property boundaries of the seaport/bulk terminal referenced above. Due to the extensive nature of the on-site disturbance (see attached photographs), a site visit was deemed unnecessary and was not conducted as part of this assessment. Functions and values were assessed remotely utilizing site photographs provided by others throughout the 100-foot tidal buffer zone of the proposed project. Assessment criteria were adapted from *The Highway Methodology Workbook Supplement - Wetland Functions and Values: A Descriptive Approach*, NAEEP-360-1-30a, US Army Corps of Engineers, New England Division, September 1999.

Ecological Integrity

Ecological Integrity relates to how much the river and its tidal buffer have retained their native biotic and abiotic features and how these may have been degraded by human influences. The Ecological Integrity within the vicinity of the proposed project has been largely compromised due to the development of the upland buffer, the presence of large stockpiles of road salt, water quality degradation, and filling along the shoreline.

Wildlife, Finfish, and Shellfish Habitat

The Wildlife, Finfish, and Shellfish Habitat functions are the suitability of the site to support wildlife. The Piscataqua River provides habitat for a wide variety of finfish and shellfish habitat, including Atlantic surgeon (federal and state listed as threatened) and shortnose sturgeon (federally and state listed as endangered). The project area is also within the range of the northern long-eared bat (federally listed as threatened), but no bat habitat exists within the property.

Flood Storage and Shoreline Anchoring

Flood Storage and Shoreline Anchoring refer to the ability of the Piscataqua River's tidal buffer to reduce flood damage via water retention and to reduce streambank/ shoreline erosion. They add to the stability of the ecological system or its buffering characteristics and provides social or economic value relative to erosion and/or flood prone areas. Riprap slopes are being effectively used to prevent erosion and damage along the bank of the Piscataqua River within the project area, but any flood storage is very minimal due to the topography of the site and the prevalence of impervious surfaces.

Groundwater Recharge/Discharge

Groundwater Recharge/Discharge refers to the potential for an area to serve as a recharge and/or discharge area for groundwater. It refers to the fundamental interaction with aquifers, regardless of the size or importance. The project area consists of almost entirely impervious surfaces, which prevent groundwater recharge. Furthermore, it is likely that the Piscataqua River is substantially more influenced by tidal forces than by groundwater at this point in its reach.

Nutrient/Sediment Trapping

Nutrient and Sediment Trapping refers to the ability of the river and its tidal buffer to act as a trap for nutrients and sediment in runoff water from surrounding uplands or contiguous wetlands and the ability to process these nutrients into other forms or trophic levels, thereby preventing degradation of water quality. The project area consists of almost entirely impervious surfaces draining into the river which are not trapping runoff and the associated nutrients, sediments, and toxicants.

Educational, Recreational, and Commercial Potential

Educational Potential consists of the ability of the river and its tidal buffer to serve as an outdoor classroom. Recreational and Commercial Potential is the suitability to support activities such as hiking, boating, hunting, bird watching, and shellfish harvesting. The Piscataqua River has the potential for educational and/or recreational boat use, though there is no safe public access to the Piscataqua River near the project site. In addition to being private property, the project site has dangerous construction debris and steep banks to the river, further diminishing the educational and recreational potential of the property. The site is currently in commercial use as a seaport/bulk terminal.

Production Export

Production Export refers to the ability of the river and its tidal buffer to produce food or usable products for humans or other living organisms. While the Piscataqua River provides a suitable means of export for materials produced elsewhere, no actual production occurs anywhere within the project area.

Aesthetic Quality and Noteworthiness

Aesthetic Quality refers to the ability of the area to provide interesting views and natural vistas. Noteworthiness includes important qualities not identified in previous functions, such as historic sites or unique natural features. The areas surrounding the Piscataqua River are highly developed commercial and residential areas. There are many public areas away from the project site that offer wide vistas and aesthetically pleasing views. At the project site however, there are no publicly available viewing areas and the property is covered in large piles of road salt and equipment.

Summary

The portion of the Piscataqua River and its associated 100-foot tidal buffer within the vicinity of the project area is entirely developed and is heavily disturbed. The primary coastal function within the river is finfish habitat (including several threatened/endangered species). Shoreline anchoring from the riprap is also present but is not a natural function of the river or tidal buffer. Other functions/values of the larger Piscataqua River exist but are not possible at the project area due to a complete lack of public access, lack of habitat, the impervious surfaces and topography of the site, and/or the presence of the bulk terminal and road salt piles.

Photographic Log



Client: Granite State Minerals

Job Number: E5027-001

Site: 227 Market Street, Portsmouth, New Hampshire

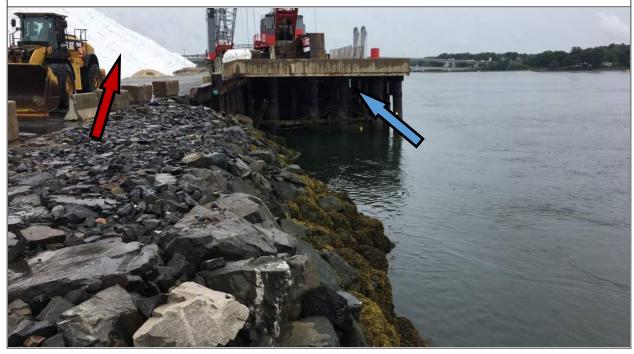
Photograph No.: 1 Date: 07/23/2019 Direction Taken: Southeast

Description: Overview of the southern shoreline portion of the property located at 227 Market Street. Note the steeply anchored riprap slopes that are reducing shoreline erosion.



Photograph No.: 2 Date: 07/23/2019 Direction Taken: Northwest

Description: Overview of the northern shoreline portion of the property located at 227 Market Street. Note the seaport/bulk terminal (blue arrow) and the large piles of road salt (red arrow).



Photographic Log 1



WETLANDS FUNCTIONAL ASSESSMENT WORKSHEET

Water Division/Land Resource Management Wetlands Bureau



Check the Status of your Application

RSA/Rule: RSA 482-A / Env-Wt 311.03(b)(10); Env-Wt 311.10

APPLICANT LAST NAME, FIRST NAME, M.I.: Granite State Minerals

As required by Env-Wt 311.03(b)(10), an application for a standard permit for minor and major projects must include a functional assessment of all wetlands on the project site as specified in Env-Wt 311.10. This worksheet will help you compile data for the functional assessment needed to meet federal (US Army Corps of Engineers (USACE); if applicable) and NHDES requirements. Additional requirements are needed for projects in tidal area; please refer to the Coastal Area Worksheet for more information.

Both a desktop review and a field examination are needed to accurately determine surrounding land use, hydrology, hydroperiod, hydric soils, vegetation, structural complexity of wetland classes, hydrologic connections between wetlands or stream systems or wetland complex, position in the landscape, and physical characteristics of wetlands and associated surface waters. The results of the evaluation are to be used to select the location of the proposed project having the least impact to wetland functions and values (Env-Wt 311.10). This worksheet can be used in conjunction with the Written Narrative (NHDES-W-06-089) or Avoidance and Minimization Checklist (NHDES-W-06-050) to address Env-Wt 313.03 (Avoidance and Minimization). If more than one wetland/ stream resource is identified, multiple worksheets can be attached with the application. All wetland, vernal pools, and stream identification (ID) numbers are to be displayed and located on the wetlands delineation of the subject property.

SECTION 1 - LOCATION (USACE HIGHWAY METHODOLOGY)				
ADJACENT LAND USE: Commercial Develo	pment			
CONTIGUOUS UNDEVELOPED BUFFER ZO	NE PRESENT? Yes No			
DISTANCE TO NEAREST ROADWAY OR OT	HER DEVELOPMENT (in feet): 130			
SECTION 2 - DELINEATION (USACE HIG	SECTION 2 - DELINEATION (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)			
CERTIFIED WETLAND SCIENTIST (if in a non-tidal area) or QUALIFIED COASTAL PROFESSIONAL (if in a tidal area) who prepared this assessment: Jeremy Degler (NH CWS #301)				
DATE(S) OF SITE VISIT(S): 07/23/2019	DELINEATION PER ENV-WT 406 COMPLETED? Yes No			
CONFIRM THAT THE EVALUATION IS BASED ON: Office and Field examination. Site photos taken by others were reviewed by a CWS.				
METHOD USED FOR FUNCTIONAL ASSESSMENT (check one and fill in field if "other"): USACE Highway Methodology. Other scientifically supported method (enter name/ title):				

HIGHWAY METHODOLOGY; Env-Wt 311.10)
LOCATION: (LAT/ LONG) 43.080178/-70.759226
DOMINANT WETLAND SYSTEMS PRESENT: N/A
COWARDIN CLASS: N/A
IS THE WETLAND PART OF: A wildlife corridor or A habitat island? IS THE WETLAND HUMAN-MADE? Yes No
ARE VERNAL POOLS PRESENT? Yes No (If yes, complete the Vernal Pool Table)
ARE ANY PUBLIC OR PRIVATE WELLS DOWNSTREAM/ DOWNGRADIENT? Yes No
PROPOSED WETLAND IMPACT AREA: N/A

SECTION 4 - WETLANDS FUNCTIONS AND VALUES* (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)

The following table can be used to compile data on wetlands functions and values. The reference numbers indicated in the "Functions/ Values" column refer to the following functions and values:

- 1. Ecological Integrity (from RSA 482-A:2, XI)
- 2. Educational Potential (from USACE Highway Methodology: Educational/Scientific Value)
- 3. Fish & Aquatic Life Habitat (from USACE Highway Methodology: Fish & Shellfish Habitat)
- 4. Flood Storage (from USACE Highway Methodology: Floodflow Alteration)
- 5. Groundwater Recharge (from USACE Highway Methodology: Groundwater Recharge/Discharge)
- 6. Noteworthiness (from USACE Highway Methodology: Threatened or Endangered Species Habitat)
- 7. Nutrient Trapping/Retention & Transformation (from USACE Highway Methodology: Nutrient removal)
- 8. Production Export (Nutrient) (from USACE Highway Methodology)
- 9. Scenic Quality (from USACE Highway Methodology: Visual Quality/Aesthetics)
- 10. Sediment Trapping (from USACE Highway Methodology: Sediment /Toxicant Retention)
- 11. Shoreline Anchoring (from USACE Highway Methodology: Sediment/Shoreline Stabilization)
- 12. Uniqueness/Heritage (from USACE Highway Methodology)
- 13. Wetland-based Recreation (from USACE Highway Methodology: Recreation)
- 14. Wetland-dependent Wildlife Habitat (from USACE Highway Methodology: Wildlife Habitat)

First, determine if a wetland is suitable for particular function and value ("Suitability" column) and indicate the rationale behind your determination ("Rationale" column). Please use the rationale reference numbers listed in Appendix A of USACE *The Highway Methodology Workbook Supplement*. Second, indicate which functions and values are principal (Principal Function/value?" column). As described in *The Highway Methodology Workbook Supplement*, "functions and values can be principal if they are an important physical component of a wetland ecosystem (function only) and/or are considered of special value to society, from a local, regional, and/or national perspective". "Important Notes" are to include characteristics the evaluator used to determine the principal function and value of the wetland.

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FUNCTIONS/ VALUES	SUITABILITY (Y/N)	RATIONALE (Reference #)	PRINCIPAL FUNCTION/VALUE? (Y/N)	IMPORTANT NOTES
1	Yes No	NHDES	☐ Yes ☑ No	Ecological Integrity has been impacted by surrounding land use, the salt piles, and human activity.
2	☐ Yes ☑ No	9, 11	☐ Yes ☑ No	No educational potential exists within the project area.
3	Yes No	3, 4, 5, 6, 7, 10, 11, 14, 16, 17	⊠ Yes □ No	The Piscataqua River lies adjacent to the property and supports fish/shellfish populations.
4	☐ Yes ⊠ No	4, 10, 11, 13	☐ Yes ☑ No	Riprap is being used effectively to prevent erosion and damage, but flood storage is minimal.
5	☐ Yes ⊠ No	2,7	☐ Yes ☑ No	Property is almost entirely impervious surface.
6	Yes No	USFWS, NHDES	☐ Yes ☑ No	Within the range of northern long- ear bat, shortnose sturgeon, and Atlantic sturgeon. No habitat.
7	☐ Yes ⊠ No	N/A	☐ Yes ☑ No	Impervious surfaces are not trapping runoff and associated nutrients.
8	Yes No	N/A	☐ Yes ☑ No	No production occurs within the project area.
9	☐ Yes ⊠ No	2, 9	☐ Yes ☑ No	The scenic quality at the project area is poor.
10	Yes No	1, 2	☐ Yes ☑ No	Impervious surfaces are not trapping runoff and associated sediments/toxicants.
11	Yes No	1, 3, 4, 8, 9, 10, 11	⊠ Yes □ No	Riprap is being used effectively in shoreline anchoring.
12	Yes No	1, 2, 8, 14, 22	☐ Yes ☑ No	The project area is not unique and does not provide cultural/heritage opportunities.
13	Yes No	2, 8, 9, 12	☐ Yes ☑ No	No recreation potential exists within the project area.
14	Yes No	N/A	☐ Yes ☑ No	No wildlife habitat exists within the project area.

SECTION 5 - VERNAL POOL SUMMARY (Env-Wt 311.10)

Delineations of vernal pools shall be based on the characteristics listed in the definition of "vernal pool" in Env-Wt 104.44. To assist in the delineation, individuals may use either of the following references:

- Identifying and Documenting Vernal Pools in New Hampshire 3rd Ed., 2016, published by NHF&G; or
- The USACE *Vernal Pool Assessment* draft guidance dated 9-10-2013 and form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

All vernal pool ID numbers are to be displayed and located on the wetland delineation of the subject property.

"Important Notes" are to include documented reproductive and wildlife values, landscape context, and relationship to other vernal pools/wetlands.

Note: For projects seeking federal approval from the USACE, please attach a completed copy of The USACE "Vernal Pool Assessment" form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

VERNAL POOL ID NUMBER	DATE(S) OBSERVED	PRIMARY INDICATORS PRESENT (LIST)	SECONDARY INDICATORS PRESENT (LIST)	LENGTH OF HYDROPERIOD	IMPORTANT NOTES
1	N/A	N/A	N/A	N/A	No vernal pools are located within the project area.
2					
3					
4					
5					
6					
7					
8					

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SECTION 6 - ST	TREAM RESO	URCES SUMMARY			
DESCRIPTION OF STREAM: Piscataqua River			STREAM TYPE (ROSGEN): F (channel material unknown)		
HAVE FISHERIES BEEN DOCUMENTED? Yes No			DOES THE STREAM SYSTEM APPEAR STABLE? ☑ Yes ☐ No		
OTHER KEY ON-	-SITE FUNCTION	NS OF NOTE: N/A			
	sed to determi	to compile data on stream resone principal function and value 4.	· · · · · · · · · · · · · · · · · · ·		
FUNCTIONS/ VALUES	SUITABILITY (Y/N)	RATIONALE	PRINCIPAL FUNCTION/VALUE? (Y/N)	IMPORTANT NOTES	
1	Yes No	NHDES	☐ Yes ☑ No	Ecological Integrity has been impacted by surrounding land use and human activity.	
2	⊠ Yes □ No	9, 11	☐ Yes ☑ No	Educational potential exists on the Piscataqua River, but not within the project area.	
3	∑ Yes ☐ No	3, 4, 5, 6, 7, 10, 11, 14, 16, 17	Yes No	The Piscataqua River supports both fish and shellfish populations.	
4	☐ Yes ☑ No	4, 10, 11, 13	☐ Yes ☑ No	Riprap is being used effectively to prevent erosion/damage, but flood storage is minimal.	
5	☐ Yes ☑ No	2, 7	☐ Yes ☑ No	The Piscataqua River is likely not driven by groundwater at this point in its reach.	
6	∑ Yes ☐ No	NHDES	⊠ Yes □ No	Shortnose sturgeon and Atlantic sturgeon have both been observed within the area.	
7	☐ Yes ☑ No	2	☐ Yes ☑ No	Impervious surfaces are not trapping runoff and associated nutrients.	
8	☐ Yes ⊠ No	N/A	☐ Yes ☑ No	No production occurs within the project area.	
9	Yes No	2, 6, 9	☐ Yes ☑ No	Scenic quality on the Piscataqua River can be high, but not within the project area.	
10	☐ Yes ☑ No	1, 2	☐ Yes ☑ No	Impervious surfaces are not trapping runoff and associated sediments/toxicants.	
11	Yes No	1, 3, 4, 8, 9, 10, 11	⊠ Yes □ No	Riprap is being used effectively in shoreline anchoring.	
12	☐ Yes ☑ No	N/A	☐ Yes ☑ No	The project area is not unique and does not provide cultural/heritage opportunities.	

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13	Yes No	2, 8, 9, 12	☐ Yes ☑ No	Recreation potential exists within the Piscataqua River, but not within the project area.		
14	☐ Yes ☑ No	N/A	☐ Yes ⊠ No	No wildlife habitat exists within the project area.		
SECTION 7 - A	SECTION 7 - ATTACHMENTS (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)					
Wildlife and	Wildlife and vegetation diversity/abundance list.					
Photograph	Photograph of wetland attached.					
Wetland delineation plans showing wetlands, vernal pools, and streams in relation to the impact area and surrounding landscape. Wetland IDs, vernal pool IDs, and stream IDs must be indicated on the plans.						
For projects in tidal areas only: additional information required by Env-Wt 603.03/603.04 (please refer to the Coastal Area Worksheet for more information)						

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Section 5 Avoidance and Minimization Checklist



AVOIDANCE AND MINIMIZATION CHECKLIST

Water Division/Land Resources Management Wetlands Bureau



Check the Status of your Application

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

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

For construction or modification of non-tidal shoreline structures over areas of surface waters having an absence of wetland vegetation, complete only Sections 1, 2, and 4 only (or the applicable sections in Attachment A: Minor and Major Projects (NHDES-W-06-013).

"A/M BMPs" stands for <u>Wetlands Best Management Practice Techniques for Avoidance and Minimization</u> dated 2019, published by the New England Interstate Water Pollution Control Commission (Env-Wt 102.18).

"Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (Env-Wt 103.62).

SECTION 1 - CONTACT/LOCATION INFORMATION				
APPLICANT LAST NAME, FIRST NAME, M.I.: Granite State Minerals				
PROJECT STREET ADDRESS: 227 & 315 Market Street PROJECT TOWN: Portsmouth				
TAX MAP/LOT NUMBE	R: 119 / 5 & 6			
SECTION 2 - PRIMARY	PURPOSE OF THE PROJECT			
Env-Wt 311.07(b)(1)	Indicate whether the primary purpose of the project is to construct a water-access structure or requires access through wetlands to reach a buildable lot or the buildable portion thereof.			
The proposed project value bollard moorings and t	o this question, describe the purpose of the "no will provide necessary upgrades to the terminal in the construction of stormwater management up as part of the facility's stormwater management	including the replacement of grades. The stormwater man	f two undersized nagement upgrades	

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

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

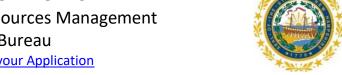
Section 6 Coastal Resource Worksheet

2020-05



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.: Granite State Minerals

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 proposed project will provide necessary upgrades to the terminal including the replacement of two undersized bollard moorings and the construction of stormwater management upgrades. The stormwater management upgrades are being constructed as part of the facility's stormwater management program under the EPA Multi-Sector General Permit (MSGP). The permit requires regular sampling of stormwater discharges and a stormwater plan to keep levels of certain analytes below benchmark limits established by the permit. The stormwater management system is designed to decrease concentrations of metals and other analytes in stormwater discharges to the river, consistent with MSGP requirements. It will also facilitate capture of cleaner and more accurate stormwater samples by providing an access point to grab samples from within a manhole rather than from the surface of the pavement.

There are no natural resource assets that are proposed to be impacted as the entirety of the proposed disturbance is located within previously distrubed tidal buffer zone. A minimal area below the mean high water line will be disturbed for the construction of the outfall to the river. This area has also been previously disturbed for the construction of the stone revetment.

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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.
There is no practicable alternative that would have a less adverse impact on the area and environments under the department's jurisdiction as all impacts are within previously disturbed tidal buffer and tidal areas. There are no tidal marshes and non-tidal marshes within the project area. There are no hydrologic connections between adjacent wetlands or stream systems with the project area. There are no wetlands and other areas of jurisdiction under RSA 482-A, including, vernal pools, documented fisheries, and habitat and reproduction areas for species of concern within the project area. Coordination with NH F&G confirms that there will be no impact to protected species. The project does not obstruct public commerce, navigation, or recreation. The project does not impact floodplain wetlands that provide flood storage. There are no natural riverine forested wetland systems and scrubshrub marsh complexes of high ecological integrity within the project area. The project does not impact wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels. The project does not impact stream channels and the ability of such channels to handle runoff of waters.
Provide a narrative showing how the project meets the standard conditions in Env-Wt 307 and the approval criteria in Env-Wt 313.01.
The proposed project does not negativly impact water quality. The stormwater management upgrades are being constructed as part of the facility's stormwater management program under the EPA Multi-Sector General Permit (MSGP). The permit requires regular sampling of stormwater discharges and a stormwater plan to keep levels of certain analytes below benchmark limits established by the permit. The stormwater management system is designed to decrease concentrations of metals and other analytes in stormwater discharges to the river, consistent with MSGP requirements. It will also facilitate capture of cleaner and more accurate stormwater samples by providing an access point to grab samples from within a manhole rather than from the surface of the pavement. Coordination with NH F&G confirms that there will be no impact to protected species.

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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.

This site will be covered under an EPA Multi-Sector General Permit which includes a Stormwater Pollution Prevention Plan which has maintenance and stormwater testing procedures for the project site.

The stormwater management upgrades are being constructed as part of the facility's stormwater management program under the EPA Multi-Sector General Permit (MSGP). The MSGP in cludes a Stormwater Pollution Prevention Plan which requires regular sampling of stormwater discharges and maintenance of the facility and stormwater management system

- 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.

The proposed outlet pipe does not extend farther seaward then the existing sotone revetment and has no impact on navigation.

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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:
rol any project that would impact tidal wetlands, tidal waters, or associated sand duries, 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.
Approximately 50 years before repair/replacement
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.
buildings, infrastructure, salt marshes, sand dunes and other valuable coastal resource areas. High tolerance. The project is proposing the construction of mooring bollards and subsurface drainage structures that
buildings, infrastructure, salt marshes, sand dunes and other valuable coastal resource areas. High tolerance. The project is proposing the construction of mooring bollards and subsurface drainage structures that

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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.
NH Coastal Flood Risk Summary Part II, Step 3 Table A: Sea level rise for High Risk Tolerance is 2.1 feet (10.1 feet) by 2072.
Identify areas of the proposed project site subject to flooding from SLR.
The current 100 year floodplain (Zone AE) base flood elevation is 8.0 feet and including the projected SLR will be 10.1 feet. The additional project area below this elevation includes some additional paved areas not associated with the proposed work.
Identify areas currently located within the 100-year floodplain and subject to coastal flood risk.
The proposed drainage structures and mooring bollards are within the existing FEMA 100-year flood level and is already subject to flooding.
Describe how the project design will consider and address the selected SLR scenario within the project design life, including in the design plans.
In coordination with to the project's high tolerance classification, the work associated with this project is not sensitive to the indicated SLR scenario.
Where there are conflicts between the project's purpose and the vulnerability assessment results, schedule a preapplication meeting with the department to evaluate design alternatives, engineering approaches, and use of the best available science.
Pre-application meeting date held:

Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO BOX 95, Concord, NH 03302-0095
www.des.nh.gov

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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.

elements.
The plan view shall depict the following:
$oxed{\boxtimes}$ 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
 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:
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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;
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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

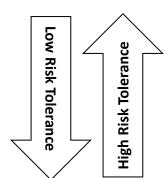
SECTION 10 – GUIDANCE

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.

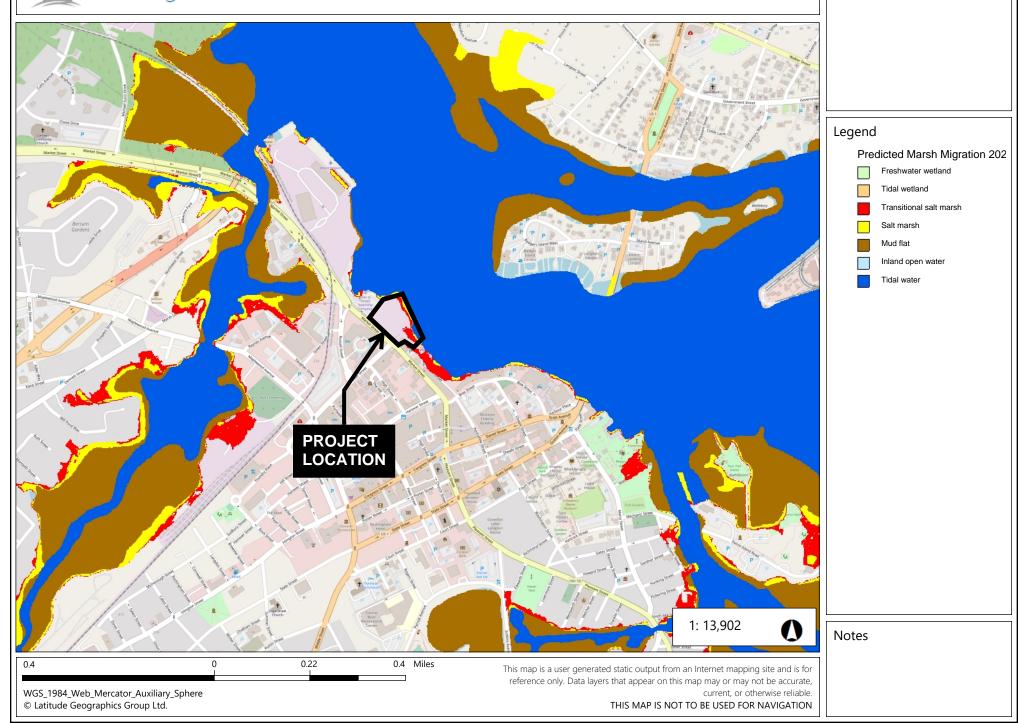
STEP 3 TABLE A. RECOMMENDED DECADAL RSLR ESTIMATES (IN FEET ABOVE 2000 LEVELS) BASED ON RCP 4.5, PROJECT TIMEFRAME, AND TOLERANCE FOR FLOOD RISK.

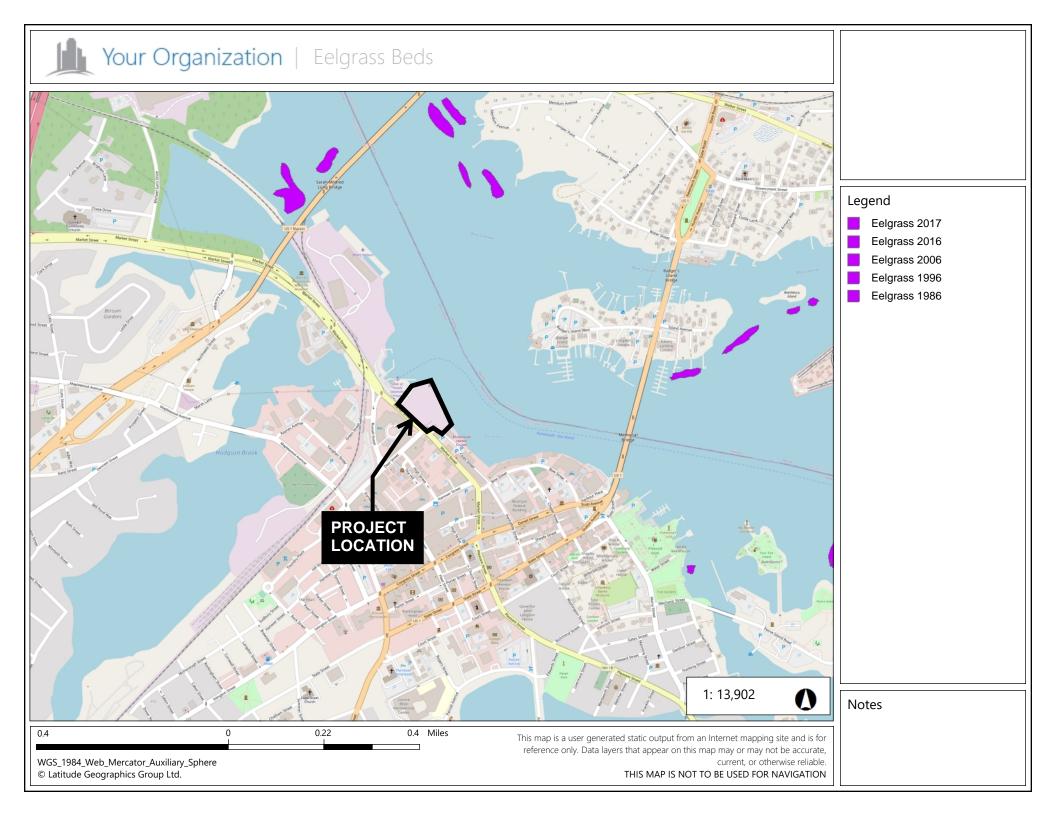
	HIGH TOLERANCE FOR FLOOD RISK	MEDIUM TOLERANCE FOR FLOOD RISK	LOW TOLERANCE FOR FLOOD RISK	VERY LOW TOLERANCE FOR FLOOD RISK		
TIMEFRAME		Plan for the following RSLR estimate (ft)* compared to sea level in the year 2000				
	Lower magnitude, Higher probability	—	—	Higher magnitude, Lower probability		
2030	0.7	0.9	1.0	1.1		
2040	1.0	1.2	1.5	1.6		
2050	1.3	1.6	2.0	2.3		
2060	1.6	2.1	2.6	3.0		
2070 2 070	2.0	2.5	3.3	3.7		
2080	2.3	3.0	3.9	4.5		
2090	2.6	3.4	4.6	5.3		
2100	2.9	3.8	5.3	6.2		
2110	3.3	4.4	6.1	7.3		
2120	3.6	4.9	7.0	8.3		
2130	3.9	5.4	7.9	9.3		
2140	4.3	5.9	8.9	10.5		
2150	4.6	6.4	9.9	11.7		

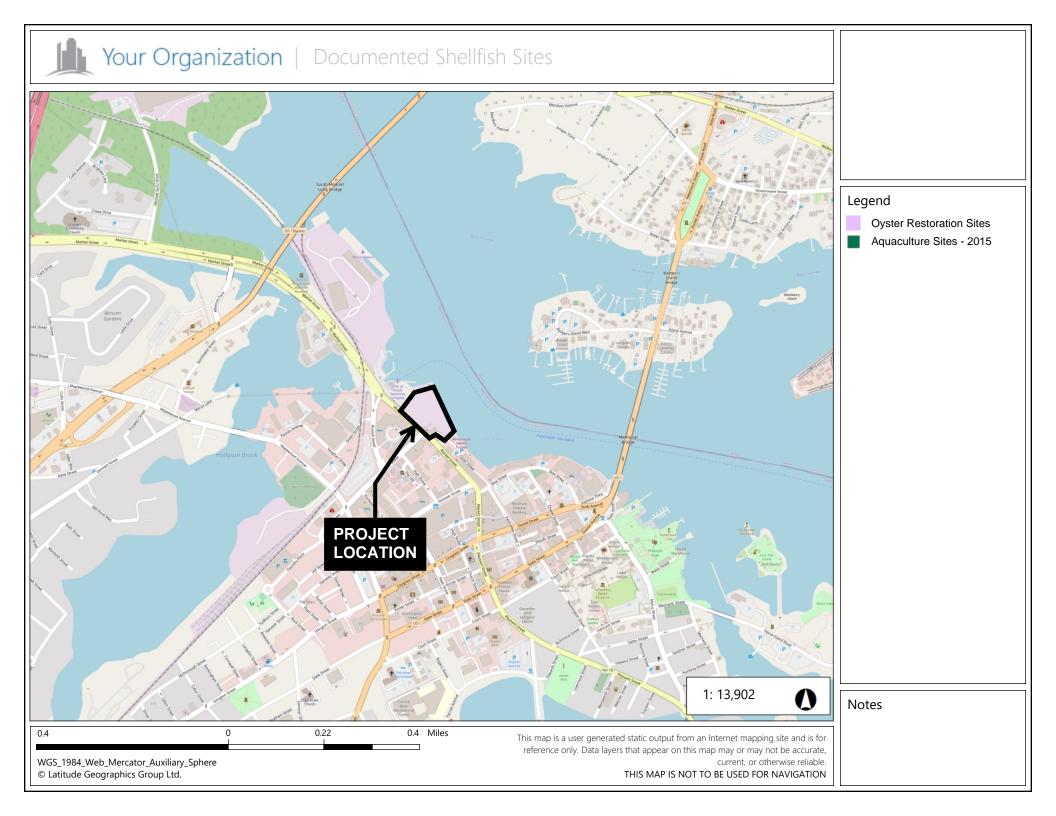
^{*}The colors (blue, red, purple, green) in Step 3 Table A correspond with the colors of the graph depicted in Figure 2 (see also Figure 4.5 in *Part I: Science*¹⁷). The RSLR estimates for High tolerance for flood risk projects correspond with K14, upper end of "likely" estimates for RCP4.5 (83% chance RSLR will not exceed this value). The RSLR estimates for Medium tolerance for flood risk projects correspond with K14, 1-in-20 chance estimates for RCP 4.5. The RSLR estimates for Low tolerance for flood risk projects correspond with K14, 1-in-100 chance estimates for RCP 4.5. The RSLR estimates for Very Low tolerance for flood risk projects correspond with K14, 1-in-200 chance estimates for RCP4.5. For K14, 1-in-1000 chance estimates, see Table 4.2 in *Part I: Science*.¹⁷ Note that while the Bayesian probabilities associated with RSLR projections are useful, they have some limitations as described in Box 4.3 in *Part I: Science*.¹⁷



Your Organization | Existing Salt Marsh and Salt Marsh Migration

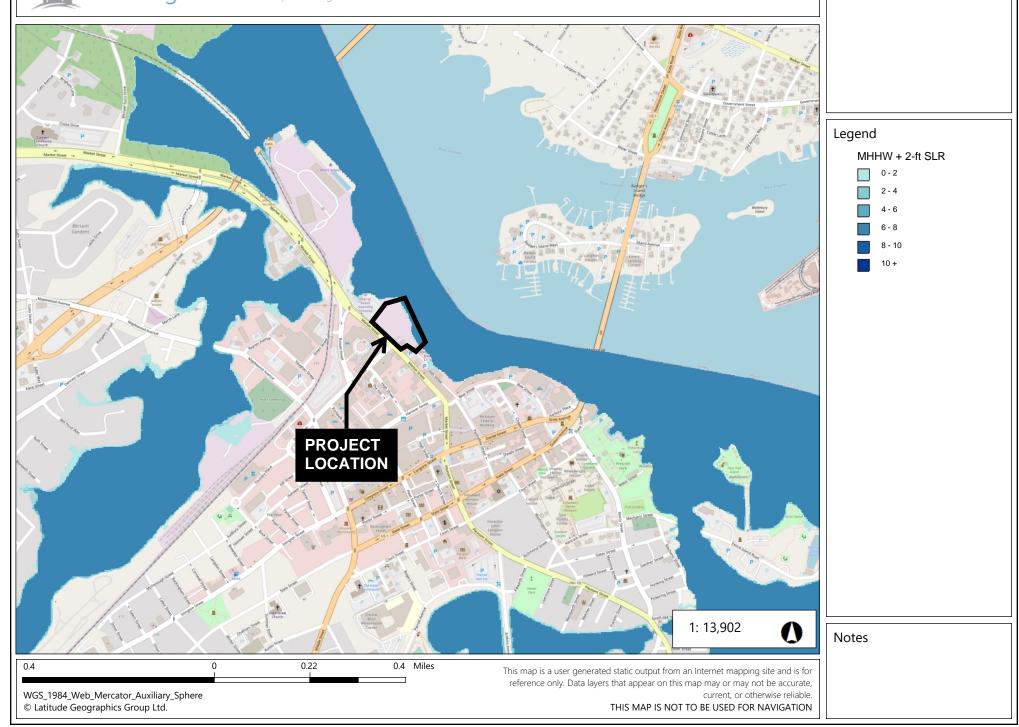








Your Organization | Projected Sea Level Rise



Your Organization | FEMA Floodplain



Home (/) / Products (products.html) / Datums (stations.html?type=Datums) / 8419870 Seavey Island, ME **Favorite Stations**

Meteorological Obs. (/met.html?id=8419870) Station Info Tides/Water Levels Phys. Oceanography (/physocean.html?id=8419870)

PORTS® (/ports/ports.html?id=8419870) OFS (/ofs/ofs_station.html?stname=Seavey Island&ofs=gom&stnid=8419870&subdomain=0)

Datums for 8419870, Seavey Island ME

NOTICE: All data values are relative to the NAVD88.

Elevations on NAVD88

Station: 8419870, Seavey Island, **T.M.**: 0 Epoch:

Status: Accepted (Dec 6 2021) (/datum_options.html#NTDE)

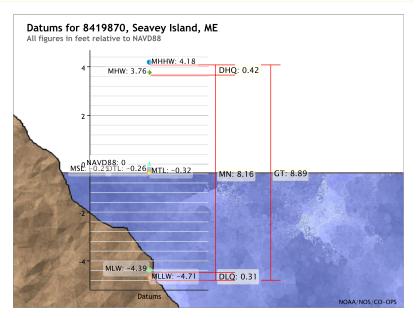
Units: Feet 1983-2001

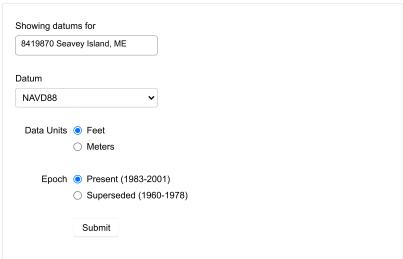
HAT Date & Time

ME		
Datum	Value	Description
MHHW (/datum_options.html#MHHW)	4.18	Mean Higher-High Water
MHW (/datum_options.html#MHW)	3.76	Mean High Water
MTL (/datum_options.html#MTL)	-0.32	Mean Tide Level
MSL (/datum_options.html#MSL)	-0.25	Mean Sea Level
DTL (/datum_options.html#DTL)	-0.26	Mean Diurnal Tide Level
MLW (/datum_options.html#MLW)	-4.39	Mean Low Water
MLLW (/datum_options.html#MLLW)	-4.71	Mean Lower-Low Water
NAVD88 (/datum_options.html)	0.00	North American Vertical Datum of 1988
STND (/datum_options.html#STND)	-6.98	Station Datum
GT (/datum_options.html#GT)	8.89	Great Diurnal Range
MN (/datum_options.html#MN)	8.16	Mean Range of Tide
DHQ (/datum_options.html#DHQ)	0.42	Mean Diurnal High Water Inequality
DLQ (/datum_options.html#DLQ)	0.31	Mean Diurnal Low Water Inequality
HWI (/datum_options.html#HWI)	3.92	Greenwich High Water Interval (in hours)
LWI (/datum_options.html#LWI)	10.04	Greenwich Low Water Interval (in hours)
Max Tide (/datum_options.html#MAXTIDE)	7.89	Highest Observed Tide
Max Tide Date & Time (/datum_options.html#MAXTIDEDT)	02/07/1978 10:42	Highest Observed Tide Date & Time
Min Tide (/datum_options.html#MINTIDE)	-7.98	Lowest Observed Tide
Min Tide Date & Time (/datum_options.html#MINTIDEDT)	11/30/1955 00:00	Lowest Observed Tide Date & Time
HAT (/datum_options.html#HAT)	5.87	Highest Astronomical Tide

11/15/2016 HAT Date and Time

16:18





Datum	Value	Description
LAT (/datum_options.html#LAT)	-6.51	Lowest Astronomical Tide
LAT Date & Time	01/14/2036 23:00	LAT Date and Time

Tidal Datum Analysis Periods

07/01/2020 - 06/30/2021

Show nearby stations

Products available at 8419870 Seavey Island, ME

TIDES/WATER LEVELS

Water Levels (/waterlevels.html?id=8419870)

NOAA Tide Predictions (/noaatidepredictions.html? id=8419870)

Harmonic Constituents (/harcon.html?id=8419870)

Sea Level Trends (/sltrends/sltrends_station.shtml? id=8419870)

Datums (/datums.html?id=8419870)

Bench Mark Sheets (/benchmarks.html?id=8419870)

Extreme Water Levels (/est/est_station.shtml? stnid=8419870)

Reports (/reports.html?id=8419870)

METEOROLOGICAL/OTHER

Meteorological Observations (/met.html?id=8419870) Water Temp/Conductivity

PORTS®

Portsmouth PORTS® (/ports/index.html?port=pm)
PORTS® product page for Seavey Island
(/ports/ports.html?id=8419870)

OPERATIONAL FORECAST SYSTEMS

Gulf of Maine (/ofs/gomofs/gomofs.html)
OFS product page for Seavey Island

INFORMATION

Station Home Page (/stationhome.html?id=8419870)

Data Inventory (/inventory.html?id=8419870)

Measurement Specifications (/measure.html)

Website Owner: Center for Operational Oceanographic Products and Services

National Oceanic and Atmospheric Administration (http://www.noaa.gov)

• National Ocean Service (http://oceanservice.noaa.gov)

• Privacy Policy (/privacy.html)

• Take Our Survey (/survey.html)

• Take Our Survey (/survey.html)

• Freedom of Information Act (https://www.noaa.gov/foia-freedom-of-information-act)

• Contact Us (/contact.html)

EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

Query Results

Degrees, Minutes, Seconds: Latitude = , Longitude =

Decimal Degrees: Latitude = , Longitude =

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

EFH

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
1	②	Atlantic Sea Scallop	ALL	New England	Amendment 14 to the Atlantic Sea Scallop FMP
1	②	Atlantic Wolffish	ALL	New England	Amendment 14 to the Northeast Multispecies FMP
Į.	•	Winter Flounder	Eggs Juvenile Larvae/Adult	New England	Amendment 14 to the Northeast Multispecies FMP
Į.	•	Little Skate	Juvenile Adult	New England	Amendment 2 to the Northeast Skate Complex FMP
Į.	•	Atlantic Herring	Juvenile Adult Larvae	New England	Amendment 3 to the Atlantic Herring FMP
A	•	Atlantic Cod	Larvae Adult Eggs	New England	Amendment 14 to the Northeast Multispecies FMP
Į.	•	Pollock	Juvenile Eggs Larvae	New England	Amendment 14 to the Northeast Multispecies FMP
F	②	Red Hake	Adult Eggs/Larvae/Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
P	•	Windowpane Flounder	Adult Larvae Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
L	•	Winter Skate	Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
L	0	Smooth Skate	Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
P	•	White Hake	Adult Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
1	②	Thorny Skate	Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
1	②	Bluefin Tuna	Adult	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH
A	•	Atlantic Mackerel	Eggs Larvae Juvenile	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
Į.	0	Bluefish	Adult Juvenile	Mid-Atlantic	Bluefish
1	②	Atlantic Butterfish	Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11

Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

HAPCs

I	ink	Data Caveats	HAPC Name	Management Council
Г	L	•	Inshore 20m Juvenile Cod	New England

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Section 7 Documentation from DRED Natural Heritage Bureau (NHB) & United States Fish and Wildlife Service

Memo

NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.

Maps and NHB record pages are confidential and should be redacted from public documents.

To: Alex Sellar, Tighe and Bond Engineers

177 Corporate Drive Portsmouth, NH 03801

From: NHB Review, NH Natural Heritage Bureau

Date: 2/11/2022 (valid until 02/11/2023) **Re**: Review by NH Natural Heritage Bureau

Permits: NHDES - Wetland Standard Dredge & Fill - Major

NHB ID: NHB22-0347 Town: Portsmouth Location: 227 Market Street

Description: The proposed project consists of stormwater management upgrades and the replacement of two existing bollard moorings to

support the existing use of the site.

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: No Comments At This Time

F&G: Please make sure and provide proposed job timing with the information that is required for review.

As of February 3, 2022, New Hampshire Fish and Game requirements for environmental review consultation have changed. To review the new rules, please go to https://www.wildlife.state.nh.us/legislative/proposed-rules.html. All requests for consultation and submittals should be sent via email to NHFGreview@wildlife.nh.gov or can be sent by mail. The NHB datacheck results letter number needs to be included in the email subject line.

The requirements for consultation (Fis 1004) shall not apply to the following: statutory permit by notification, permit by rule, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule. Consultation requests for these projects can be sent directly to kim.tuttle@wildlife.nh.gov.

Vertebrate species	State ¹	Federal	Notes
Atlantic Sturgeon (Acipenser oxyrinchus	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).
oxyrinchus) Shortnose Sturgeon (Acipenser brevirostrum)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

Memo

NH Natural Heritage Bureau NHB DataCheck Results Letter

Please note: portions of this document are confidential.

Maps and NHB record pages are confidential and should be redacted from public documents.

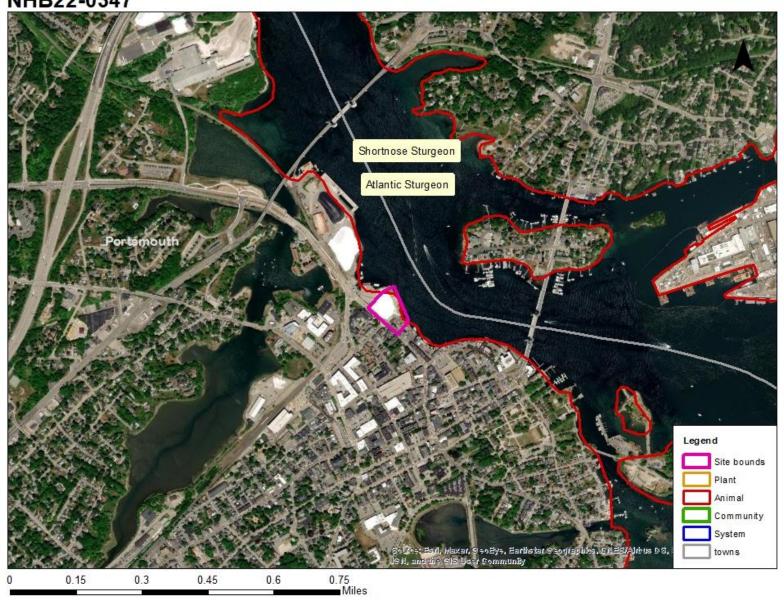
¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20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

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

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

CONFIDENTIAL – **NH Dept. of Environmental Services review**

NHB22-0347



NHB22-0347 EOCODE: AFCAA01042*003*NH

New Hampshire Natural Heritage Bureau - Animal Record

Atlantic Sturgeon (Acipenser oxyrinchus oxyrinchus)

Legal Status Conservation Status

Federal: Listed Threatened Global: Rare or uncommon

State: Listed Threatened State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank: --

Detailed Description: 2016: 1 individual, sex unknown, detected in the lower Piscataqua River. 2015: 1 individual,

sex unknown, detected in Portsmouth Harbor. 2012: 1 individual, sex unknown, detected in

Little Bay.

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataqua River.

General Comments: --Management ---

Comments:

Location

Survey Site Name: Piscataqua River

Managed By:

County:

Town(s): Out-Of-State

Size: 7749.3 acres Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataqua River.

Dates documented

First reported: 2012-06-02 Last reported: 2016-05-27

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.

NHB22-0347 EOCODE: AFCAA01010*001*NH

New Hampshire Natural Heritage Bureau - Animal Record

Shortnose Sturgeon (*Acipenser brevirostrum*)

Legal Status Conservation Status

Federal: Listed Endangered Global: Rare or uncommon

State: Listed Endangered State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank: --

Detailed Description: 2016: 2 individuals, 1 female and 1 sex unknown, detected in Portsmouth Harbor and the

lower Piscataqua River. 2015: 3 females and 2 other individuals, sex unknown detected in Portsmouth Harbor. 2014: 1 female detected moving from Portsmouth Harbor up the Piscataqua River to the mouth of the Cocheco River. 2012: 1 female detected in Little Bay.

2011: 1 female detected in Little Bay. 2010: 1 female detected in Little Bay.

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataqua River.

General Comments: --Management --

Comments:

Location

Survey Site Name: Piscataqua River

Managed By:

County:

Town(s): Out-Of-State

Size: 7749.3 acres Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataqua River.

Dates documented

First reported: 2010-11-03 Last reported: 2016-10-20

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.

Alexander Sellar

From: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Sent: Monday, February 28, 2022 10:38 AM
To: Alexander Sellar; FGC: NHFG review

Cc: Neil A. Hansen

Subject: RE: NHB22-0347 227 Market Street Portsmouth

Attachments: F&G Correspondence.pdf

[Caution - External Sender]

Hello Alex,

As there have been no changes to the design since our previous correspondences for the proposed project stormwater management upgrades and the replacement of two existing bollard moorings to support the existing use of the site at 227 Market St. Portsmouth, the NHFG Nongame and Endangered Wildlife Program does not expect impacts to Atlantic and shortnose sturgeon as a result of the proposed activities.

Thanks,

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

From: Alexander Sellar < ASellar@TigheBond.com>

Sent: Friday, February 18, 2022 2:28 PM

To: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>; FGC: NHFG review <NHFGReview@wildlife.nh.gov>

Cc: Neil A. Hansen < NAHansen@tighebond.com>

Subject: NHB22-0347

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

Hi Kim,

I wanted to reach out directly to you in regards to the attached NHB review for a proposed project at 227 Market Street in Portsmouth. This project had several years of delays but again we reach out to you for a third time in preparation of a submission next month. There have been no changes to the design since your previous reviews and I have attached our previous correspondence for your reference. Would you require any additional information for this project to complete your review?

Please let me know if you have any questions.

Thank you, Alex

Alexander Sellar, PE

Project Engineer

Tighe&Bond

o. 603 433 8818 | m. 603 507 0587

177 Corporate Drive, Portsmouth, NH, 03801 w: tighebond.com | halvorsondesign.com







CONFIDENTIAL – NH Dept. of Environmental Services review

Memo



To: Neil Hansen, Tighe & Bond 177 Corporate Drive Portsmouth, NH 03801

From: Amy Lamb, NH Natural Heritage Bureau

Date: 8/4/2020 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau

NHB File ID: NHB20-2243 Town: Portsmouth Location: Tax Maps: Map 119, Lot 6

Description: This project consists of stormwater management upgrades to the existing Granite State Minerals Terminal to comply with EPA's

Multi-Sector General Permit. The existing site is 100% impervious. This project had a previous NHB review which has expired,

NHB19-2156

cc: Kim Tuttle

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

Comments: Please continue to coordinate with the NH Fish & Game Department and the US Fish & Wildlife Service.

Vertebrate species	State ¹	Federal	Notes
Atlantic Sturgeon (Acipenser oxyrinchus)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).
Shortnose Sturgeon (<i>Acipenser brevirostrum</i>)	Е	Е	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

¹Codes: "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.

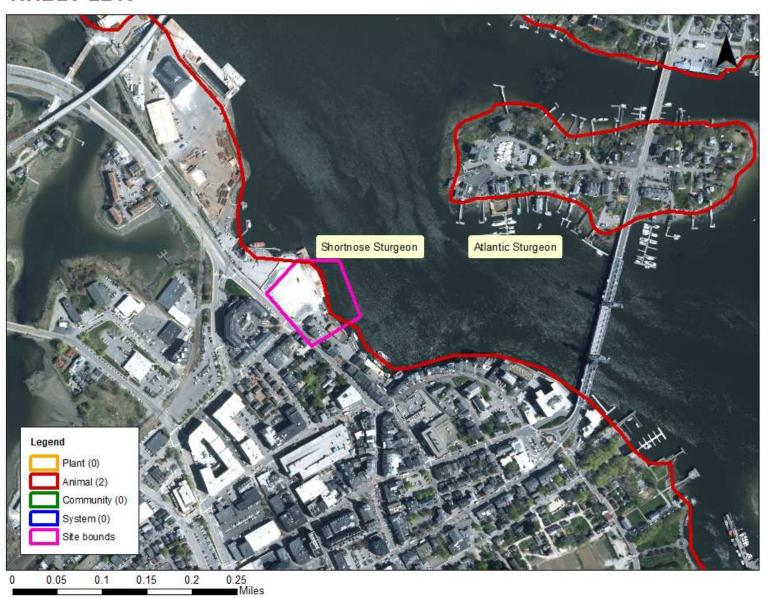
Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

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

CONFIDENTIAL – **NH Dept.** of Environmental Services review

NHB20-2243



NHB20-2243 EOCODE: AFCAA01040*003*NH

New Hampshire Natural Heritage Bureau - Animal Record

Atlantic Sturgeon (Acipenser oxyrinchus)

Legal Status Conservation Status

Federal: Listed Threatened Global: Rare or uncommon

State: Listed Threatened State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank: --

individual, sex unknown, detected in Portsmouth Harbor.

2012">br/>2012: 1 individual, sex

unknown, detected in Little Bay.

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataqua River.

General Comments: --Management --

Management Comments:

Location

Survey Site Name: Piscataqua River

Managed By:

County:

Town(s): Out-Of-State

Size: 7749.3 acres Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataqua River.

Dates documented

First reported: 2012-06-02 Last reported: 2016-05-27

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.

NHB20-2243 EOCODE: AFCAA01010*001*NH

New Hampshire Natural Heritage Bureau - Animal Record

Shortnose Sturgeon (Acipenser brevirostrum)

Legal Status Conservation Status

Federal: Listed Endangered Global: Rare or uncommon

State: Listed Endangered State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank: --

Detailed Description: 2016: 2 individuals, 1 female and 1 sex unknown, detected in Portsmouth Harbor and the

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataqua River.

General Comments: ---Management ---

Comments:

Location

Survey Site Name: Piscataqua River

Managed By:

County:

Town(s): Out-Of-State

Size: 7749.3 acres Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataqua River.

Dates documented

First reported: 2010-11-03 Last reported: 2016-10-20

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.

Neil A. Hansen

From: Tuttle, Kim < Kim.Tuttle@wildlife.nh.gov>
Sent: Wednesday, August 5, 2020 10:43 AM

To: Neil A. Hansen
Cc: Dionne, Michael

Subject: NHB20-2243 stormwater management upgrades to the existing Granite State Minerals

Terminal Portsmouth

Hello Neil,

As the project has not changed since the original NHFG review below (previously NHB19-2156), the NHFG Nongame and Endangered Species Program does not expect impacts to the following species identified on NHB20-2243:

Atlantic Sturgeon (Acipenser oxyrinchus) T T

Shortnose Sturgeon (Acipenser brevirostrum) E E

1Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern

Thanks,

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

----Original Message-----

From: Dionne, Michael < Michael. Dionne@wildlife.nh.gov>

Sent: Tuesday, August 6, 2019 1:48 PM

To: Neil A. Hansen < NAHansen@tighebond.com>; Tuttle, Kim < Kim.Tuttle@wildlife.nh.gov>

Cc: Giallongo, Stefanie < Stefanie. Giallongo@des.nh.gov>; Patterson, Cheri < Cheri. Patterson@wildlife.nh.gov>

Subject: NHB19-2156 Granite State Minerals terminal Piscatagua River Portsmouth

[Caution - External Sender]

Hi Neil,

The NH Fish and Game Marine Division has reviewed NHB19-2156 for the proposed work at the Granite State Minerals terminal on the Piscataqua River. The proposed work includes stormwater management upgrades to the facility including a new outfall into the river, the replacement of two existing bollard moorings at the terminal and repaving the yard. The Marine Division feels that the proposed work will not negatively impact the surrounding natural community and appreciate the efforts of Granite State Minerals to improve the current stormwater management.

Mike Dionne

Marine Biologist

NH Fish and Game Department

225 Main St. Durham, NH 03824

(603) 868-1095, michael.dionne@wildlife.nh.gov

From: Neil A. Hansen < NAHansen@tighebond.com>

Sent: Wednesday, August 5, 2020 10:31 AM **To:** Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov> **Subject:** RE: NHB review: NHB20-2243

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

Kim,

The NHB review with potential impacts (attached) for a project at 227 Market Street in Portsmouth the same project at the Granite State Minerals terminal that you reviewed a year ago (e-mails attached). We had some delays getting the permit application submitted to NHDES. We are now preparing to submit by the end of the month. There have been no changes to the design since your previous review.

Please let me know if you need any additional information from me to complete your review of this project.

Thank You, Neil

Neil A. Hansen, PE | Project Engineer

Tighe & Bond | 177 Corporate Dr. | Portsmouth, NH 03801 | 603.294.9213

From: Lamb, Amy < May.Lamb@dncr.nh.gov Sent: Wednesday, August 5, 2020 10:04 AM

To: Neil A. Hansen < NAHansen@tighebond.com Cc: Tuttle, Kim < Kim.Tuttle@wildlife.nh.gov

Subject: NHB review: NHB20-2243

[Caution - External Sender]

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

Best, Amy

Amy Lamb Ecological Information Specialist

NH Natural Heritage Bureau DNCR - Forests & Lands

CONFIDENTIAL – NH Dept. of Environmental Services review

Memo

NH NATURAL HERITAGE BUREAU NHB DATACHECK RESULTS LETTER

To: Neil Hansen, Tighe & Bond 177 Corporate Drive Portsmouth, NH 03801

From: Amy Lamb, NH Natural Heritage Bureau

Date: 7/15/2019 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau

NHB File ID: NHB19-2156 Town: Portsmouth Location: Tax Maps: Map 119, Lot 6

Description: This project consists of stormwater management upgrades to the existing Granite State Minerals Terminal to comply with EPA's

Multi-Sector General Permit. The existing site is 100% impervious.

cc: Kim Tuttle

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

Comments: Contac the NH Fish & Game Department and US Fish & Wildlife Service.

Vertebrate species	State ¹	Federal	Notes
Atlantic Sturgeon (Acipenser oxyrinchus)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).
Shortnose Sturgeon (Acipenser brevirostrum)	Е	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

¹Codes: "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.

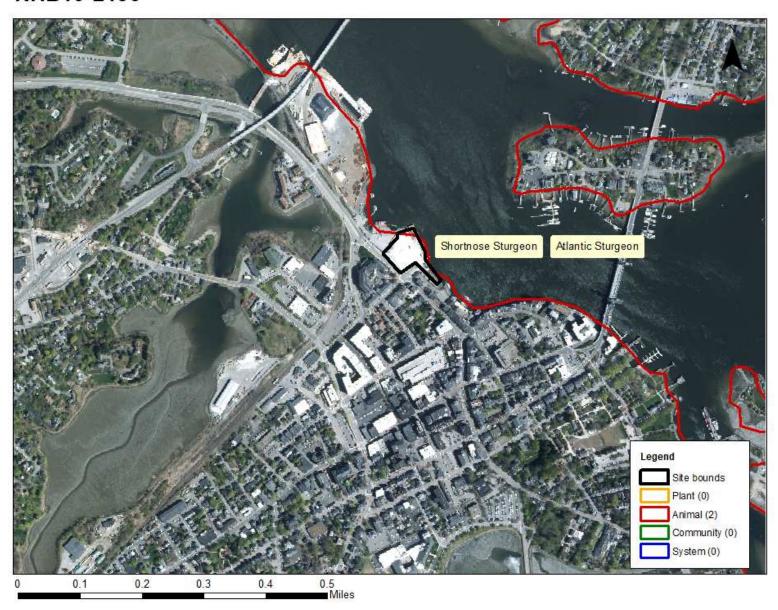
Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

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

CONFIDENTIAL – **NH Dept. of Environmental Services review**

NHB19-2156



NHB19-2156 EOCODE: AFCAA01040*003*NH

New Hampshire Natural Heritage Bureau - Animal Record

Atlantic Sturgeon (Acipenser oxyrinchus)

Legal Status Conservation Status

Federal: Listed Threatened Global: Rare or uncommon

State: Listed Threatened State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank:

individual, sex unknown, detected in Portsmouth Harbor.

-> 2012: 1 individual, sex

unknown, detected in Little Bay.

General Area:

2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataquog River.

General Comments: Management Comments:

Location

Survey Site Name: Piscataquog River

Managed By:

County: Rockingham Town(s): Newington

Size: 7749.3 acres Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataquog River.

Dates documented

First reported: 2012-06-02 Last reported: 2016-05-27

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.

NHB19-2156 EOCODE: AFCAA01010*001*NH

New Hampshire Natural Heritage Bureau - Animal Record

Shortnose Sturgeon (Acipenser brevirostrum)

Legal Status Conservation Status

Federal: Listed Endangered Global: Rare or uncommon

State: Listed Endangered State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked

Comments on Rank:

Detailed Description: 2016: 2 individuals, 1 female and 1 sex unknown, detected in Portsmouth Harbor and the

detected in Little Bay.

General Area: 2016: Tidal waters in Portsmouth Harbor, Little Bay, and the Piscataquog River.

General Comments: Management Comments:

Location

Survey Site Name: Piscataquog River

Managed By:

County: Rockingham Town(s): Newington

Size: 7749.3 acres Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 2016: Tidal waters of Portsmouth Harbor, Little Bay, and the Piscataquog River.

Dates documented

First reported: 2010-11-03 Last reported: 2016-10-20

The U.S. Fish & Wildlife Service has jurisdiction over Federally listed species. Please contact them at 70 Commercial Street, Suite 300, Concord NH 03301 or at (603) 223-2541.

From: <u>Tuttle, Kim</u>

To: <u>Dionne, Michael; Patterson, Cheri</u>

Cc: Neil A. Hansen

Subject: RE: NHB19-2156 Granite State Minerals Terminal

Date: Tuesday, August 06, 2019 8:28:29 AM

Cheri and Mike,

Have you had a chance to look at this one yet?

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

From: Neil A. Hansen [mailto:NAHansen@tighebond.com]

Sent: Monday, August 5, 2019 8:11 AM

To: Tuttle, Kim

Subject: RE: NHB19-2156 Granite State Minerals Terminal

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

sender.

Kim,

Just checking in to see if there is any update on this review.

Thanks, Neil

Neil A. Hansen, PE | Project Engineer Tighe & Bond | 177 Corporate Dr. | Portsmouth, NH 03801 | 603.294.9213

From: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>

Sent: Tuesday, July 16, 2019 1:36 PM

To: Neil A. Hansen <NAHansen@tighebond.com> **Subject:** NHB19-2156 Granite State Minerals Terminal

Neil,

I sent this one down to our Marine Division since the two sturgeon species may require some additional review since they are also federally listed. The Marine Program Supervisor is out until the end of the month so you may not hear from us for a couple of weeks. Please send a reminder email at that time if you have not heard from us by then.

Regards,

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

From: Neil A. Hansen [mailto:NAHansen@tighebond.com]

Sent: Tuesday, July 16, 2019 1:24 PM

To: Tuttle, Kim

Subject: RE: NHB review: NHB19-2156

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

sender.

Kim,

I received a NHB review with potential impacts (attached) for a project at 227 Market Street in Portsmouth. The project is at the Granite State Minerals terminal on the Piscataqua River. The project includes stormwater management upgrades to the facility including a new outfall into the river, the replacement of two existing bollard moorings at the terminal and repaving the yard. I have attached the plan for use with your review. The existing terminal consists of a paved storage yard used for salt storage and an office building and garage. The limit of work is in existing paved areas and the new outfall will be located in an existing rip rap bank.

Please let me know if you need any additional information from me to complete your review of this project.

Thank You, Neil

Neil A. Hansen, PE | Project Engineer Tighe & Bond | 177 Corporate Dr. | Portsmouth, NH 03801 | 603.294.9213

From: Lamb, Amy < Amy.Lamb@dncr.nh.gov >

Sent: Monday, July 15, 2019 4:15 PM

To: Neil A. Hansen < <u>NAHansen@tighebond.com</u>> **Cc:** Tuttle, Kim < <u>Kim.Tuttle@wildlife.nh.gov</u>>

Subject: NHB review: NHB19-2156

[Caution - External Sender]

Attached, please find the review we have completed. If your review memo includes potential

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

Best, Amy

Amy Lamb Ecological Information Specialist

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

Neil A. Hansen

From: Dionne, Michael < Michael.Dionne@wildlife.nh.gov>

Sent: Tuesday, August 06, 2019 1:48 PM

To: Neil A. Hansen; Tuttle, Kim

Cc: Giallongo, Stefanie; Patterson, Cheri

Subject: NHB19-2156 Granite State Minerals terminal Piscataqua River Portsmouth

[Caution - External Sender]

Hi Neil.

The NH Fish and Game Marine Division has reviewed NHB19-2156 for the proposed work at the Granite State Minerals terminal on the Piscataqua River. The proposed work includes stormwater management upgrades to the facility including a new outfall into the river, the replacement of two existing bollard moorings at the terminal and repaving the yard. The Marine Division feels that the proposed work will not negatively impact the surrounding natural community and appreciate the efforts of Granite State Minerals to improve the current stormwater management.

Mike Dionne

Marine Biologist

NH Fish and Game Department

225 Main St. Durham, NH 03824

(603) 868-1095, michael.dionne@wildlife.nh.gov

NH Fish and Game...connecting you to life outdoors

https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fwww.wildnh.com&c=E,1,oAiVbuuw59z52uaVEci9ZqECBEwLrwTr8U2vk1RRmqAPbCtUyx88LjEm9kliJnaBklrvszaNaIp2RQHCgMIETZGm8BthtcX4O9sWCK1uh9ivwA,,&typo=1<https://linkprotect.cudasvc.com/url?a=http%3a%2f%2fwww.wildnh.com%2f&c=E,1,TJXwVKVm3laxSlAFpp1KjyHhTAOxxa1yvsymO_V0u-2mEzfoPHZEG793zguLRllYKRt4PVtsUBuBfcXqtdlh69vnyPbrrNFjOiaDiJZ-2j4HZKim&typo=1>, www.facebook.com/nhfishandgame<http://www.facebook.com/nhfishandgame#!/nhfishandgame>

Did you know? New Hampshire Fish and Game has been conserving New Hampshire's wildlife and their habitats since 1865.

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources State Historic Preservation Office Attention: Review & Compliance 19 Pillsbury Street, Concord, NH 03301-3570



DHR Use Only	y
R&C#	10879 MI
Log In Date	7,19,19
Response Date	7,23,19
Sent Date	7,24,19

Request for Project Review by the New Hampshire Division of Historical Resources

☐ This is a new submittal ☐ This is additional information relating to DHR Review & Compliance (R&C) #: 10879
GENERAL PROJECT INFORMATION
Project Title Granite State Minerals
Project Location 227 Market Street
City/Town Portsmouth Tax Map 119 Lot # 6
NH State Plane - Feet Geographic Coordinates: Easting 1226750 Northing 212710 ✓ (See RPR Instructions and R&C FAQs for guidance.)
Lead Federal Agency and Contact (if applicable) EPA (Agency providing funds, licenses, or permits) Permit Type and Permit or Job Reference # MSCP
State Agency and Contact (if applicable) NHDES
Permit Type and Permit or Job Reference # Wetlands
APPLICANT INFORMATION
Applicant Name Eastern Minerals c/o Joe McNamee
Mailing Address 227 Market Street Phone Number 978.764.2303
City Portsmouth State NH Zip 03801 Email jmcnamee@easternminerals.com
CONTACT PERSON TO RECEIVE RESPONSE
Name/Company Neil Hansen/Tighe & Bond, Inc.
Mailing Address 177 Corporate Drive Phone Number 6034338818
City Portsmouth State NH Zip 03801 Email nahansen@tighebond.com

This form is updated periodically. Please download the current form at www.nh.gov/nhdhr/review. Please refer to the Request for Project Review Instructions for direction on completing this form. Submit one copy of this project review form for each project for which review is requested. Include a self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, additional information will be needed to complete the Section 106 review. All items and supporting documentation submitted with a review request, including photographs and publications, will be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process and the DHR's role in it, please visit our website at: www.nh.gov/nhdhr/review or contact the R&C Specialist at marka.labash@dncr.nh.gov or 603.271.3558.

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION
Project Boundaries and Description
 Attach the Project Mapping using EMMIT or relevant portion of a 7.5' USGS Map. (See RPR Instructions and R&C FAQs for guidance.) Attach a detailed narrative description of the proposed project. Attach a site plan. The site plan should include the project boundaries and areas of proposed excavation. Attach photos of the project area (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.) (Informative photo captions are requested.) A DHR records search must be conducted to identify properties within or adjacent to the project area. Provide records search results via EMMIT or in Table 1. (Blank table forms are available on the DHR website.) EMMIT or in-house records search conducted on 12/4/2018.
$\underline{Architecture}$
Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the project area? ☐ Yes ☒ No If no, skip to Archaeology section. If yes, submit all of the following information:
Approximate age(s):
 Photographs of each resource or streetscape located within the project area, with captions, along with a mapped photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.) If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of windows if window replacement is proposed.)
$\underline{Archaeology}$
Does the proposed undertaking involve ground-disturbing activity? X Yes No If yes, submit all of the following information:
Description of current and previous land use and disturbances. Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.)
Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process.
DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only
☐ Insufficient information to initiate review. ☐ Additional information is needed in order to complete review. ☐ No Potential to cause Effects ☐ No Historic Properties Affected ☐ No Adverse Effect ☐ Adverse Effect Comments:
If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation. Authorized Signature: Math Math Division of Historical Date: 7/3/19



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 31, 2022

Project code: 2022-0000824

Project Name: Granite State Minerals

Subject: Consistency letter for the 'Granite State Minerals' project indicating that any take of

the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Alexander Sellar:

The U.S. Fish and Wildlife Service (Service) received on January 31, 2022 your effects determination for the 'Granite State Minerals' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take" of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

• Roseate Tern Sterna dougallii dougallii Endangered

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

[1] Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Granite State Minerals

2. Description

The following description was provided for the project 'Granite State Minerals':

This project consists of constructing stromwater management upgrades to the Granite State Minerals Terminal for comply with the EPA's Multi-Sector General Permit

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.0799968,-70.7590106459304,14z



Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

- Is the action authorized, funded, or being carried out by a Federal agency?

 No
- 2. Will your activity purposefully **Take** northern long-eared bats? *No*
- 3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31 $\,$

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31 $\,$

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0



United States Department of the Interior



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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 31, 2022

Project Code: 2022-0000824

Project Name: Granite State Minerals

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

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

Project Code: 2022-0000824

Event Code: None

Project Name: Granite State Minerals
Project Type: Drainage Project

Project Description: This project consists of constructing stromwater management upgrades to

the Granite State Minerals Terminal for comply with the EPA's Multi-

Sector General Permit

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.0799968,-70.7590106459304,14z



Counties: Rockingham County, New Hampshire

Endangered Species Act Species

There is a total of 2 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 Fisheries¹, 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.

1. <u>NOAA Fisheries</u>, 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

Birds

NAME

Roseate Tern *Sterna dougallii dougallii*

Endangered

Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083

Critical habitats

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

Section 8 New Hampshire PGP: Appendix B - Corps Secondary Impact Checklist



Appendix B

Regional General Permits (GPs) Required Information and Corps Secondary Impacts Checklist

In order for the Corps of Engineers to properly evaluate your application, applicants must submit the following information along with the New Hampshire DES Wetlands Bureau application or permit notification forms. Some projects may require more information. For a more comprehensive checklist, go to www.nae.usace.army.mil/regulatory, "Forms/Publications" and then "Application and Plan Guideline Checklist." Check with the Corps at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the State of New Hampshire DES Wetlands Bureau application and Permit by Notification forms.

All Projects:

- Corps application form (ENG Form 4345) as appropriate.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible black and white (no color) plans no larger than 11"x17" with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
- Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. Don't use local datum. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
- Horizontal state plane coordinates in U.S. survey feet based on the Traverse Mercator Grid system for the State of New Hampshire (Zone 2800) NAD 83.
- Show project limits with existing and proposed conditions.
- Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
- Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the ordinary high water in inland waters and below the high tide line in coastal waters.
- Delineation of all waterways and wetlands on the project site,:
- Use Federal delineation methods and include Corps wetland delineation data sheets. See GC 2 and www.nero.noaa.gov/hcd for eelgrass survey guidance.
- GP 3, Moorings, contains eelgrass survey requirements for the placement of moorings.
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.

Appendix B August 2017



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	X	
to determine if there is an impaired water in the vicinity of your work area.*		
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		X
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.		
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology,	N/A	N/A
sediment transport & wildlife passage?	14/11	IN/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		X
lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream		Λ
banks. They are also called vegetated buffer zones.)		
2.5 The overall project site is more than 40 acres?		X
2.6 What is the area of the previously filled wetlands?		
2.7 What is the area of the proposed fill in wetlands?		
2.8 What is the % of previously and proposed fill in wetlands to the overall project site?		
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	X	
IPAC determination.) NHB DataCheck Tool: https://www2.des.state.nh.us/nhb_datacheck/		
USFWS IPAC website: https://ecos.fws.gov/ipac/location/index		

Appendix B August 2017

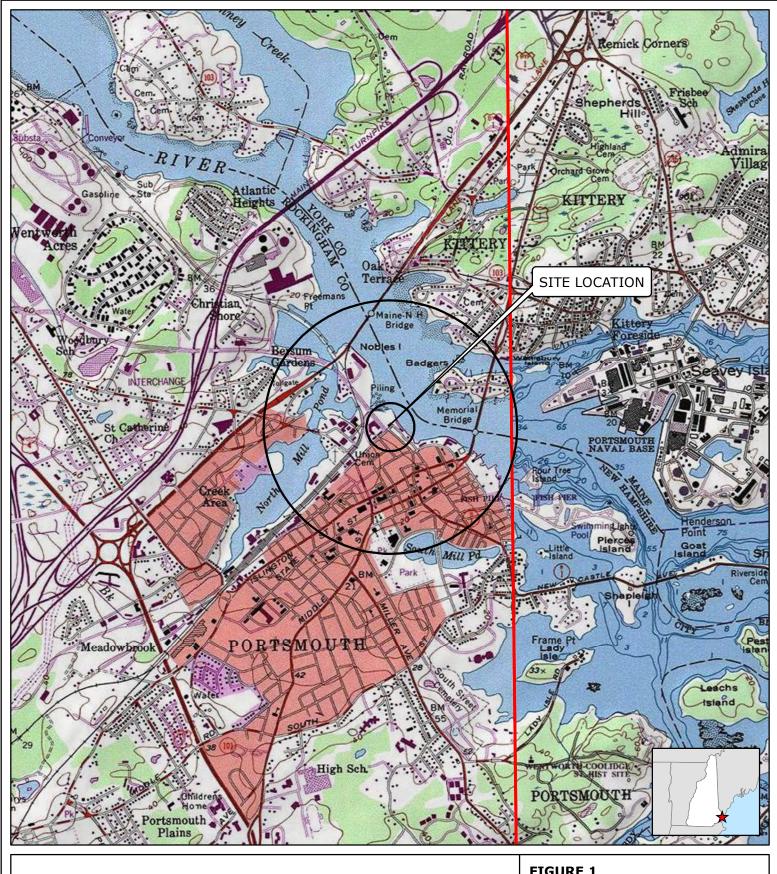
3.2 Would work occur in any area identified as either "Highest Ranked Habitat in N.H." or "Highest Ranked Habitat in Ecological Region"? (These areas are colored magenta and green, respectively, on NH Fish and Game's map, "2010 Highest Ranked Wildlife Habitat by Ecological Condition.") Map information 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,		X
wetland/waterway) on the entire project site and/or on an adjoining property(s)?		Λ
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	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	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.

Appendix B August 2017

^{**} If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.

Section 9 U.S. Geological Survey Topographic Map





Based on USGS Topographic Map for Portsmouth, New Hampshire. Revised 1956. Circles indicate 500-foot and half-mile radii

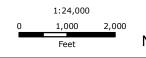
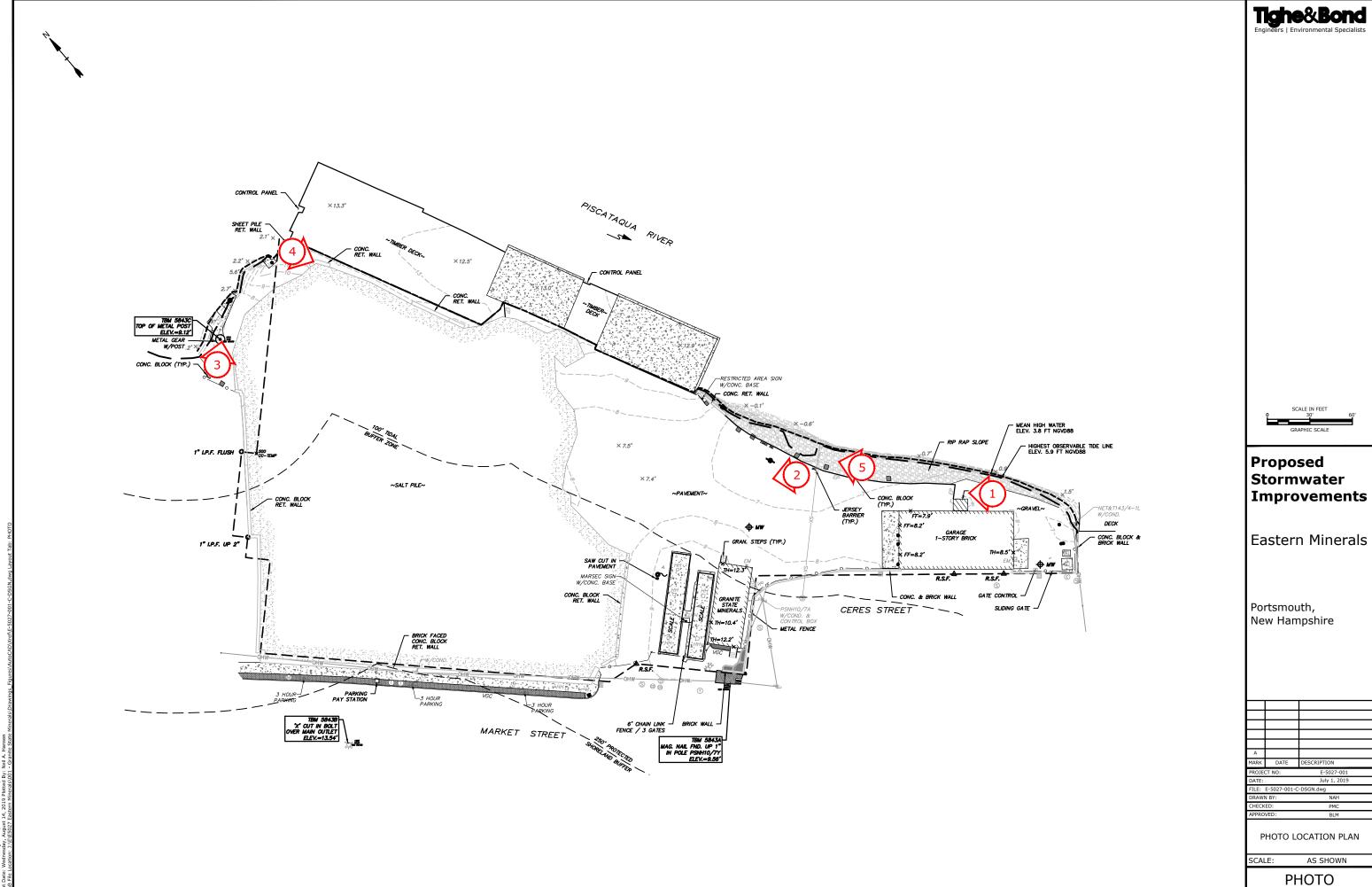


FIGURE 1 **SITE LOCUS MAP**

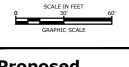
Eastern Minerals Market Street Portsmouth, NH

December 2018

Section 10 Photographs of Tidal Buffer Zone







Α			
MARK	DATE	DESCRIPTION	
PROJE	CT NO:	E-5027-001	
DATE:	DATE: July 1, 2019		
FILE:	E-5027-001-C	-DSGN.dwg	
DRAWI	N BY:	NAH	



Photo 1: Next to the existing garage looking northwest towards the existing stone revetment. (12/7/2018)

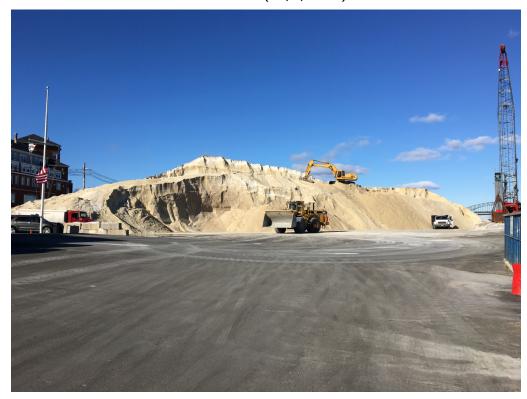


Photo 2: In front of the stone revetment looking northwest across the site at the salt pile (12/7/2018)



Photo 3: At the northwestern corner of the site looking east at the existing mooring (12/7/2018)

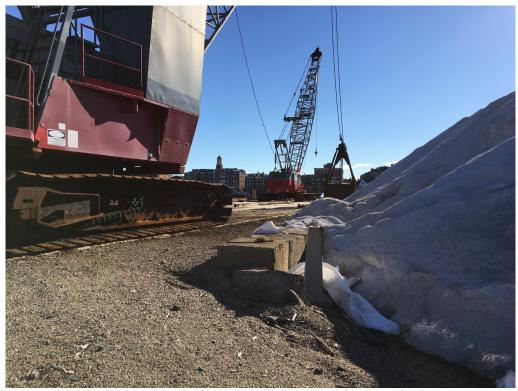
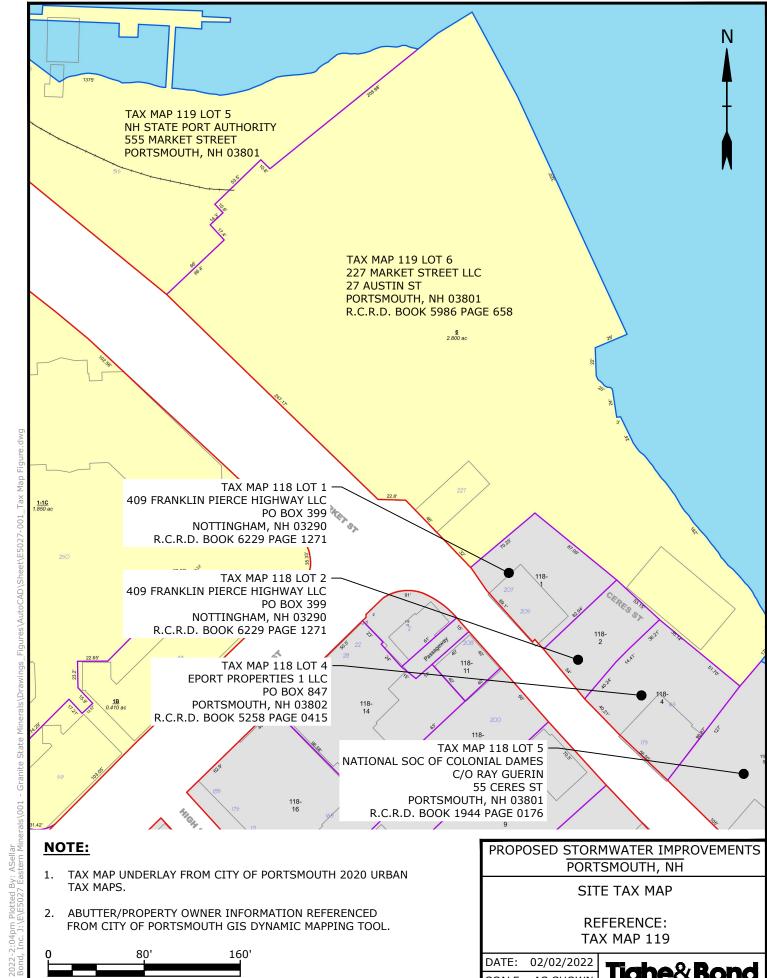


Photo 4: At the northern end of the site looking south towards the existing pier (12/7/2018)

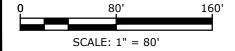


Photo 5: Looking north towards the existing pier and the location of the proposed stormwater outfall (7/23/2019)

Section 11 City of Portsmouth Tax Map



- TAX MAPS.
- ABUTTER/PROPERTY OWNER INFORMATION REFERENCED FROM CITY OF PORTSMOUTH GIS DYNAMIC MAPPING TOOL.



SITE TAX MAP

REFERENCE: TAX MAP 119

DATE: 02/02/2022

SCALE: AS SHOWN FIGURE:

Section 12 Abutter Information

- **12.1 Abutter Notice**
- 12.2 Abutter List
- 12.3 Abutter Certified Mail Receipts

Abutters List

Proposed Site Improvements 227 Market Street Portsmouth, New Hampshire

ABUTTERS 409 Franklin Pierce Highway LLC PO Box 399 Nottingham, NH 03290	MAP # 118 118	LOT # 1 2
Eport Properties 1 LLC PO Box 847 Portsmouth, NH 03802	118	4
National Society of Colonial Dames c/o Ray Guerin 55 Ceres Street Portsmouth, NH 03801	118	5
OWNERS NH State Port Authority 555 Market Street Portsmouth, NH 03801	119	5
227 Market Street, LLC 27 Austin Street Portsmouth, NH 03801	119	6

APPLICANT

Granite State Minerals c/o Joe McNamee 227 Market Street Portsmouth, NH 03801

ENGINEER

Tighe & Bond, Inc. 177 Corporate Drive Portsmouth, NH 03801

(09.03_145027-001_abutters list.docx)

PUBLIC NOTICE

NOTICE OF INTENT TO FILE

Please take notice that Granite State Minerals, applicant, is intending to file a Wetland Application – Standard Major Impact with the New Hampshire Department of Environmental Services for proposed site improvements at 227 Market Street in Portsmouth, New Hampshire.

The proposed project consists of stormwater management upgrades, the replacement of two existing bollard moorings to support the existing use of the site and repaving the northwestern side of the yard. The stormwater management upgrades are being constructed as part of the facility's stormwater management program under the EPA Multi-Sector General Permit (MSGP).

The proposed project is located within the 100 FT upland tidal buffer zone (TBZ) and tidal waters for the Piscataqua River. The TBZ is previously developed and currently consists of 100% impervious area (paved yard & stone revetment). The tidal waters to be disturbed is also impervious and consists of an existing stone revetment.

There will be temporary impacts within the TBZ and tidal waters as part of the project. The temporary impacts due to construction related activities will be 6,675 SF. The proposed condition will result in no increase of impervious surface in the tidal buffer zone or tidal waters.

Plans and details of this application are on file, for your review, at the City of Portsmouth Clerk's Office, 1 Junkins Avenue, Portsmouth, New Hampshire (8:00am - 4:30pm) or at the NHDES Wetlands Bureau, 29 Hazen Drive, Concord, New Hampshire (8:00am - 4:00pm).

(145027-001_abutters notice.docx)

Firm Mailing Book For Accountable Mail

PS Form 3877 , January 2017 (Page 1 of 2)	Total Number of Pieces Re		ώ	7.	<u>o</u>	5.	4	ယ	2.	<u>.</u> 4	USPS Tracking/Article Number	Name and Address of Sender
2017 (Page 1 of 2)	Total Number of Pieces Received at Post Office								_		ticle Number	
Complete in Ink	Postmaster, Per (Name of receiving employee) 8707 g					55 Ceres Street Portsmouth, NH 03801	118-5 National Society of Colonial Dames —	Eport Properties 1 LLC PO Box 847 Portsmouth, NH 03802	Nottingham, NH 03290	118-1 & 118-2 409 Franklin Pierce Highway LLC	Addressee (Name, Street, City, State, & ZIP Code™)	Check type of mall of service Adult Signature Required Priority Mail Express Adult Signature Restricted Delivery Registered Mail Certified Mail Restricted Delivery Merchandise Collect on Delivery (COD) Signature Confirmation Insured Mail Restricted Delivery Restricted Delivery Restricted Delivery Restricted Delivery
Privacy Notice: For more information on USPS	E JAN 2 6 2023	Jes j	Han	dling Cl	narge - if	Registe	ed and	0741:	5 × \$0.60 = \$	5027-002	Postage (Extra Handling Actual Value Insured Service) Charge if Registered Value Service	of this receipt) of Receipt. B86713.17
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PS Form **3877**, January 2017 (Page 1 of 2) PSN 7530-02-000-9098

Tighe&Bond

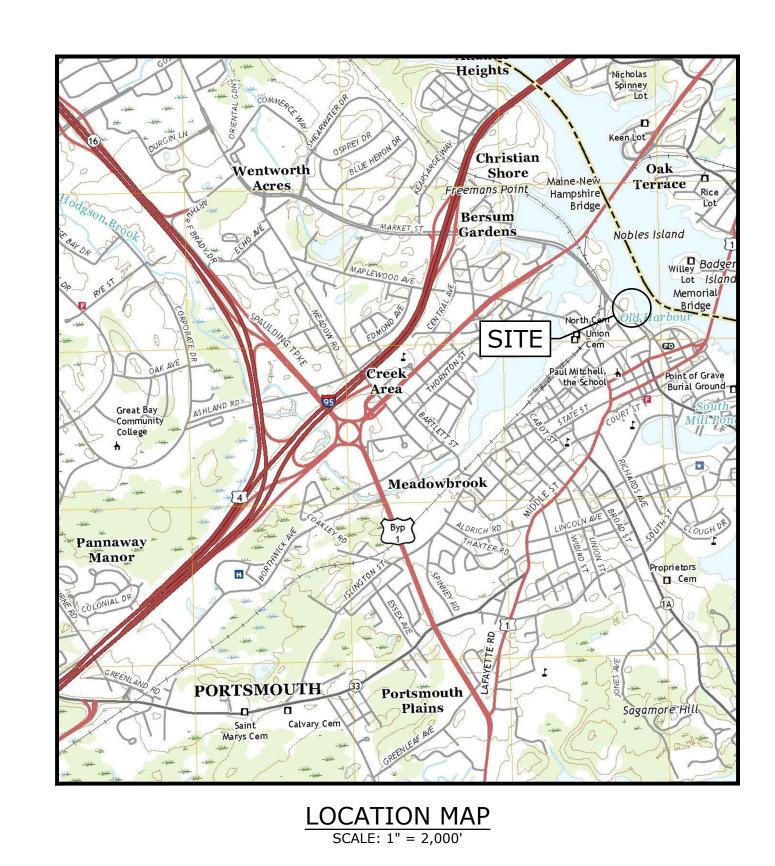
Section 13 Site Plan

Site Plans Bound Seperately

PROPOSED SITE IMPROVEMENTS

227 MARKET STREET
PORTSMOUTH, NEW HAMPSHIRE
PROJECT NO: E5027-001
DECEMBER 29, 2022

	LIST OF DRAWINGS				
SHEET NO.	SHEET TITLE	LAST REVISED			
	COVER SHEET	12/29/2022			
C-101	EXISTING CONDITIONS AND DEMOLITION PLAN	12/29/2022			
C-102	SITE, GRADING, DRAINAGE, AND EROSION CONTROL PLAN	12/29/2022			
C-501	EROSION CONTROL NOTES AND DETAILS SHEET	12/29/2022			
C-502	DETAILS SHEET	12/29/2022			
C-503	DETAILS SHEET	12/29/2022			



DREDARED RY

Tighe&Bond

177 CORPORATE DRIVE
PORTSMOUTH, NEW HAMPSHIRE 03801
603-433-8818

OWNERS:

227 MARKET STREET, LLC
27 AUSTIN STREET

PORTSMOUTH, NEW HAMPSHIRE 03801

NH PORT AUTHORITY

555 MARKET STREET
PORTSMOUTH, NEW HAMPSHIRE 03801

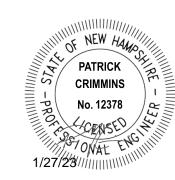
SURVEY CONSULTANT: DOUCET SURVEY, INC.

102 KENT PLACE
NEWMARKET, NEW HAMPSHIRE 03110
603-659-6560

APPLICANT:

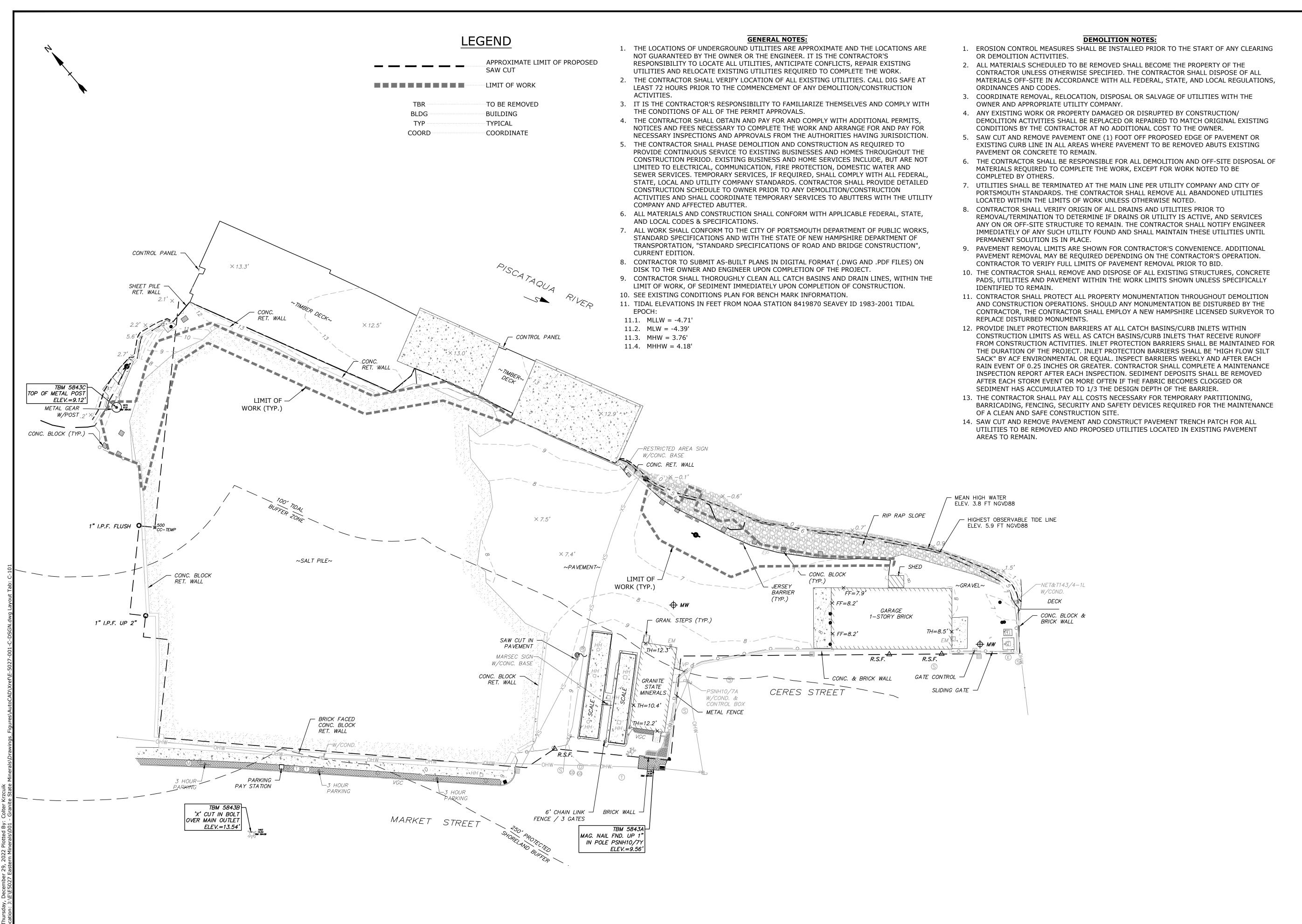
GRANITE STATE MINERALS
227 MARKET STREET

PORTSMOUTH, NEW HAMPSHIRE 03801

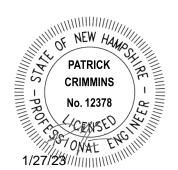




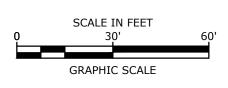
WETLAND PERMIT APPLICATION COMPLETE SET 6 SHEETS



| Tighe&Bond







Proposed Site Improvements

Granite State Minerals

Portsmouth, New Hampshire

1ARK	DATE	DESCRIPTION		
PROJECT NO: E-5027-001				
DATE: December 29, 2022				
ILE: E-5027-001-C-DSGN.dwg				

DATE: December 29, 2022

FILE: E-5027-001-C-DSGN.dwg

DRAWN BY: AFS/CJK

CHECKED: NAH

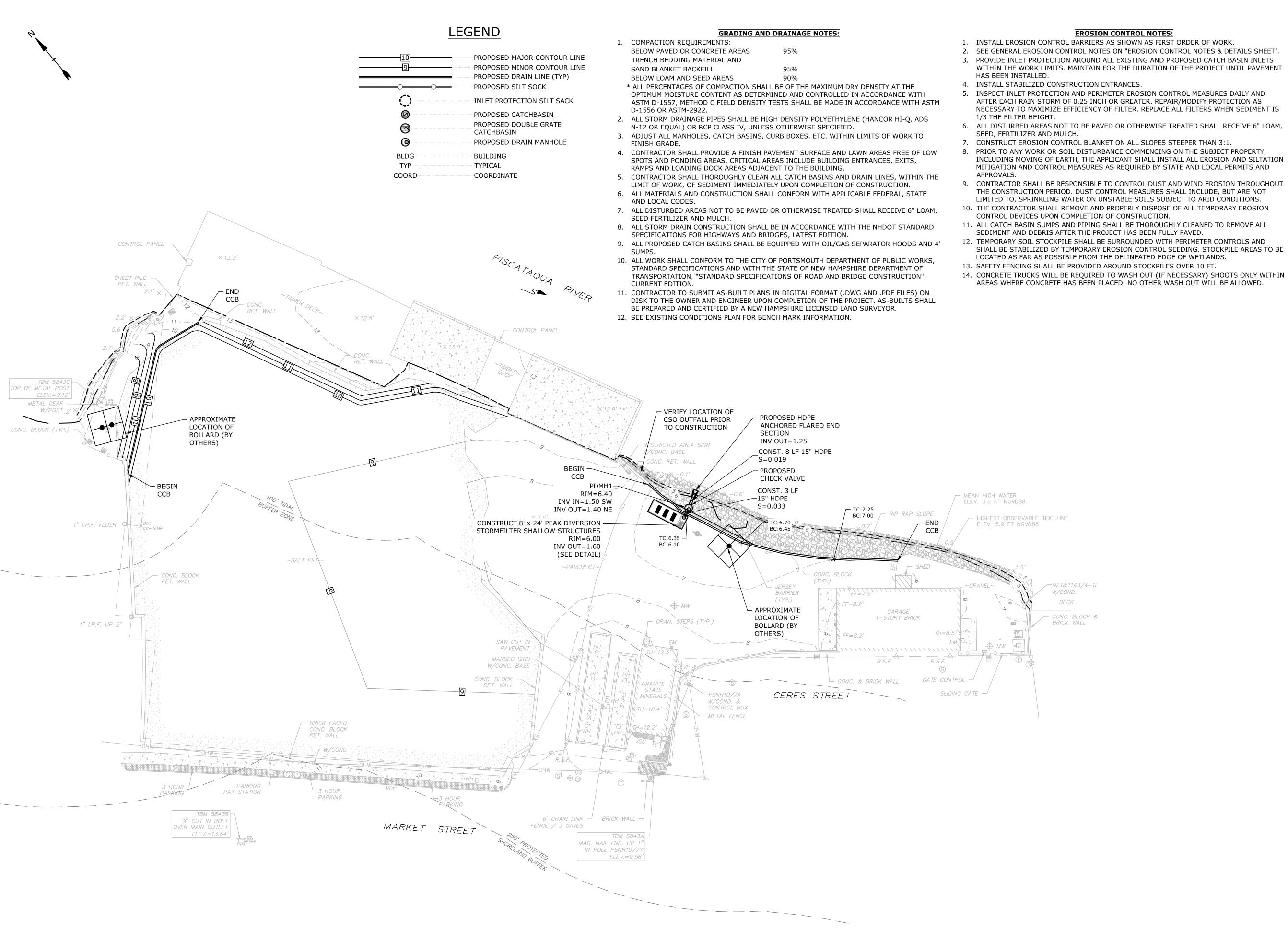
APPROVED: PMC

EXISTING CONDITIONS & DEMOLITION PLAN

SCALE:

AS SHOWN

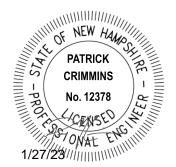
C-101



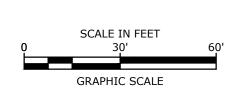
EROSION CONTROL NOTES:

- 1. INSTALL EROSION CONTROL BARRIERS AS SHOWN AS FIRST ORDER OF WORK.
- 2. SEE GENERAL EROSION CONTROL NOTES ON "EROSION CONTROL NOTES & DETAILS SHEET".
- 3. PROVIDE INLET PROTECTION AROUND ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT
- AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS
- 6. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM,
- 7. CONSTRUCT EROSION CONTROL BLANKET ON ALL SLOPES STEEPER THAN 3:1.
- 8. PRIOR TO ANY WORK OR SOIL DISTURBANCE COMMENCING ON THE SUBJECT PROPERTY, INCLUDING MOVING OF EARTH, THE APPLICANT SHALL INSTALL ALL EROSION AND SILTATION MITIGATION AND CONTROL MEASURES AS REQUIRED BY STATE AND LOCAL PERMITS AND
- 9. CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, SPRINKLING WATER ON UNSTABLE SOILS SUBJECT TO ARID CONDITIONS.
- 10. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION
- 11. ALL CATCH BASIN SUMPS AND PIPING SHALL BE THOROUGHLY CLEANED TO REMOVE ALL
- 12. TEMPORARY SOIL STOCKPILE SHALL BE SURROUNDED WITH PERIMETER CONTROLS AND SHALL BE STABILIZED BY TEMPORARY EROSION CONTROL SEEDING. STOCKPILE AREAS TO BE
- 13. SAFETY FENCING SHALL BE PROVIDED AROUND STOCKPILES OVER 10 FT.
- AREAS WHERE CONCRETE HAS BEEN PLACED. NO OTHER WASH OUT WILL BE ALLOWED.









Proposed Site Improvements

Granite State Minerals

Portsmouth, New Hampshire

RK	DATE	DESCRIPTION	
DJECT NO: E-5027-001			
TE:		December 29, 2022	
E:	E-5027-001-C	-DSGN.dwg	

CHECKED: NAH APPROVED: PMC SITE, GRADING, DRAINAGE

AFS/CJK

& EROSION CONTROL PLAN

DRAWN BY:

SCALE:

C-102

AS SHOWN

227 MARKET STREET LLC PROJECT OWNER: 27 AUSTIN STREET

PORTSMOUTH, NH 03801 PROJECT NAME: PROPOSED STORMWATER IMPROVEMENTS

PROJECT ADDRESS: 227 MARKET STREET

PORTSMOUTH, NH 03801 PROJECT MAP / LOT: MAP 119 / LOT 6

PROJECT LATITUDE: 43°-04'-49"N PROJECT LONGITUDE: 70°-45'-34"W

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF CONSTRUCTING STORMWATER IMPROVEMENTS IN ORDER TO COMPLY WITH AN EPA MSGP AND THE REPLACEMENT OF TWO (2) EXISTING BOLLARD MOORINGS. THE WORK IS ANTICIPATED TO START IN FALL 2019, AND BE COMPLETED BY FALL 2020.

THE TOTAL AREA TO BE DISTURBED IS LESS THAN 1 ACRE.

NAME OF RECEIVING WATERS

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA A PROPOSED OUTFALL TO THE PISCATAQUA RIVER.

CONSTRUCTION SEQUENCE OF MAJOR ACTIVITIES:

- CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS: DISPOSAL OF SEDIMENT SPOIL AND OTHER SOLID WASTE
- FLOOD PLAIN EXCAVATION WORK
- CONTROL OF DUST
- NEARNESS OF CONSTRUCTION SITE TO RECEIVING WATERS
- CLEAR AND DISPOSE OF DEBRIS.
- CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED
- GRADE AND GRAVEL ROADWAYS AND PARKING AREAS ALL ROADS AND PARKING AREA
- SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER
- EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC. FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.

OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

SPECIAL CONSTRUCTION NOTES:

CONSTRUCTION" PREPARED BY THE NHDES

THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT 10. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;

- ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING
- PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL
- CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALES, SILT FENCES, MULCH BERMS, SILT SACKS AND SILT SOCKS AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
- SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH 2. HAZARDOUS WASTE: BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE
- PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
- THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND
- INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER
- CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1

- AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
- A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
- D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.:
- IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.
- WINTER STABILIZATION PRACTICES:
- A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE
- OF THAW OR SPRING MELT EVENTS; ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;
- AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;
- STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
- A. TEMPORARY SEEDING;
- B. MULCHING.
- ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
- DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT FENCES, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY OCTOBER 15.

DUST CONTROL:

THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.

- 2. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY
- 3. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

- L. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND
- CULVERTS. 2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES
- PRIOR TO THE ONSET OF PRECIPITATION. 3. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE

INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.

4. PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

OFF SITE VEHICLE TRACKING:

THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY EXCAVATION ACTIVITIES.

CONCRETE WASHOUT AREA:

- THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE:
- A. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT
- FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY;
- B. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
- C. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS;
- D. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES:

- FIRE-FIGHTING ACTIVITIES;
- FIRE HYDRANT FLUSHING;
- WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
- WATER USED TO CONTROL DUST;
- POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
- 6. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED; PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
- 8. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
- 9. UNCONTAMINATED GROUND WATER OR SPRING WATER;

- 11. UNCONTAMINATED EXCAVATION DEWATERING; 12. LANDSCAPE IRRIGATION.

- A. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER;
- B. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
- C. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
- A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER; B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT
- A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION:

- CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
- REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF. A. GOOD HOUSEKEEPING - THE FOLLOWING GOOD HOUSEKEEPING PRACTICE SHALL BE

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO

- FOLLOWED ON SITE DURING CONSTRUCTION: a. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON
- b. ALL REGULATED MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE,
- UNDER A ROOF OR OTHER ENCLOSURE, ON AN IMPERVIOUS SURFACE; MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED: d. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND
- DISPOSAL OF MATERIALS; e. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY
- THE MANUFACTURER: WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.
- B. HAZARDOUS PRODUCTS THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS: a. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT
- RESEALABLE; ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION;
- SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL. C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL
- a. PETROLEUM PRODUCTS:

BE FOLLOWED ON SITE:

- ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR
- PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE; PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- iii. SECURE FUEL STORAGE AREAS AGAINST UNAUTHORIZED ENTRY; iv. INSPECT FUEL STORAGE AREAS WEEKLY;
- v. WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE

SUBSTANCES:

MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS; vi. COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS; vii. SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED

SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL

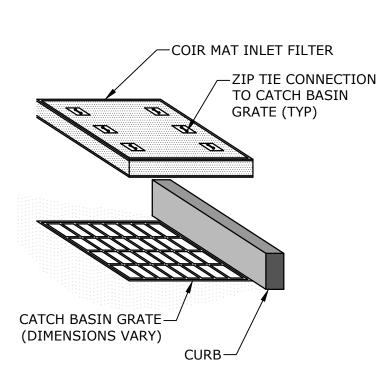
TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE

- REGULATED. viii. THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
 - (1) EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;
 - (2) PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS; (3) HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE
 - IN ALL WORK AREAS; (4) USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED

- (5) PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS
- ix. FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT SHALL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES THESE REQUIREMENTS ARE SUMMARIZED IN WD-DWGB-22-6 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT, OR ITS SUCCESSOR DOCUMENT.
- HTTPS://WWW.DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/DWGB/DOCUMENTS/DWGB-22-6.PDF
- FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS;
- ii. ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER
- iii. STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
- c. PAINTS: i. ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR
- EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM;
- iii. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
- D. SPILL CONTROL PRACTICES IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
- a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND
- THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES; b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE:

ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;

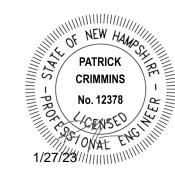
- d. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE;
- e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED;
- f. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. E. VEHICLE FUELING AND MAINTENANCE PRACTICE:
- a. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY; b. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT
- IS CLEAN AND DRY; c. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED
- d. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA;
- e. CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE;
- f. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.



- 1. COIR MAT INLET FILTER SHALL BE STORM WATER INLET FILTER BY BLOCKSOM & CO. OR APPROVED
- INSTALL AND MAINTAIN INLET PROTECTION IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

INLET PROTECTION

NO SCALE





Proposed Site Improvements

Granite State Minerals

| Portsmouth, New Hampshire

MARK DATE DESCRIPTION PROJECT NO: E-5027-001 December 29, 2022 FILE: E-5027-001-C-DTLS.dwg

EROSION CONTROL NOTES & DETAILS SHEET

AFS/CJK

NAH

PMC

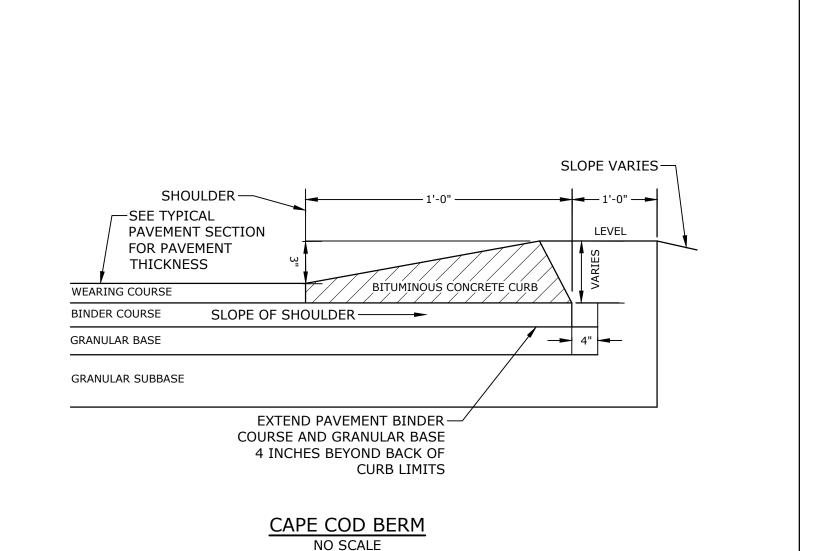
SCALE: AS SHOWN

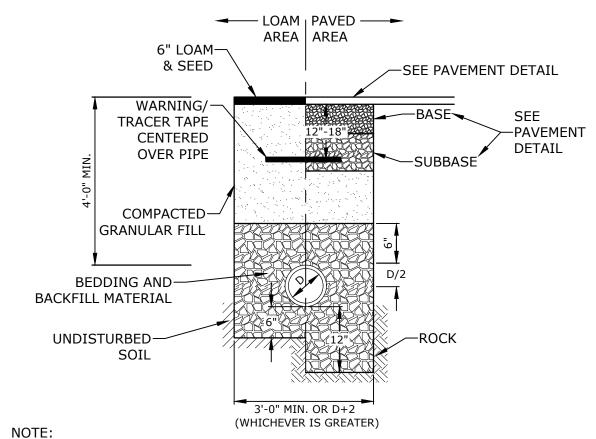
DRAWN BY

CHECKED:

APPROVED:

C-501





1. CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6"

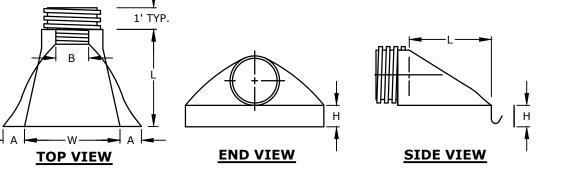
BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 6" ABOVE TOP OF PIPE.

2. ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE CITY OF PORTSMOUTH.

3. DRAIN LINE SHALL BE INSULATED WHERE THERE IS LESS THAN 6' OF COVER IN PAVED AREAS AND LESS THAN 4' OF COVER IN NON-PAVED AREAS.

> STORM DRAIN TRENCH NO SCALE

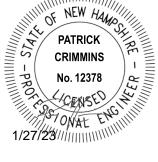




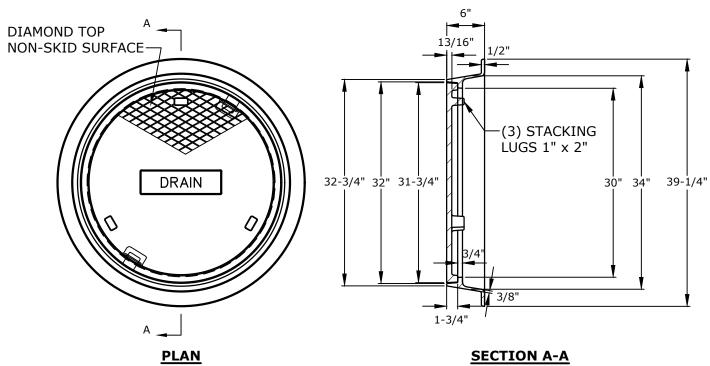
PIPE Ø		DIN	MENSION	(INCHES)		
11129	PART NO.	A(1±)	в мах	H(1±)	L(1/2±)	W(2±)
24"	2410 NP	7.5	18	6.5	36	45

1. ANCHOR FLARED END SECTION TO GRADE TO PREVENT FLOTATION.

HDPE END SECTION NO SCALE







1. ALL DIMENSIONS ARE NOMINAL.

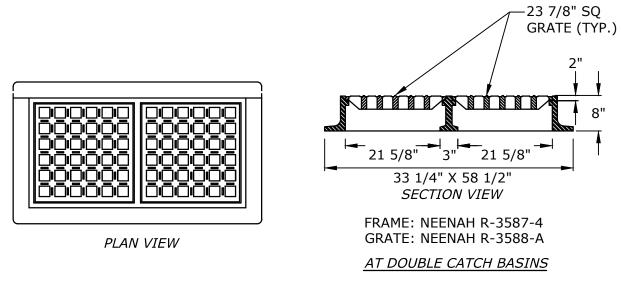
FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:

A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING. B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.

C. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.

3. LABEL TYPE OF MANHOLE WITH 3" HIGH LETTERS IN HE CENTER OF THE COVER.

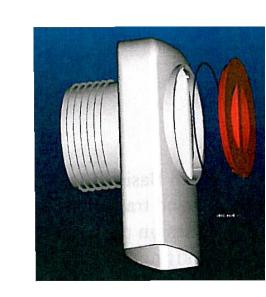
DRAIN MANHOLE FRAME & COVER NO SCALE



1. FRAME AND GRATES SHALL BE NEENAH FOUNDRY OR APPROVED EQUAL.

2. FRAME AND GRATES SHALL BE HEAVY DUTY AND RATED FOR H-20 LOADING.

DOUBLE CATCHBASIN FRAME & GRATE NO SCALE



1. ALL CATCH BASIN OUTLETS TO HAVE "ELIMINATOR" OIL AND FLOATING DEBRIS TRAP MANUFACTURED

BY KLEANSTREAM (NO EQUAL) 2. INSTALL DEBRIS TRAP TIGHT TO INSIDE OF

3. 1/4" HOLE SHALL BE DRILLED IN TOP OF DEBRIS

"ELIMINATOR" OIL FLOATING DEBRIS TRAP

NO SCALE

Proposed Site Improvements

Granite State Minerals

Portsmouth, New Hampshire

RK	DATE	DESCRIPTION
OJE	CT NO:	E-5027-001
TE:		December 29, 2022
		•
E:	E-5027-001-C	
	E-5027-001-C N BY:	
IWA		-DTLS.dwg
AWI ECK	N BY:	-DTLS.dwg AFS/CJK

DETAILS SHEET SCALE: AS SHOWN

C-502

WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS. 10. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZNTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.

1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.

SQUARE INCHES PER LINEAR FOOT.

STRIP OF BUTYL RUBBER SEALANT.

BEYOND INSIDE WALL OF STRUCTURE.

(6" MINIMUM THICKNESS)

PRIOR TO PRECASTING.

PLACED IN THE CENTER THIRD OF THE WALL.

CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE

INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE

3. THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN

6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE

7. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED

8. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3"

9. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT

4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE

4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING. 5. CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER

ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12

			_
	WALL	FLOOR	
DIAMETER	THICKNESS	THICKNESS	
	(MIN.)	(MIN.)	
Λ'	5"	6"	l

MANHOLE FRAME AND COVER —ADJUST TO GRADE WITH CONCRETE GRADE RINGS OR CLAY BRICKS, FRAME TO BE SET IN FULL BED OF MORTAR. 8" MIN. (2 COURSES MAX). -SEE STRUCTURE JOINTS DETAIL (TYP.) 30" /--MORTAR ALL JOINTS -MIN. 0.12 sq. in. STEEL PER 5" MIN ECCENTRIC TOP VERTICAL FOOT, PLACED ACCORDING TO AASHTO DESIGNATION M199 -PIPE OPENING TO BE PRECAST IN RISER SECTION HEIGHT OF RISER VARY FROM 1' TO 4' 5" MIN —► ELASTOMERIC CHECK VALVE TO BE WASTOP NPS 15" OR 24" MAX. APPROVED EQUAL DIA. PIPE #3 BAR AROUND OPENING→ FOR PIPES 18" DIAMETER AND OVER, 1" COVER INVERT OF STRUCTURE TO BE CONCRETE CLASS "B" ─3/4" CRUSHED STONE

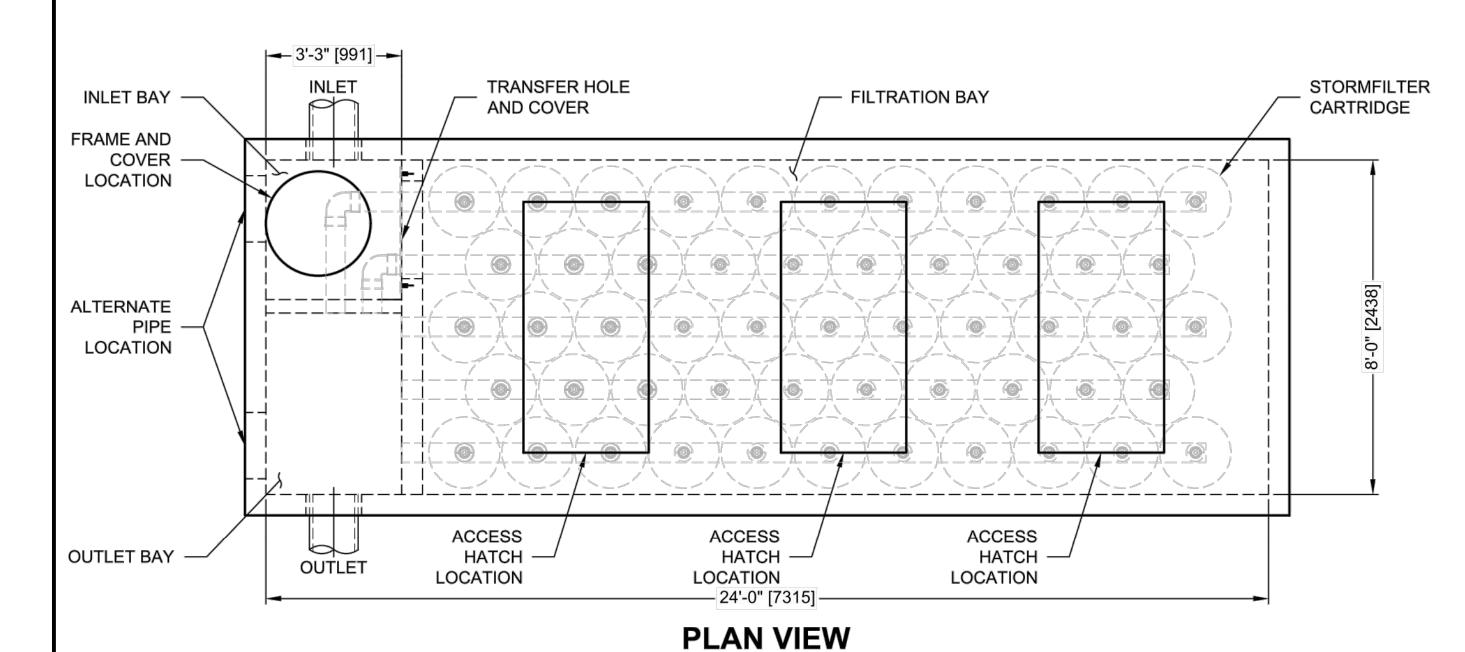
6" TYP.

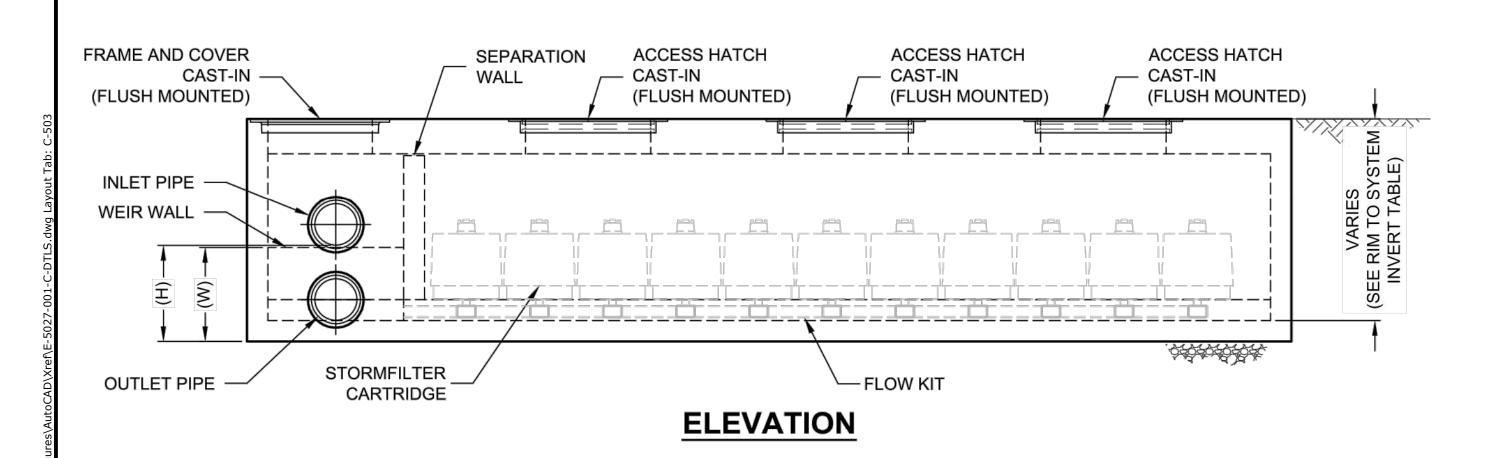
FINISH—

SUBGRADE

4' DIAMETER DRAIN MANHOLE WITH CHECK VALVE

NO SCALE





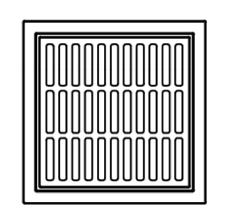


STORMFILTER DESIGN NOTES

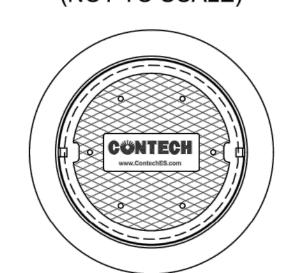
- STORMFILTER TREATMENT CAPACITY VARIES BY CARTRIDGE COUNT AND LOCALLY APPROVED SURFACE AREA SPECIFIC FLOW RATE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD
- A 8' x 24' [2438 x 7315] PEAK DIVERSION STYLE STORMFILTER IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (52) AND IS AVAILABLE IN A LEFT INLET (AS SHOWN) OR A RIGHT INLET CONFIGURATION
- ALL PARTS AND INTERNAL ASSEMBLY PROVIDED BY CONTECH UNLESS NOTED OTHERWISE

CARTRIDGE SIZE (in. [mm])	27 [686]			18 [457]			LOW DROP		
RECOMMENDED HYDRAULIC DROP (H) (ft. [mm])	3.05 [930]		2.3 [701]		1.8 [549]				
HEIGHT OF WEIR (W) (ft. [mm])	3.00 [914]		2.25 [686]		1.75 [533]				
SPECIFIC FLOW RATE (gpm/sf [L/s/m ²])	2 [1.36]	1.67* [1.13]*	1 [0.68]	2 [1.36]	1.67* [1.13]*	1 [0.68]	2 [1.36]	1.67* [1.13]*	1 [0.68]
CARTRIDGE FLOW RATE (gpm [L/s])	22.5 [1.42]	18.79 [1.19]	11.25 [0.71]	15 [0.95]	12.53 [0.79]	7.5 [0.47]	10 [0.63]	8.35 [0.53]	5 [0.32]

* 1.67 gpm/sf [1.13 L/s/m²] SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY

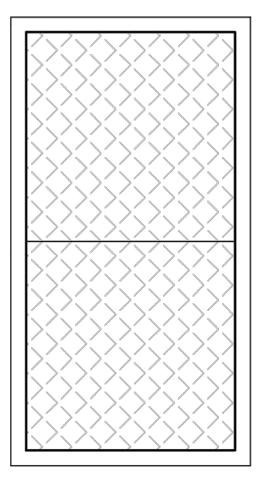


FRAME AND GRATE (24" SQUARE) (NOT TO SCALE)



FRAME AND COVER

(30" ROUND) (NOT TO SCALE)



ACCESS HATCH (36" x 72") (NOT TO SCALE)

SITE SPECIFIC DATA REQUIREMENTS					
STRUCTURE ID					
WATER QUALITY F	LOW RATE (cfs [L/s])			
PEAK FLOW RATE	(cfs [L/s])				
RETURN PERIOD C	F PEAK FLC	W (yrs)			
CARTRIDGE FLOW					
CARTRIDGE SIZE (2					
MEDIA TYPE (PERL					
NUMBER OF CARTI					
FILTER BAY RIM EL					
PIPE DATA:	INVERT	MATERIAL	DIAMETER		
INLET PIPE 1					
INLET PIPE 2					
OUTLET PIPE					
NOTES/SPECIAL REQUIREMENTS:					

RIM TO SYSTEM INVERT

CARTRIDGE SIZE	MIN. HEIGHT	MAX. HEIGHT
LOW DROP / 18"	3'-8"	4'-10"
27"	4'-4"	4'-10"
·	·	·

PERFORMANCE SPECIFICATION

FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS. SPECIFIC FLOW RATE SHALL BE 2 GPM/SF (MAXIMUM). SPECIFIC FLOW RATE IS THE MEASURE OF THE FLOW (GPM) DIVIDED BY THE MEDIA SURFACE CONTACT AREA (SF). MEDIA VOLUMETRIC FLOW RATE SHALL BE 6 GPM/CF OF MEDIA (MAXIMUM).

GENERAL NOTES

- 1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- 2. DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- 3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com
- 4. STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- 5. STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0'-0", AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.

INSTALLATION NOTES

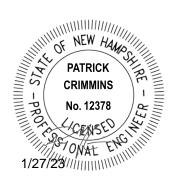
- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER
- C. CONTRACTOR TO ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH OUTLET PIPE INVERT WITH OUTLET BAY FLOOR.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
- F. CONTRACTOR TO REMOVE THE TRANSFER HOLE COVER WHEN THE SYSTEM IS BROUGHT ONLINE.



9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069 800-338-1122 513-645-7000 513-645-7993 FAX

SFPD0824-S 8' x 24' PEAK DIVERSION STORMFILTER SHALLOW STANDARD DETAIL

Tighe&Bond

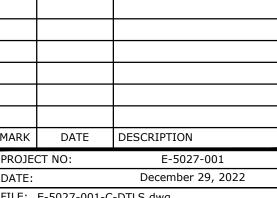




Proposed Site Improvements

Granite State Minerals

Portsmouth, New Hampshire



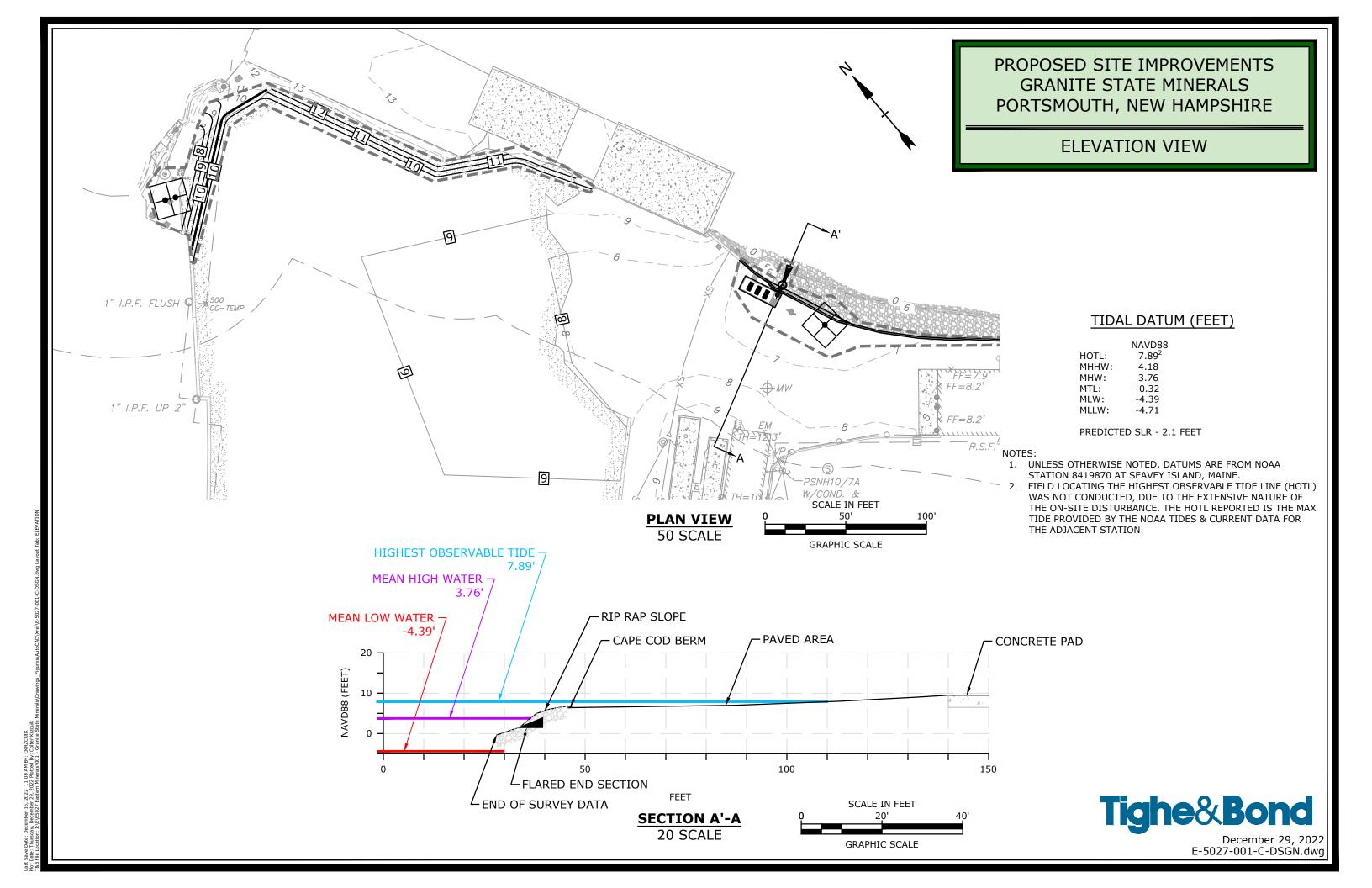
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DETAILS SHEET

SCALE: **AS SHOWN**

APPROVED:

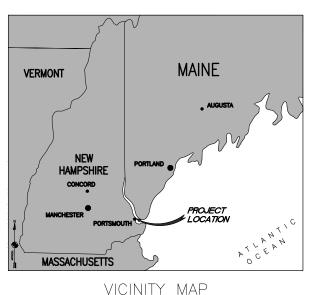
C-503



Section 14 Mooring Improvement Plan



PORTSMOUTH WHARF MOORING IMPROVEMENTS **JUNE 2019**

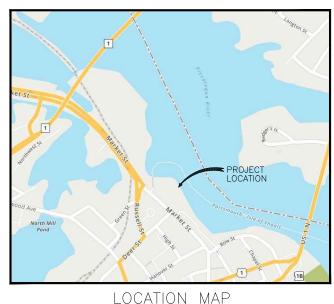


CONTRACT DRAWING LIST

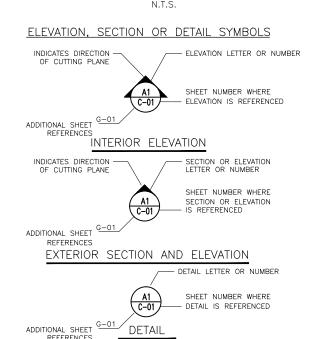
<u>SHT</u>	SHT	<u>NO.</u>	DRAWING TITLE
			<u>GENERAL</u>
G-001	1 OF	9	TITLE SHEET
G-002	2 OF	9	GENERAL NOTES
G-101	3 OF	9	PROJECT WORK OVERVIEW
G-102	4 OF	9	LOCATION PLAN
G-601	5 OF	9	BORING LOGS
			<u>STRUCTURAL</u>
S-101	6 OF	9	MOORING FITTING B1 PLAN & SECTIONS
S-102	7 OF	9	MOORING FITTING B1 DETAILS
S-103	8 OF	9	MOORING FITTING B2 PLAN & SECTIONS
S-104	9 OF	9	MOORING FITTING B2 DETAILS

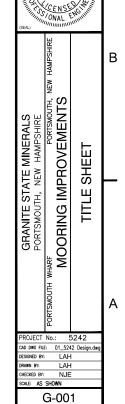
ABBREVIATIONS

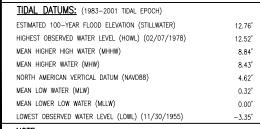
, ,_		
APPROX	APPROXIMATE	
ø	DIAMETER	LUC
Æ	BASELINE	
EA	EACH	ELEVATION, SECTIO
EL	ELEVATION IN FEET	INDICATES DIRECTION —
EQ	EQUAL(LY)	OF CUTTING PLANE
IN	INCH(S)	
MHW	MEAN HIGH WATER	4
MHHW	MEAN HIGHER HIGH WATER	
MIN	MINIMUM	ADDITIONAL SHEET G-01
MLLW	MEAN LOWER LOW WATER	REFERENCES INTERIO
MLW	MEAN LOW WATER	INDICATES DIRECTION —
MPH	MILES PER HOUR	OF CUTTING PLANE
NAVD88	NATIONAL VERTICAL DATUM 1988	
NTS	NOT TO SCALE	(
OC	ON CENTER	0.01
PK	POINT KNOWN	ADDITIONAL SHEET G-01 REFERENCES
PSF	POUNDS PER SQUARE FOOT	EXTERIOR SECT
SQ	SQUARE	
SSP	STEEL SHEET PILE	
T&B	TOP & BOTTOM	(
TYP	TYPICAL	
VIF	VERIFY IN FIELD	ADDITIONAL SHEET G-01 [











VESSEL NAVIGATION PRODUCES VESSEL WAKES, WHICH CAN AFFECT

NOAA/NOS STATION #8419870 SEAVEY ISLAND, PORTSMOUTH HARBOR, NH (1983-2001 TIDAL EPOCH) (STATION IS APPROXIMATELY 1 MILE FROM SITE

REFERENCES AND STANDARDS:

- 1. AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, 2014 (ACI 318-14)
- 2. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION, 14TH EDITION, 2011 (AISC-11)
- AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES, 2016 (ASCF 7-16)
- 4. ASCE SEISMIC DESIGN OF PIERS & WHARVES, 2014 (ASCE 61-14)
- 5. DEPARTMENT OF DEFENSE UNIFIED FACILITIES CRITERIA (UFC) DESIGN: PIERS AND WHARVES, 2017 (UFC 4-152-01)

DESIGN CRITERIA:

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- LOCATION B1: ONE MOORING FITTING OF 125 TON CAPACITY
 LOCATION B2: TWO MOORING FITTINGS OF 75 TON CAPACITY EACH
- 2. SPECIFICATIONS AND REFERENCES:
 - a. AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318)
 - b. STEEL CONSTRUCTION MANUAL, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), 14TH EDITION
 - OIL COMPANIES INTERNATIONAL MARINE FORUM, MOORING EQUIPMENT GUIDELINES, FOURTH EDITION, (OCIMF MEG 4)

GENERAL NOTES:

- 1. THE DRAWINGS AND SPECIFICATIONS FORM A PART OF THE CONTRACT DOCUMENTS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. IN THE EVENT OF A CONFLICT BETWEEN THE SPECIFICATIONS AND THE DRAWINGS, THE SPECIFICATIONS SHALL TAKE PRECEDENCE. A COPY OF THE DRAWINGS AND SPECIFICATIONS MUST BE KEPT ONSITE AT ALL TIMES DURING THE PROJECT.
- COORDINATE ALL WORK WITH FACILITY PERSONNEL AND OPERATIONS ON A DAILY BASIS. THE CONSTRUCTION WORK SHALL
 NOT INTERFERE WITH ONGOING OPERATIONS. SCHEDULE AND COORDINATE ALL WORK, INCLUDING ALLOWABLE WORK
 WINDOWS, WITH THE OWNER. MAINTAIN THE WORK SITE TO THE SATISFACTION OF THE OWNER.
- 3. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SITE SAFETY. DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING ALL PHASES OF CONSTRUCTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AND BE REMOVED FROM THE OWNER'S PROPERTY AFTER COMPLETION OF THE PROJECT. ALL PROPOSED STAGING AREAS SHALL BE COORDINATED WITH THE OWNER BEFORE STARTING WORK. TEMPORARY CONSTRUCTION STAGING/STORAGE AREA SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION UPON COMPLETION OF THE PROJECT.
- 4. DIMENSIONS AND DETAILS OF THE EXISTING CONSTRUCTION ARE FROM LIMITED ARCHIVE DRAWINGS AND FIELD INVESTIGATIONS. CHECK AND VERIFY ALL DIMENSIONS AND DETAILS OF THE EXISTING CONSTRUCTION PRIOR TO COMMENCING CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- EXISTING CONDITIONS ARE INTENDED TO PROVIDE GENERAL OVERVIEW OF STRUCTURES BUT DO NOT INCLUDE ALL
 APPURTFNANCES AND CONDITIONS.
- METHODS OF DEMOLITION, CONSTRUCTION, AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED.

UTILITIES NOTES:

В

Α

- THE EXACT SIZE & LOCATION OF ALL EXISTING UTILITIES IMPACTED BY THE WORK SHALL BE FIELD VERIFIED PRIOR TO START OF CONSTRUCTION. NOTIFY "DIG SAFE" (1-888-344-7233) AT LEAST 14 CALENDAR DAYS PRIOR TO COMMENCEMENT OF GROUND PENETRATING ACTIVITY.
- TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE OWNER AT THE CONTRACTORS EXPENSE. NOTIFY THE OWNER A MINIMUM OF 5 DAYS IN ADVANCE OF ANY OUTAGES.

ENVIRONMENTAL CONTROL NOTES:

- ENVIRONMENTAL CONTROLS SHALL CONFORM TO ALL STATE, LOCAL, AND FEDERAL REGULATIONS AND PERMITS.
 ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT NOT BE LIMITED TO MEASURES TO CONTROL TURBIDITY, PH, AND DUST.
- 2. STORAGE, FUELING AND LUBRICATION OF EQUIPMENT AND MOTOR VEHICLES SHALL BE CONDUCTED IN A MANNER THAT AFFORDS THE MAXIMUM PROTECTION AGAINST SPILL AND EVAPORATION. FUEL, LUBRICANTS AND OIL SHALL BE MANAGED AND STORED IN ACCORDANCE WITH ALL FEDERAL, STATE, REGIONAL, AND LOCAL LAWS AND REGULATIONS. THERE SHALL BE NO STORAGE OF FUEL ON THE PROJECT SITE. FUEL MUST BE BROUGHT TO THE PROJECT SITE AS NEEDED. EQUIPMENT OPERATION, ACTIVITIES, OR PROCESSES PERFORMED BY THE CONTRACTOR SHALL BE IN ACCORDANCE WITH ALL FEDERAL AND STATE AIR EMISSION AND PERFORMANCE LAWS AND STANDARDS.
- ALL PILE DRIVING SHALL OCCUR DURING DAYLIGHT HOURS AND SHALL FOLLOW ALL RESTRICTIONS REQUIRED BY THE APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

STEEL NOTES:

- 1. ALL STRUCTURAL STEEL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) STEEL CONSTRUCTION MANUAL.
- 2. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AWS D1.1 AND D3.6M. ELECTRODES SHALL BE E70XX LOW HYDROGEN IN ACCORDANCE WITH AWS SPECIFICATIONS.
- 3. ALL STRUCTURAL STEEL SHAPES AND PLATES SHALL BE ASTM A572, GRADE 50, OR ASTM A992, UNLESS OTHERWISE INDICATED
- 4. ALL STRUCTURAL STEEL SHALL BE COATED IN ACCORDANCE WITH THE SPECIFICATIONS.

CONCRETE NOTES:

- 1. ALL CONCRETE CONSTRUCTION AND DETAILING SHALL CONFORM TO THE LATEST EDITION OF ACI 318.
- CONCRETE SHALL CONFORM TO NHDOT CLASS AA, WITH A MAXIMUM WATER TO CEMENT RATIO OF 0.400 AND WITH A 5,000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS.
- 3. EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER.
- CONCRETE SHALL BE MOIST CURED FOR A PERIOD OF 7 DAYS AND CHEMICALLY CURED FOR A PERIOD OF 14 DAYS, (21
 DAYS TOTAL). CURING SHALL BEGIN IMMEDIATELY AFTER FINISHING.
- 5. REINFORCING STEEL SHALL CONFORM TO ASTM A615. GRADE 60 IN ACCORDANCE WITH THE SPECIFICATIONS.
- 6. MAINTAIN 3" OF CLEAR COVER TO ALL REINFORCING STEEL, UNLESS OTHERWISE NOTED.
- 7. ALL REINFORCING STEEL SHALL BE UNCOATED AND FULLY SUPPORTED ON APPROVED PLASTIC CHAIRS AND BARS.
- 8. ALL HOOKS SHALL BE STANDARD 90 OR 180 DEGREE HOOKS.
- ALL FORMWORK FOR CONCRETE SHALL BE LEFT IN PLACE FOR A PERIOD OF NOT LESS THAN SEVEN FULL DAYS AFTER CONCRETE PLACEMENT.
- 10. CONTRACTOR SHALL SUBMIT DETAILED REINFORCING DRAWINGS INCLUDING BAR AND BENDING SCHEDULES TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO DELIVERY OF ANY REINFORCING STEFL
- 11. SPLICING OF REINFORCING STEEL OVER 20 FEET IS PERMITTED. STAGGER SPLICES ONE SPLICE LENGTH MINIMUM. NO MORE THAN 50 PERCENT OF THE REINFORCING STEEL SHALL BE SPLICED AT ANY LOCATION. PROVIDE SPLICE LENGTHS OF

BAR SIZE	SPLICE LENGT
4	27"
5	33"
6	40"
7	73"
8	83"
9	94"

STEEL PILE NOTES:

 STEEL MOORING DOLPHIN PILES SHALL BE UNCOATED AND HAVE THE FOLLOWING DESIGN CAPACITIES (WITH ULTIMATE CAPACITY INCLUDING A FACTOR OF SAFETY = 2.0)

	<u>SIZE</u> <u>DE</u>	SIGN CAPACITY	ULTIMATE CAPACIT
BATTER PILES	PP12.75X0.500	225 TON	450 TON

- 2. PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK AS DEFINED IN THE SPECIFICATIONS. ESTIMATED PILE LENGTHS ARE PROVIDED IN THE SPECIFICATIONS.
- 3. STEEL PIPE PILES SHALL BE IN ACCORDANCE WITH ASTM A252 GRADE 3 (SEAMLESS OR STRAIGHT SEAM)
- 4. ANY PORTION OF PILE CRACKED, DEFORMED OR OTHERWISE DAMAGED BY PILE INSTALLATION SHALL BE REPLACED.
- 5. PILES SHALL BE DRIVEN WITH AN OPEN END CUTTING SHOE.
- 6. CONTRACTOR SHALL PROVIDE SUFFICIENT FALSEWORK DURING PILE DRIVING OPERATION AND MAY BE REMOVED AFTER WELD TESTING HAS BEEN COMPLETED AND APPROVED.

MOORING HARDWARE NOTES:

- 1. ALL FITTINGS SHALL BE CAST STEEL ASTM A-27, GRADE 65-35 AND COATED IN ACCORDANCE WITH THE SPECIFICATIONS.
- 2. ALL BOLT POCKETS SHALL BE FILLED WITH POLYURETHANE SEALANT.
- GROUT FOR ANNULUS AND GROUT BED SHALL BE NON-SHRINK, NON-METALLIC HIGH PERFORMANCE CEMENTITIOUS
 GROUT HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 7,500 PSI. GROUT SHALL CONFORM TO ASTM C-1107,
 GRADE C.
- 4. MOORING HARDWARE SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.

PRESTRESSED ROCK ANCHOR NOTES:

- 1. ROCK ANCHOR CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE POST TENSIONING INSTITUTION (PTI) MANUAL.
- 2. THE BONDED LENGTH FOR EACH ANCHOR SHALL BE PROPOSED BY THE CONTRACTOR AND VERIFIED BY TESTING, BUT SHALL NOT BE LESS THAN 30 FEET AT LOCATION B1 AND 25 FEET AT LOCATION B2. EACH ANCHOR SHALL BE INSTALLED AND SUCCESSFULLY PROOF—TESTED AS SPECIFIED HEREIN TO A LOAD OF 133% OF THE DESIGN LOAD TO CONFIRM ADEQUACY OF THE CONTRACTOR PROPOSED BOND LENGTH.
- . ROCK ANCHORS SHALL BE 2 1/4 INCH NOMINAL DIAMETER AT LOCATION B1 AND 1 3/4 INCH NOMINAL DIAMETER AT LOCATION B2, THREADED RODS OF HOT-ROLLED AND PROOF STRESSED ALLOY STEEL CONFORMING TO ASTM A722, GRADE 150, WITH AN EFFECTIVE CROSS-SECTIONAL AREA OF 4.08 SQUARE INCHES AT LOCATION B1 AND 2.58 SQUARE INCHES AT LOCATION B2, AS MANUFACTURED BY DYWIDAG SYSTEMS INTERNATIONAL OR APPROVED EQUIVALENT.
- 4. ANCHOR INSTALLATION: ROCK ANCHORS SHALL BE INSTALLED THROUGH PRE-DRILLED HOLES WITH A MINIMUM DIAMETER OF 8 INCHES AT LOCATION B1 AND A MINIMUM DIAMETER OF 6 INCHES AT LOCATION B2. THE HOLE SHALL BE DRILLED TO A DEPTH OF 12 INCHES BEYOND THE END OF THE ANCHOR-TENDON. THE ANCHORS SHALL BE POSITIONED AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER. TYPICAL INSTALLATION DETAILS ARE SHOWN ON THE DRAWINGS.
- INITIAL LIFT—OFF READINGS: AFTER TRANSFERRING THE LOAD TO THE STRESSING ANCHOR AND PRIOR TO REMOVING THE JACK, A LIFT—OFF READING SHALL BE MADE. THE LOAD DETERMINED FROM THE LIFT OFF READING SHALL BE WITHIN FIVE (5) PERCENT OF THE SPECIFIED LOCK—OFF (DESIGN) LOAD.
- 6. PROOF TESTING: EVERY ANCHOR SHALL BE PROOF—TESTED TO 133 PERCENT OF DESIGN LOAD TO CONFIRM ADEQUACY OF THE CONTRACTOR'S PROPOSED BOND LENGTH. DESIGN LOADS FOR ALL ANCHORS ARE SHOWN ON THE DRAWINGS. PROOF—TESTING CAN BE CARRIED OUT A MINIMUM OF THREE (3) FULL DAYS AFTER ANCHOR GROUTING IS COMPLETE PER ANCHOR MANUFACTURER RECOMMENDATIONS.
- 7. THE FIRST ANCHOR INSTALLED SHALL BE TESTED TO CONFIRM THE ADEQUACY OF THE CONTRACTOR'S PROPOSED BOND LENGTH PRIOR TO THE INSTALLATION OF THE REMAINING ANCHORS.
- 3. LIFT-OFF TESTING WILL BE ACCOMPLISHED IN ACCORDANCE WITH ANCHOR MANUFACTURERS RECOMMENDATIONS AND/OR AS SPECIFIED BY THE ENGINEER.
- 9. VOIDS AND CRACKS IN THE BEDROCK CAN BE EXPECTED. THESE VOIDS AND CRACKS CAN INTERFERE WITH PROPER ANCHOR INSTALLATION AND DRILL HOLES MAY REQUIRE PRESSURE GROUT AND REDRILLING PRIOR TO GROUTING OF THE THREADED BAR INTO BEDROCK.
- 10. CONTRACTOR MUST KEEP AND SUBMIT DETAILED RECORDS OF ACTUAL STRESS AND BOND LENGTHS TO ENSURE PROPER TEST RESULTS.

QUALITY CONTROL:

- CONTRACTOR SHALL SUBMIT DATA ON QUALIFICATIONS OF PROPOSED CONCRETE TESTING AGENCY AND TECHNICIANS FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK.
- WORK ON CONCRETE UNDER THIS CONTRACT SHALL BE PERFORMED BY AN ACI CONCRETE FIELD TESTING
 TECHNICIAN GRADE 1 OR GRADE 2 QUALIFIED IN ACCORDANCE WITH ACI SP-299 OR EQUIVALENT. EQUIVALENT
 CERTIFICATION PROGRAMS SHALL INCLUDE REQUIREMENTS FOR WRITTEN AND PERFORMANCE EXAMINATIONS AS
 STIPULATED IN ACI SP-299.
- 3. TESTING AGENCIES THAT PERFORM TESTING SERVICES ON REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF ASTM E 329.
- TESTING AGENCIES THAT PERFORM TESTING SERVICES ON CONCRETE MATERIALS SHALL MEET THE REQUIREMENTS OF ASTM C 1077.
- 5. CONTRACTOR SHALL PROVIDE A DETAILED REPORT OF MATERIALS AND METHODS USED, TEST RESULTS, AND THE FIELD TEST STRENGTH (FCR) FOR MARINE CONCRETE REQUIRED TO MEET DURABILITY REQUIREMENTS.
- 6. CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL THE ANCHOR SYSTEM PERFORMANCE AND PROOF TESTING REPORTS. THE REPORTS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, TEST PERSONNEL CREDENTIALS, A DESCRIPTION OF THE TEST PROCEDURES, TESTING EQUIPMENT USED, PERFORMANCE AND PROOF TEST RESULTS WHICH INCLUDE PLOTS OF MOVEMENT VERSUS LOAD FOR EACH INCREMENT, CREEP MEASUREMENTS, FAILURE LOCATIONS, AND FIELD MODIFICATIONS TO THE DESIGN AND INSTALLATION METHODS.
- 7. CONTRACTOR SHALL PROOF TEST ALL ANCHORS IN ACCORDANCE WITH PTI MANUAL. PLOT ANCHOR MOVEMENT AS A FUNCTION OF THE LOAD. THE TEST ACCEPTANCE SHALL BE BASED ON CREEP MOVEMENT AND LOCK-OFF LOAD IN ACCORDANCE WITH THE PTI MANUAL.
- 8. WHEN AN ANCHOR FAILS, THE CONTRACTOR SHALL MODIFY THE DESIGN AND/OR THE CONSTRUCTION PROCEDURES. THESE MODIFICATIONS MAY INCLUDE, BUT ARE NOT LIMITED TO, INSTALLATION OF ADDITIONAL ANCHORS, REDUCING THE ANCHOR DESIGN LOAD BY INCREASING THE ANCHOR LENGTH OR CHANGING THE ANCHOR TYPE. ANY MODIFICATION OF DESIGN OR CONSTRUCTION PROCEDURES SHALL BE AT NO CHANGE IN THE CONTRACT PRICE AND SHALL BE APPROVED BY THE OWNER.
- 9. THE ANCHORS SHALL BE LOCKED OFF AT THE DESIGN LOAD AND SHALL BE IN ACCORDANCE WITH THE PTI MANUAL.



GRANITE STATE MINERALS
PORTSMOUTH, NEW HAMPSHIRE
PORTSMOUTH, NEW HAMPSHIRE
OORING IMPROVEMENTS
GENERAL NOTES

PROJECT No.: 5242
200 twis file: 01,5242 Design: 642 Design: CAH
SESSIONED 64: LAH
SESSIONED 65: LAH
SESSIONED 65: LAH
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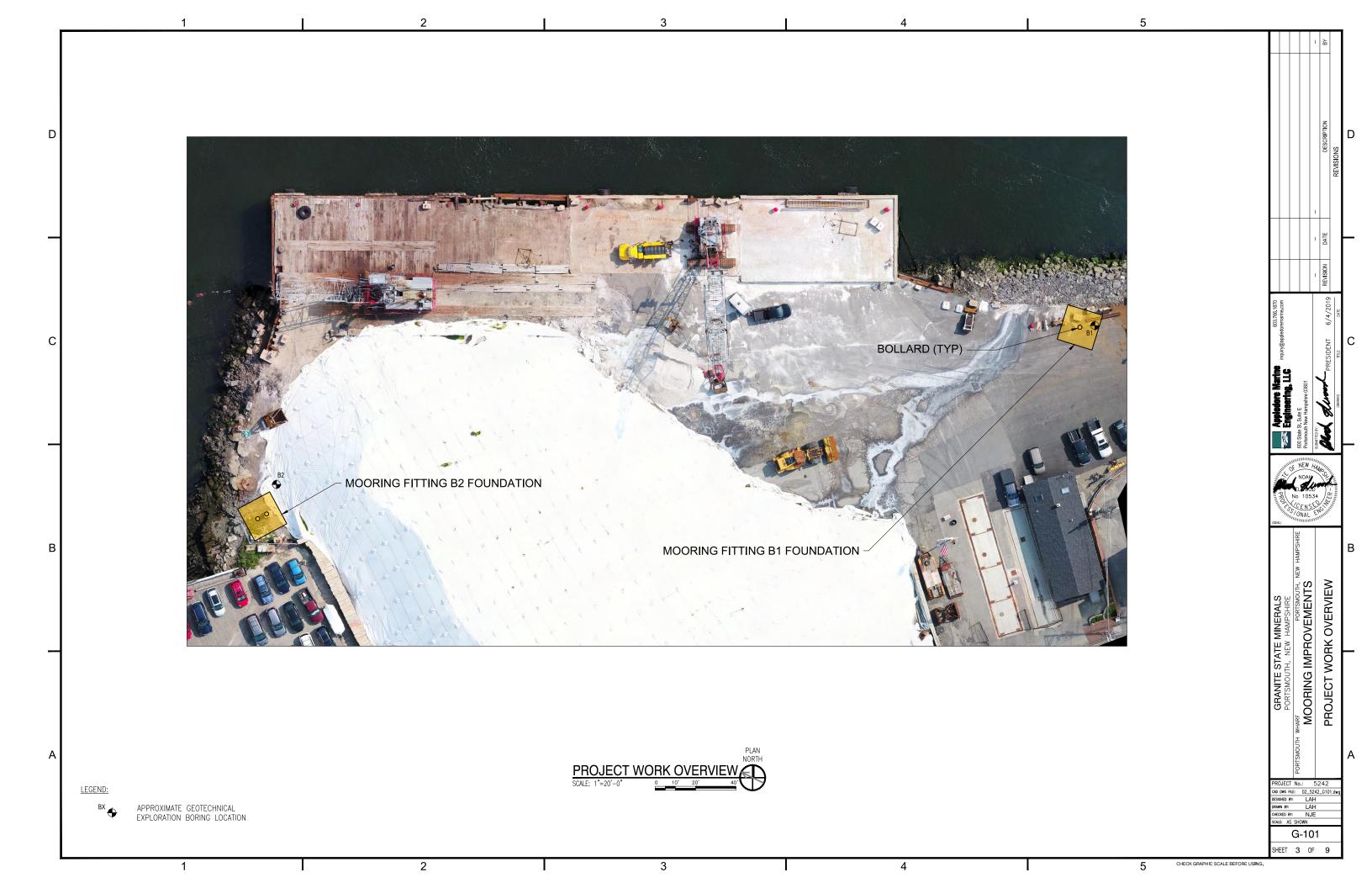
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SHEET 2 OF 9

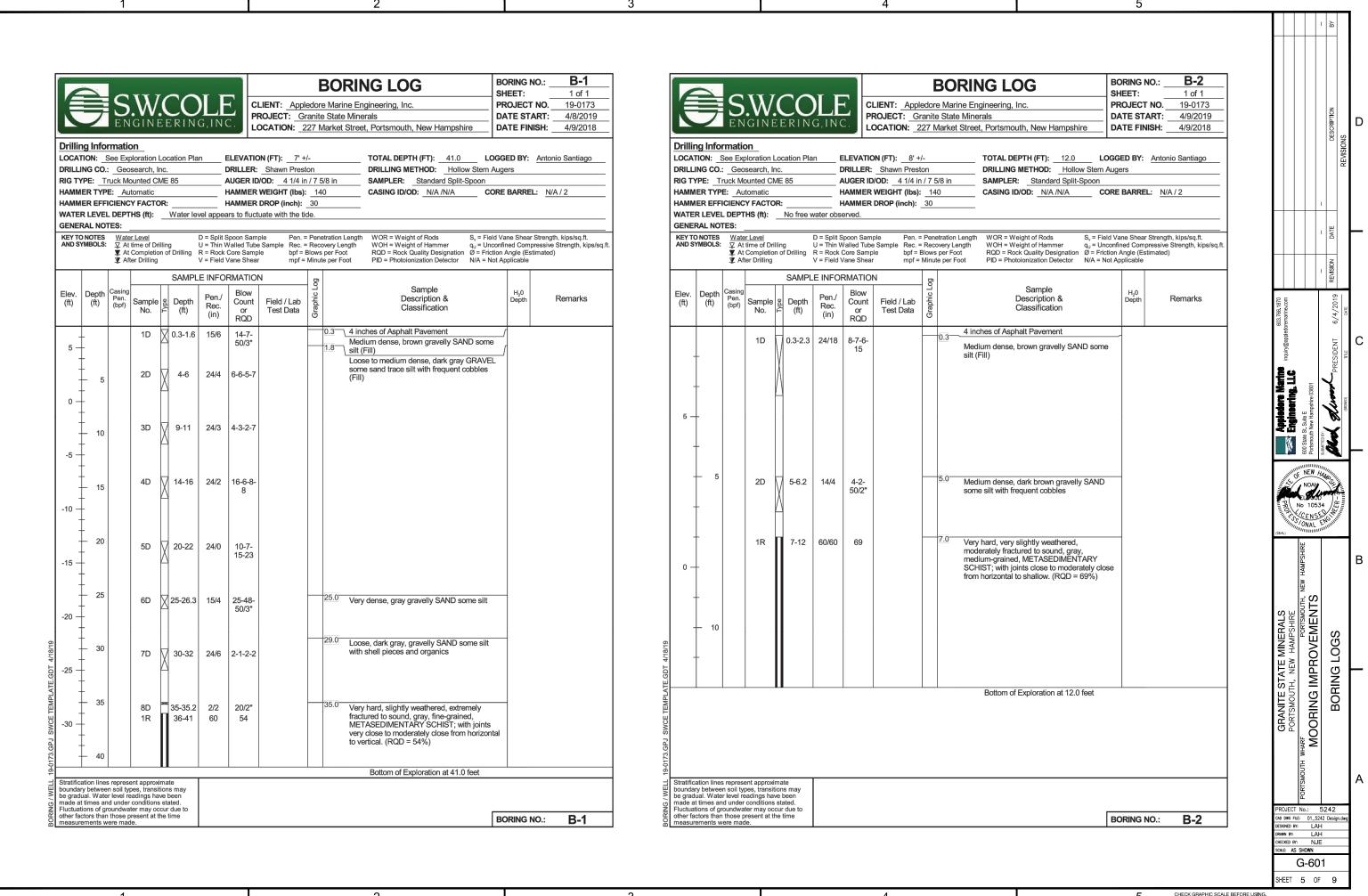
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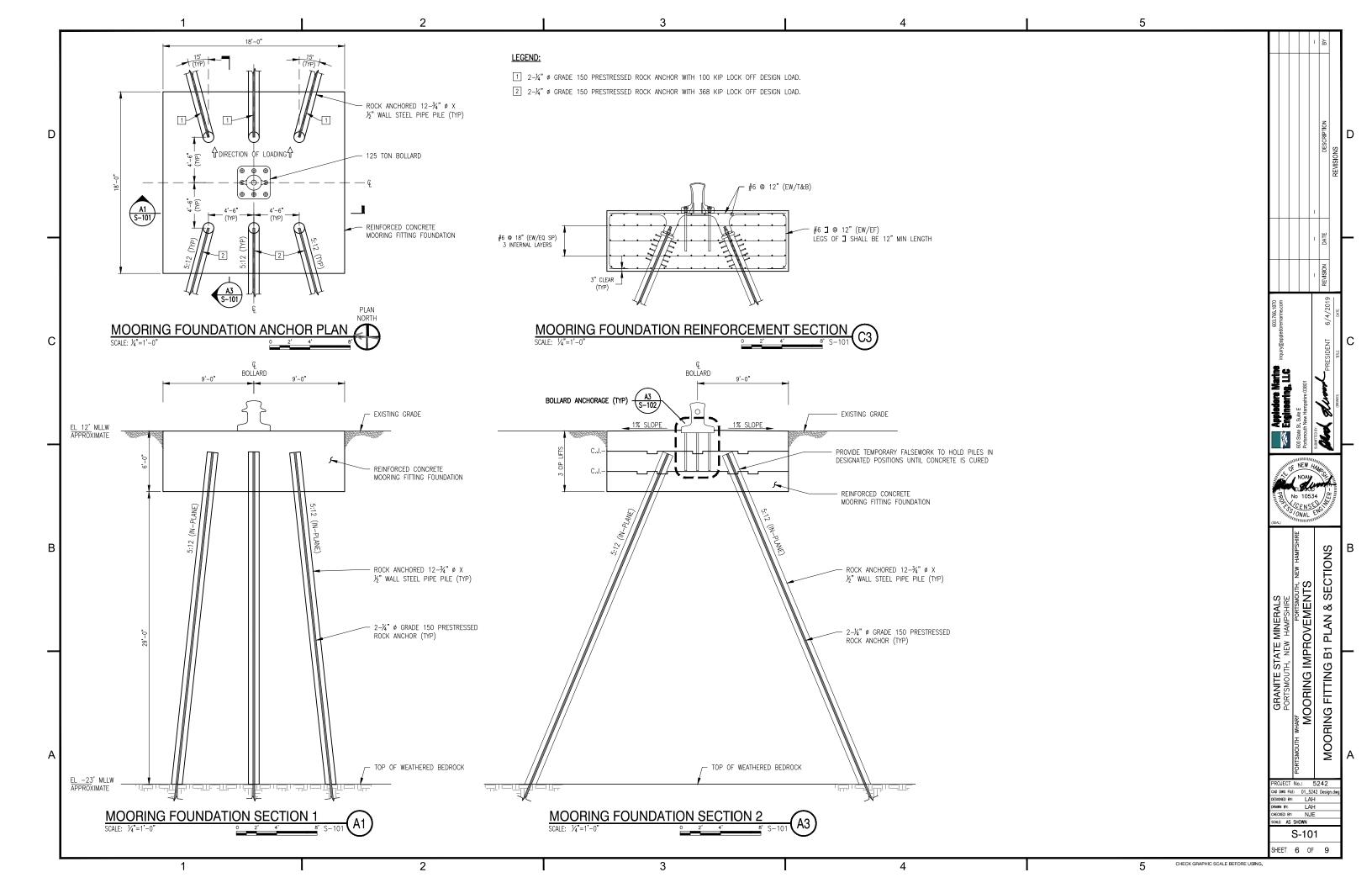
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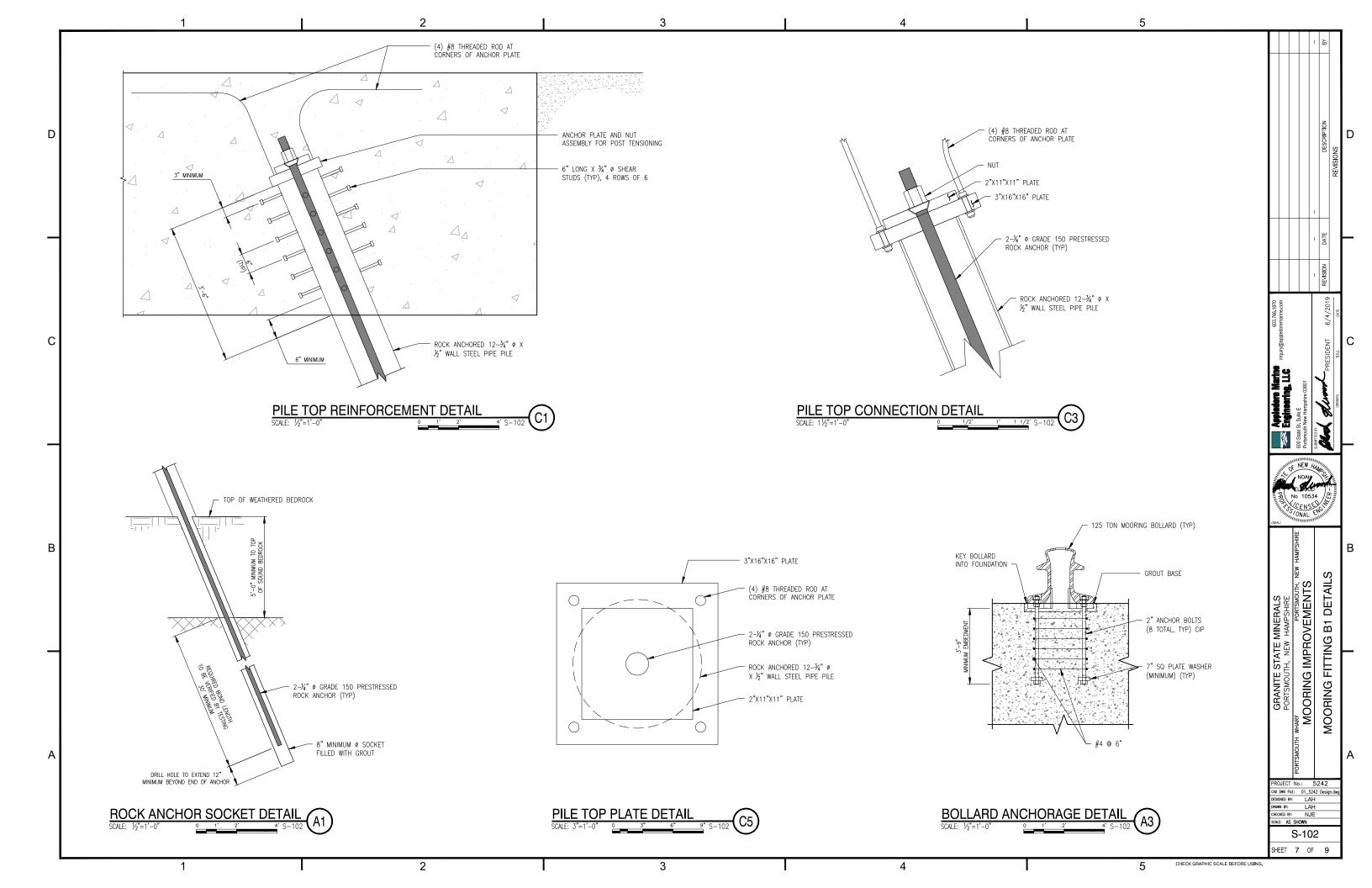
CHECK GRAPHIC SCALE BEFORE USING

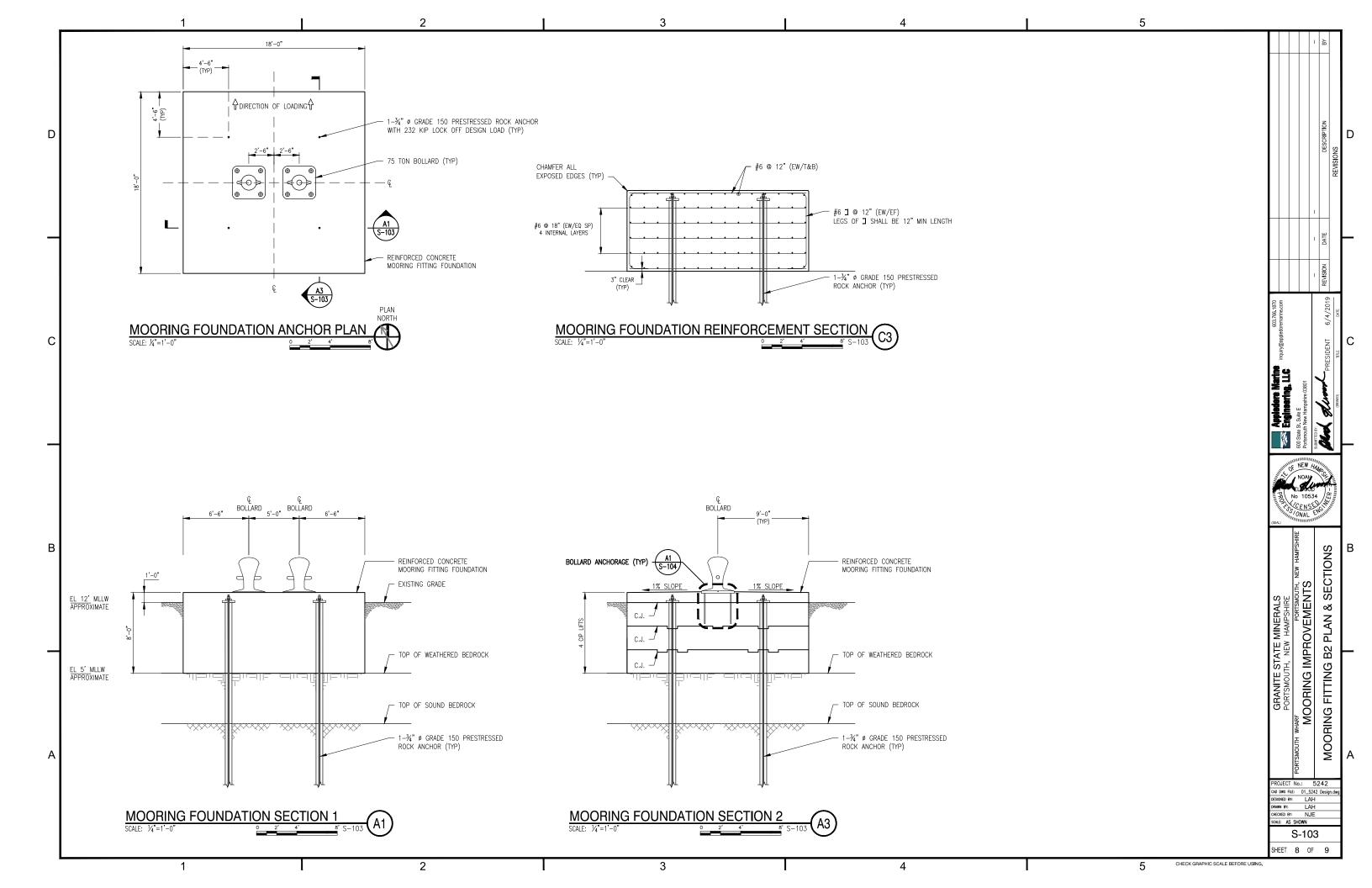


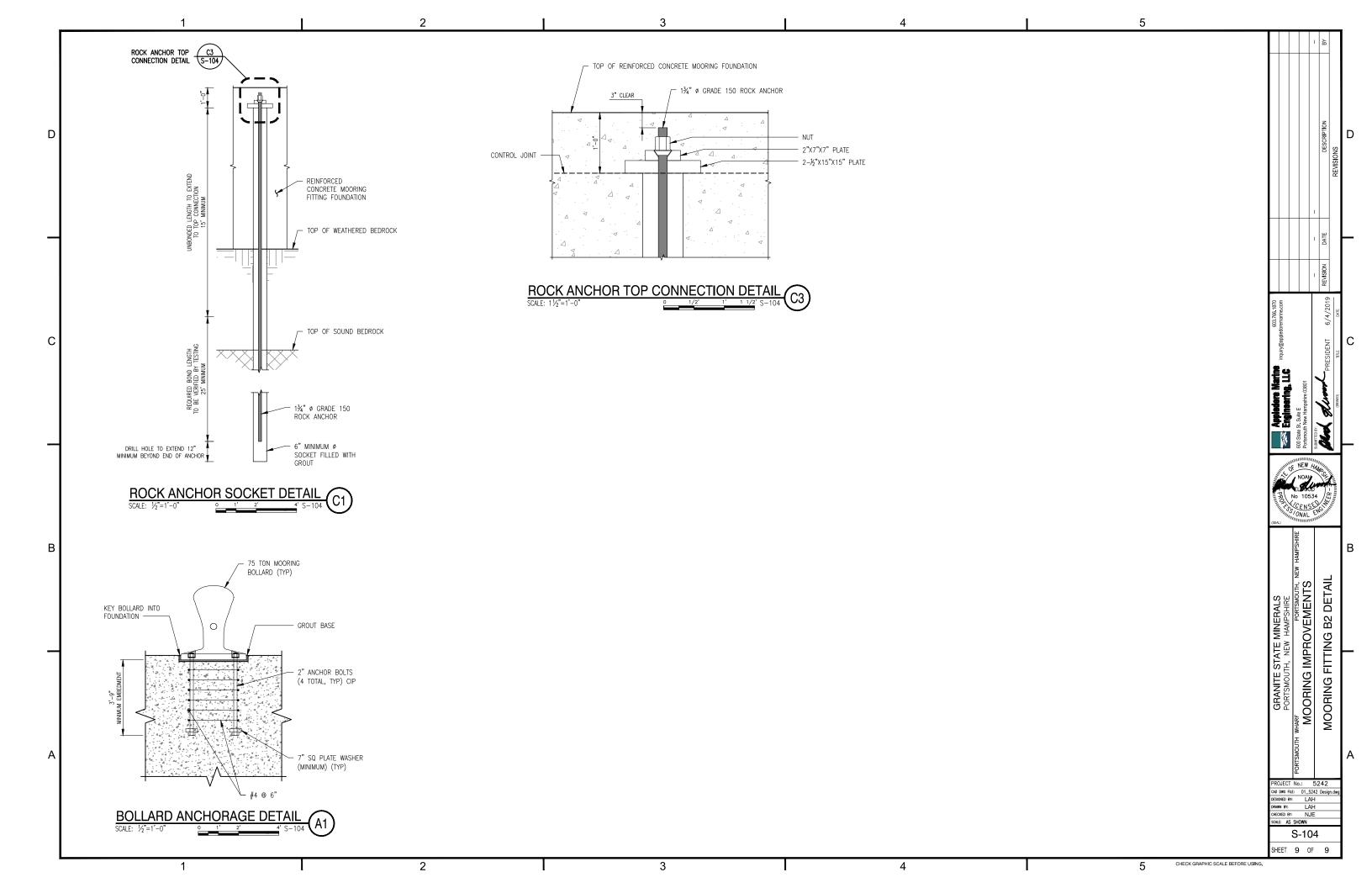












Section 15 Copy of Application Fee Check

GRANITE STATE MINERALS, INC. 227 MARKET STREET PORTSMOUTH, NH 03801

Bank of America.

022562

DATE 1/19/2023

AMOUNT \$2,670.00

Two Thousand Six Hundred Seventy Dollars and 00 Cents

PAY TO THE ORDER OF

TREASURER - STATE OF NH

Shelagh E. Muhaner AUTHORIZED SIGNATURE

"O 2 2 5 6 2 " "O 1 1 4 0 0 4 9 5 " O 0 0 0 4 6 1 2 1 4 0 6 "

GRANITE STATE MINERALS, INC.

022562

TREASURER

TREASURER - STATE OF NH

011134 Document Number Date Outstanding Amt.

Net Paid Amount Discount

1/19/2023

022562

Net Check Amount

APP STORMWATER 2023 1/19/2023

\$2,670.00

\$2,670.00

\$0.00

\$2,670.00

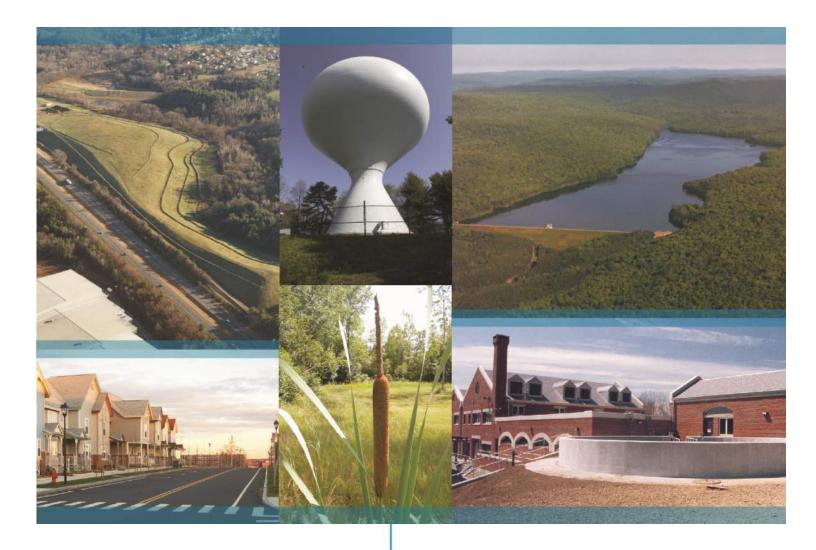
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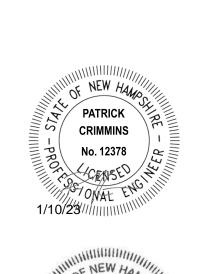
\$2,670.00

\$0.00

\$2,670.00

FORM #SC2151







Iron Horse Properties, LLC 105 Bartlett Street Portsmouth, New Hampshire

Standard Dredge and Fill Wetlands Permit Application

Prepared For: **Iron Horse Properties, LLC**

January 10, 2023



C0960-011 January 10, 2023

NHDES Wetlands Bureau Attn: Kristin Duclos 29 Hazen Dr, PO Box 95 Concord, NH 03302-0095

Wetland Application – Standard Major Impact Re: Iron Horse Properties, LLC, Portsmouth, NH **105 Bartlett Street** Portsmouth, New Hampshire

Dear Ms. Duclos:

Tighe & Bond is pleased to submit this permit application on behalf of behalf of Iron Horse Properties, LLC (owner/applicant) for impacts associated with the redevelopment of a commercial parcel in the previously developed upland buffer at 105 Bartlett Street in Portsmouth.

Project Description

The proposed project is located at 105 Bartlett Street and is comprised of a five (5) parcels that are bounded by Bartlett Street to the west and south, North Mill Pond to the north, and the Boston and Maine (B&M) railroad to the east. The existing parcels are listed below.

Tax Map/Lot No.	Area (ac)
157 / 1	1.42
157 / 2	2.34
164 / 1	1.19
164 / 4-2	5.73
R.O.W.	1.60

Lot 157-1 is currently occupied by a 20,000-square-foot, 2-story, concrete block/steel frame building and associated parking lot. Lot 157-2 contains another 20,000-square foot wood frame structure with a variety of outbuildings, such as sheds, to support an impervious lumber yard. Lot 164-1 also contains an approximately 20,000-square foot wood frame structure that hosts a variety of smaller businesses and associated parking. Lot 164-4-2 is currently occupied by a former B&M railroad turntable, a dilapidated former brick roundhouse, and an approximately 3,600-square-foot machine shop. Several shipping containers are also present throughout the lot. The northern end of the lot is comprised mostly of abandoned rail lines that run down the shoreline between North Mill Pond and the active railroad past the northern limits of the project site

The proposed project will include demolition of the existing building on lot 157-1 and the existing buildings on Lot 164-4-2, These buildings will be replaced with three (3) multi-family apartment buildings depicted as Building A, B and C on the Site Plan. The three (3) buildings will include a total of 152 dwelling units with parking below Buildings A and B. The project includes associated site improvements that consist of the private road cul-de-sac adjacent to Building C, surface parking, pedestrian access, utilities, dark-sky friendly lighting, landscaping and stormwater management systems that provide treatment for runoff.

Jurisdictional Wetlands

On October 29 and December 2, 2019, Tighe & Bond reviewed and assessed 2,000+/- linear feet of tidal wetlands and buffers along the North Mill Pond. The review was limited to the vicinity of a proposed multi-family development, extending from Bartlett Street to an area opposite Cornwall Street, which runs roughly perpendicular to the parcel.

The wetland delineation review was based on criteria specified in the *Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1* (January 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (January 2012). The Highest Observable Tide Line was reviewed based on the definition found in NH Department of Environmental Services Wetland Rules, Env-Wt 101.49/Env-Wt 602.23. Wetlands were classified based on *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979).

The Highest Observable Tide Line (HOTL) had been previously delineated by another consulting firm in 2017. This line was reviewed by exporting the 2017 surveyed line into ArcGIS to overlay on an aerial photographic base map. This base map was then uploaded to an iPad and paired with a Trimble R1 submeter GPS for in-field verification. Using the iPad and GPS as a guide, the line was then evaluated in the field. The HOTL was deemed accurate and the previous 2017 delineation was accepted by Tighe & Bond. A previously unidentified freshwater wetland was also found within a six-foot +/- deep abandoned railroad turntable. Tighe & Bond delineated this area with sequentially numbered flagging and located the wetland boundary using the GPS technology described above.

Functions and values were assessed in the vicinity of the proposed project. Assessment methodologies were adapted from the *Maine Citizens Guide to Evaluating, Restoring, and Managing Tidal Marshes* (Bryan et al., 1997) and *The Highway Methodology Workbook Supplement—Wetland Functions and Values: A Descriptive Approach*, NAEEP-360-1-30a, US Army Corps of Engineers, New England Division, September 1999.

Tidal Buffer

The North Mill Pond 100-foot tidal buffer can be divided into three zones within the project area: 1) a commercial area, including the Ricci Supply and Ace Hardware complex, the Great Rhythm Brewery building, a former railroad machine shop, and all the paved and unpaved impervious surfaces associated with those buildings; 2) the disturbed forest directly northeast and northwest of Great Rhythm Brewery, including the area around the old railroad turntable and roundhouse remains; and 3) the shrub thicket extending along the narrow portion of the parcel to the northeast. These areas all include historic filling 2-16 feet deep associated with railroad activities. The fill includes coal, coal ash, and possible slag.

Waiver Request

The attached permit application includes a request for a waiver from Env-Wt 603.08(a) and (b), which require location and documentation of three tidal events by a licensed land surveyor. We have proposed, instead, to use the NOAA predicted tidal datums from nearby Seavey Island as conservative estimates of tidal heights. These heights are conservative because tides flow through two moderate restrictions between Seavey Island and the project



site, which should dampen tidal extremes. From this analysis, the proposed project was determined to have a medium risk tolerance and is not at risk of flooding under a predicted sea level rise (SLR) of 5.0 feet by 2122.

Summary of Agency Coordination

- A wetland preapplication teleconference was held with NHDES staff on April 15, 2020 and February 23, 2021.
- A mitigation preapplication teleconference was held with NHDES staff on March 18, 2021.
- A mitigation preapplication teleconference was held with NHDES staff on March 22, 2022.
- A DataCheck request was completed through the NH Natural Heritage Bureau February 22, 2021 & April 11, 2022 with a finding of no recorded occurrences for sensitive species near the project area.
- A NHDES Alteration of Terrain Permit was issued for this project on September 29, 2021. Permit: AoT-2026.
- This project has received comments from Portsmouth Conservation Commission. These comments were incorporated into plans that have received local approvals, including a Wetland Conditional Use Permit, Shared Parking Conditional Use Permit, Lot line Relocation, and Site Plan Review approved April 20, 2021.

Appendices

The following supporting documents are included as part of this submittal:

- Appendix A Forms
 - Standard Major Impact Application
 - Owners List
 - Attachment A
 - Avoidance & Minimization Checklist
 - Copy of the Fee Payment
 - o Wetlands Rule Waiver Request
 - Coastal Resource Worksheet and Attachments
 - Project Narrative with Construction Sequencing and Project Monitoring
 - Sea Level Rise Table
 - NOAA Tidal Datums
- Appendix B Federal and State Coordination
 - o US Army Corps of Engineers Appendix B Checklist
 - o IPAC Review Species List
 - Section 106 NH Department of Historical Resources Response Letter
- Appendix C Maps & Other Attachments
 - Tax Map



- Abutters List
- Abutters Notification
- Abutters Certified Mailing List
- Photograph Log
- Site Location Map
- Recorded Deed
- Owner's Letter of Authorization
- o Agent Letter of Authorization
- o Natural Heritage Bureau Results Letter
- NHFG Correspondence Email
- Appendix D Functional Assessment
- Appendix E Figures
 - o Figure 1 Predicted Salt Marsh Migration
 - o Figure 2 Eelgrass Beds and Documented Shellfish Sites
 - Figure 3 Projected Sea Level Rise
 - Figure 4 Elevation View
 - Figure 5 Priority Resource Map
 - o Figure 6 Essential Fish Habitat Map Results
 - Figure 7 FEMA Flood Map
- Appendix F Compensatory Mitigation Proposal & In-Lieu Fee
- Appendix G Engineering Plans

Should you have any questions or require any additional information, please contact me at 603-294-9213 or NAHansen@TigheBond.com.

Very truly yours,

TIGHE & BOND, INC.

Neil A. Hansen, PE Project Manager Patrick M. Crimmins, PE

Vice President

Enclosures

Copy: Portsmouth City Clerk

Portsmouth Conservation Commission

Portsmouth Planning Board Portsmouth City Council

CPI Management, c/o Rob Simmons

APPENDIX A



STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION



File No.:

Check No.:

Amount:

Initials:

Administrative

Use

Only

Water Division/Land Resources Management Wetlands Bureau

Check the Status of your Application

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

Administrative

Use

Only

APPLICANT'S NAME: Iron Horse Properties, LLC, Rob Simmons TOWN NAME: Portsmouth, NH

Administrative

Use

Only

adh com	erson may request a waiver of the requirements in Rules Env-Wt 100-900 to accommodate situations erence to the requirements would not be in the best interest of the public or the environment but is upliance with RSA 482-A. A person may also request a waiver of the standards for existing dwellings of suant to RSA 482-A:26, III(b). For more information, please consult the Waiver Request Form.	still in
SEC	TION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))	
	ase use the Wetland Permit Planning Tool (WPPT), the Natural Heritage Bureau (NHB) DataCheck Too	ol. the Aquatic
	toration Mapper, or other sources to assist in identifying key features such as: priority resource area	
pro	tected species or habitats, coastal areas, designated rivers, or designated prime wetlands.	
Has	the required planning been completed?	⊠ Yes □ No
Doe	es 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? o If yes, species or habitat name(s): NHB Project ID #: NHB22-1202	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 t	ne property within a Designated River corridor? If yes, provide the following information:	Yes No
•	Name of Local River Management Advisory Committee (LAC):	
•	A copy of the application was sent to the LAC on Month: Day: Year:	

For dredging projects, is the subject property contaminated? • If yes, list contaminant:		Yes No
Is there potential to impact impaired waters, class A waters, or outstanding resour	ce waters?	Yes No
For stream crossing projects, provide watershed size (see <u>WPPT</u> or Stream Stats):		
SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))		
Provide a brief description of the project and the purpose of the project, outlining and whether impacts are temporary or permanent. DO NOT reply "See attached"; below.		
The proposed project consists of constructing two (2) multi-family apartment build one (1) mixed used building with first floor office and amenity space, and upper st include a total of 152 dwelling units. The project will include associated site impro road with cul-de-sac, parking, utilities, stormwater management, landscaping and community space along the North Mill Pond. The land from North Mill Pond's mea wetland buffer will be designated as community space for the City's North Mill Pon permitted separately as part of a future projet. The proposed wetland impacts fro impacts.	ory apartments. The p vements that consist o lighting. The project w in high water (MHW) li nd Trail project which	roject will of a private vill also include ine to the 50ft will be
SECTION 3 - PROJECT LOCATION		
Separate wetland permit applications must be submitted for each municipality wit	hin which wetland imp	pacts occur.
ADDRESS: 105 Bartlett Street		
TOWN/CITY: Portsmouth		
TAX MAP/BLOCK/LOT/UNIT: Map 157 Lot 1, 2 & Map 164 Lot 1, 4-2		
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: North Mill Pond N/A		
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places):	43.07201° North	
	70.75781° West	

2020-05 Page 2 of 7

SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFI	•	` ''	
NAME: Iron Horse Properties, LLC, Rob Simmons			
MAILING ADDRESS: 6 Liberty Square, PMB 90767			
TOWN/CITY: Boston		STATE: MA	ZIP CODE: 02109
EMAIL ADDRESS: robs@cathartes.com			
FAX:	PHONE: 617-893-9354		
ELECTRONIC COMMUNICATION: By initialing here: JJ, I has application electronically.	nereby authorize NHDES to	communicate all	matters relative to
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-	Wt 311.04(c))		
LAST NAME, FIRST NAME, M.I.: Hansen, Neil A			
COMPANY NAME: Tighe & Bond, Inc.			
MAILING ADDRESS: 177 Corporate Drive			
TOWN/CITY: Portsmouth		STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: NAHansen@tighebond.com			
FAX:	PHONE: 603-433-8818		
ELECTRONIC COMMUNICATION: By initialing here NAH, to this application electronically.	I hereby authorize NHDES t	o communicate a	ıll matters relative
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFF If the owner is a trust or a company, then complete with Same as applicant	•	•))
NAME: SEE LIST OF OWNERS INCLUDED			
MAILING ADDRESS:			
TOWN/CITY:		STATE:	ZIP CODE:
EMAIL ADDRESS:			
FAX:	PHONE:		
ELECTRONIC COMMUNICATION: By initialing here NAH, to this application electronically.	I hereby authorize NHDES t	o communicate a	Ill matters relative

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: The jurisdictional wetland and 100-foot tidal buffer were reviewed and accepted by Tighe & Bond on October 29 and December 2, 2019. The proposed project preserves the existing wetland resource while reducing permanent buffer impacts.

Env-Wt 500: Not applicable, does not apply to coastal project, per Env-Wt 509.02(b).

Env-Wt 600: This project is classified as a Major Impact project because it will result in greater than 10,000 sf of temporary and permanent impacts within the tidal buffer zone. The eixsting 100-foot tidal buffer is highly developed and consists primarily of commercial buildings, paved parking lots, and adandonded buildings. There are patches of vegetation and trees near the central portion of the project's wetland delineation. The vegetated permeable surfaces within the buffer does little to enhance and protect the downgradient tidal wetland. The proposed project will involve regrading of the wooded vegetation and include the addition of native planting and grasses to enhance the buffer area from the existing condition. The project will include permanent stormwater treatment BMPs that will protect the downgradient waters. A Coastal Resource worksheet is attached. Wetlands on this site are classified as Estuarine. Unconsolidated Shore, Mud, and regularly flooded (E2US3N). Wetland functions in this portion of North Mill Pond include ecological integridy, W F & S habitat, recreational and commercial potential, aesthtic quality, educational potential, and noteworthnes, which will be enhanced with the proposed project.

Env-Wt 700: Not applicable, no prime wetland impacts.

Env-Wt 900: Not applicable, no stream crossings proposed.

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)

but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.
Mitigation Pre-Application Meeting Date: Month: 3 Day: 22 Year: 2022
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.

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095 www.des.nh.gov

Irm@des.nh.gov or (603) 271-2147

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

PERMANENT

project is completed.

HID	SDICTIONAL AREA	F	PERMANEN	IT		TEMPORARY	
JUKI	SDICTIONAL AREA	SF	LF	ATF	SF	LF	ATF
	Forested Wetland	1,528					
	Scrub-shrub Wetland						
spu	Emergent Wetland						
Wetlands	Wet Meadow						
We	Vernal Pool						
	Designated Prime Wetland						
	Duly-established 100-foot Prime Wetland Buffer						
e	Intermittent / Ephemeral Stream						
Surface Water	Perennial Stream or River						
Se V	Lake / Pond						
ırfa	Docking - Lake / Pond						
Su	Docking - River						
	Bank - Intermittent Stream						
Banks	Bank - Perennial Stream / River						
Ba	Bank / Shoreline - Lake / Pond						
	Tidal Waters						
	Tidal Marsh	209					
Tidal	Sand Dune						
l ∺	Undeveloped Tidal Buffer Zone (TBZ)						
	Previously-developed TBZ	34,639			10,182		
	Docking - Tidal Water						
	TOTAL	36,376			10,182		
SEC	TION 12 - APPLICATION FEE (RSA 482-A:3, I)						
	MINIMUM IMPACT FEE: Flat fee of \$400.						
	NON-ENFORCEMENT RELATED, PUBLICLY-FUN	DED AND S	UPERVISE	D RESTORAT	ION PROJEC	CTS, REGARD	LESS OF
	IMPACT CLASSIFICATION: Flat fee of \$400 (refe					•	
⊠ I	MINOR OR MAJOR IMPACT FEE: Calculate usin	g the table	below:	•	•		
							\$
	Permanent and temporar	y (non-dock	king): 46,	,558 SF		× \$0.40 =	18,623.
							2
	Seasonal do	ocking struc	ture:	SF		× \$2.00 =	
	Permanent do			SF		× \$4.00 =	
	Projects pr	oposing sho	oreline str	uctures (inclu	uding docks) add \$400 =	\$

TEMPORARY

		Tot	\$ al = 18,623.
The applic	ation fee for minor or major impact is th	ne above calculated total or \$400, whichever is greate	\$ er = 18,623. 2
	3 - PROJECT CLASSIFICATION (Env-Wt 30 e project classification.	06.05)	
Minimu	m Impact Project	Project Major Project	
SECTION 14	- REQUIRED CERTIFICATIONS (Env-Wt	311.11)	
Initial each	box below to certify:		
Initials:	To the best of the signer's knowledge and	belief, all required notifications have been provided.	
Initials:	The information submitted on or with the signer's knowledge and belief.	e application is true, complete, and not misleading to the	best of the
Initials: NAH	 Deny the application. Revoke any approval that is g If the signer is a certified weth practice in New Hampshire, reestablished by RSA 310-A:1. The signer is subject to the penalt currently RSA 641. The signature shall constitute aut Department to inspect the site of 	land scientist, licensed surveyor, or professional engineer efer the matter to the joint board of licensure and certificies specified in New Hampshire law for falsification in off thorization for the municipal conservation commission and the proposed project, except for minimum impact forest il projects, where the signature shall authorize only the E	r licensed to cation ficial matters, and the try SPN
Initials:	• •	operty, each property owner signature shall constitute conspired in polication being filed and does not object to the filing.	ertification by
SECTION 15	- REQUIRED SIGNATURES (Env-Wt 311.	04(d); Env-Wt 311.11)	
SIGNATURE See Owner's	OWNER): //Agent Letter of Authorization	PRINT NAME LEGIBLY:	DATE:
SIGNATURE	APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGIBLY:	DATE:
SIGNATURE	AGENT, IF APPLICABLES	PRINT NAME LEGIBLY: Neil Hansen	DATE: 1/10/23
SECTION 1	6 - TOWN / CITY CLERK SIGNATURE (Env	v-Wt 311.04(f))	

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NHDES-W-06-012

As required by RSA 482-A:3, I(a)(1), I hereby certify that the applican	t has filed four application forms, four detailed
plans, and four USGS location maps with the town/city indicated belo	ow.
TOWN/CITY CLERK SIGNATURE:	PRINT NAME LEGIBLY:
TOWN/CITY:	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".

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Owners List

Proposed Multi-Family Development 105 Bartlett Street Portsmouth, New Hampshire

OWNERS Clipper Traders LLC 105 Bartlett Street	MAP # 157	LOT # 1
Portsmouth, NH 03801		
Portsmouth Hardware & Lumber LLC 105 Bartlett Street Portsmouth, NH 03801	157 164	2
Iron Horse Properties LLC 105 Bartlett Street Portsmouth, NH 03801	164	4-2



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: Iron Horse Properties, LLC, c/o Rob Simmons TOWN NAME: Portsmouth

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the <u>Avoidance and Minimization Narrative</u> or <u>Checklist</u> 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.

ALTHOUGH THE PROPOSED PROJECT IMPACTS JURISDICTIONAL WETLANDS, THE PROPOSED IMPACTS ARE LIMITED TO SMALL AREAS IN THE TIDAL WETLAND FOR DISHARGE OF TREATED STORMWATER. THE PROJECT PROPOSES ENHANCED STORMWATER TREATMENT, DECREASED IMPERVIOUS SURFACES, AND INCREASED RECREATION USE OF THE BUFFER AREA IN COORDINATION WITH THE CITY. IMPACTS FROM THE PROJECT HAVE BEEN AVOIDED AND MINIMIZED BY PULLING THE NEW BUILDINGS AND PARKING LOT FURTHER BACK FROM THE COASTAL WETLAND AND UTILIZING UNDERGROUND PARKING, THUS FREEING UP SIGNIFICANT AREAS OF IMPERVIOUS SURFACES TO BE RESTORED (SEE APPENDIX F FOR THE MITIGATION PROPOSAL AND WETLAND IMPACT PLAN). ALL WORK IS BEING DONE WITHIN THE PREVIOUSLY DEVELOPED TIDAL BUFFER.

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.
No marshes are located within the project limits.
The managed and to contain the project minute.
SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))
SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3)) Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.
Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.
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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.
Impacts from the project have been avoided and minimized by pulling portions of the new buildings and parking lot further back from the coastal wetland and utilizing underground parking, thus freeing up significant areas of impervious surfaces to be restored (see Appendix F for the mitigation proposal and wetland impact plan). All work is being done within the previously developed tidal buffer. The proposed project results in 209 SF of permanent impacts to the tidal wetland to construct two of the three stormwater outfall plunge pools. The proposed project also results in 1,528 SF of permanent impacts to a small forested wetland located inside the abandoned railroad turntable.
SECTION I.V - PUBLIC COMMERCE, NAVIGATION, OR RECREATION (Env-Wt 313.03(b)(5)) Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce, navigation, or recreation.
The proposed project increases public recreation and does not affect commerce or navigation.

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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 proposed project has been designed to maintain the existing flood storage capacity within the floodplain.
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.
The project does not impact these systems.

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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 proposed project enhances stormwater runoff treatment from the existing condition which will improve the surrounding water conditions. Furthermore, this is an urban area adjacent to brackish waters with no potential to supply public drinking water.
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.
Describe how the project avoids and minimizes adverse impacts to stream channels and the ability of such channels to
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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.
N/A - no shoreline structures proposed.
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.
N/A - no shoreline structures proposed.

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Describe how the structures have been designed to avoid and minimize impacts on ability of abutting owners to use and enjoy their properties.	è
N/A - no shoreline structures proposed.	
SECTION I VIII - SUMBELINE STRICTLIBES - COMMEDCE AND DECREATION (EMV-M/+ 212 02/c)(//))	
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.	
Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation,	
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.	
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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.	

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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.
N/A - no shoreline structures proposed.
CECTION LAVY CHORELINE CERLICITIES VECETATION REMOVAL ACCESS ROUNTS AND SHORELINE STABILITY (Final
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.
N/A - no shoreline structures proposed.

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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:

The assessment was based on the Maine Citizens Guide to Evaluating, Restoring, and Managing Tidal Marshes (Maine Audubon, 1997); Method for Inventorying and Evaluating Wetlands In New Hampshire, University of New Hampshire Cooperative Extension, 2015; and The Highway Methodology Workbook Supplement—Wetland Functions and Values: A Descriptive Approach, NAEEP-360-1-30a, US Army Corps of Engineers, New England Division, (September 1999).

NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: LEONARD A LORD, PHD, NHCWS#14

DATE OF ASSESSMENT: OCT. 29 AND DEC. 2, 2019

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 CHECKLIST

Water Division/Land Resources Management Wetlands Bureau



Check the Status of your Application

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

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

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

The following definitions and abbreviations apply to this worksheet:

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

SECTION 1 - CONTACT/LOCATION INFORMATION					
APPLICANT LAST NAME, FIRST NAME, M.I.: Iron Horse Properties, LLC, c/o Rob Simmons					
PROJECT STREET ADDRESS: 105 Bartlett Street PROJECT TOWN: Portsmouth					
TAX MAP/LOT NUMBER: Map 157 Lot 1, 2 & Map 164 Lot 1, 4-2					
SECTION 2 - PRIMARY	PURPOSE OF THE PROJECT				
Indicate whether the primary purpose of the project is to construct a water-access structure or requires access through wetlands to reach a buildable lot or the buildable portion thereof.					
If you answered "no" to	o this question, describe the purpose of the "non-	access" project type you h	ave proposed:		
demolition of the existic replaced with three (3) buildings will include a site improvements that utilities, dark-sky friend runoff. The project will in a net reduction of ima portion of the City of	ject is to redevelop a parcel adjacent to a tidal weing building on lot 157-1 and the existing buildings multi-family apartment buildings depicted as Builtotal of 152 dwelling units with parking below Built consist of the private road cul-de-sac adjacent to ally lighting, landscaping and stormwater managen include temporary and permanent impacts within apervious surface within the Tidal Buffer Zone. The Portsmouth's North Mill Pond Greenway project. of North Mill Pond for public recreational use. The	s on Lot 164-4-2, These building A, B and C on the Site ildings A and B. The project Building C, surface parking nent systems that provide in the Tidal Buffer Zone. This is a 10 ft wide porous	Idings will be Plan. The three (3) tincludes associated g, pedestrian access, treatment for e project will result the construction of a asphalt pathway		

Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

2020-05

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

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

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HOLD DOCUMENT UP TO THE LIGHT TO VIEW TRUE WATERMARK Manufacturers and Traders Trust Company BUFFALO, N.Y. 14240	AL CHECK	HOLD DOCUMENT UP TO THE LIGHT TO VIEW 500033	3248-2 10-4/220
James Shananhan	DATE	01/12/2023	Parties of Details of
***EIGHTEEN THOUSAND SIX HUNDRED TWENTY THRE	E and 20/100**	#USDollars	
#8121 - Portsmouth State St	TWO	AUTHORIZED SIGNATURES REQUIRED FOR AMOUN	MP
The second of th		AU	THORIZED SIGNATURE



WETLANDS RULE WAIVER OR DWELLING OVER WATER WAIVER REQUEST FORM



WATER DIVISION/LAND RESOURCES MANAGEMENT WETLANDS BUREAU

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

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

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

SECTION 1 - PROJECT LOCATION INFORMATION (Env-Wt 204.03(c))					
ADDRESS: 105 Bartlett Street	TOWN/CITY: Portsmouth		STATE: NH	ZIP CODE: 03801	
TAX MAP/LOT NUMBER: Map 157 Lot 1, 2 & Map 164 Lot 1, 4-2 2					
SECTION 2 - WAIVER REQUESTOR INFORMATION (Env-Wt 204.03(a))					
LAST NAME, FIRST NAME, M.I.: Hansen, Neil A.					
MAILING ADDRESS: 177 Corporate Drive					
TOWN/CITY: Portsmouth			STATE: NH	ZIP CODE: 03801	
EMAIL ADDRESS (if available): LLord@tighebond.com DAYTIME TELEPHO		PHONE NUM	IBER: (603) 433-		
or if not FAX NUMBER: 8818					
SECTION 3 - APPLICANT INFORMATION (Env-Wt 204.03(b)) If request is being made on behalf of someone else, include the following information regarding the person being represented. If requestor is the applicant, check the following box and proceed to Section 4. Requestor is the applicant.					
LAST NAME, FIRST NAME, M.I.: Iron Horse Properties, LLC, Rob Simmons					
MAILING ADDRESS: 6 Liberty Square, PMB 90767					
TOWN/CITY: Boston			STATE: MA	ZIP CODE: 02110	
EMAIL ADDRESS (if available): robs@cathartes.com or if not FAX NUMBER: DAYTIME PHONE NUMBER: 61		: 617-893-9354			

SECTION 4 - WAIVER INFORMATION
SECTION 4A - WAIVER TO RULE Env-Wt 100-900 N/A - If you are not requesting a rule waiver, check this box and proceed to Section 4b
Provide the number of the specific section of each rule for which a waiver is sought (Env-Wt 204.03(d)): Env-Wt 603.08(a)&(b)
Provide a complete explanation of why a waiver is being requested, including an explanation of the operational and economic consequences of complying with the requirement and, if the requested waiver would extend the duration of a permit, the reason(s) why the permit holder was not able to complete the project within the specified time (Env-Wt 204.03(f)(1)):
The provisions referenced in the rule section referenced above state that field observations of at least 3 tide events to be conducted by a licensed land surveyor. A waiver is being requested because the project location is within 1.5 miles of a NOAA Tide and Current station at Seavey Island which provides data that can conservatively used for this project location. This data is conservative because tides flow through two moderate restrictions between Seavey Island and the project site, which should dampen tidal extremes. The expense incurred to have a licensed professional is excessive for redundant information which is readily available from the Seavey Island station.
If applicable, provide a complete explanation of the alternative that is proposed to be substituted for the requirement in Env-Wt, including written documentation or data, or both, to support the alternative (Env-Wt 204.03(g)):
As previously stated, the project's design has incorporated the tide and current information provided by the Seavey Island tide and current station. This information has been provided as an attachment to the Coastal Resources Worksheet within this application package.
SECTION 4B – DWELLING OVER WATERS WAIVER UNDER RSA 482-A:26, III(b).
N/A - If you are not requesting a standard waiver, check this box and proceed to Section 5)
Identify the specific standard to which a waiver is being requested (Env-Wt 204.03(e)): RSA 482-A:

Provide a complete explanation of why a waiver is being requested, including a complete explanation of how the statutory criteria of RSA 482-A:26, III(b) will be met (Env-Wt 204.03(f)(2)):
SECTION 5 - ADDITIONAL WAIVER INFORMATION (Env-Wt 204.03(h); Env-Wt 204.03(i)) (applicable to Waivers of Rules and Standards under RSA 482-A:26, III(b))
Indicate whether the waiver is needed for a limited duration and, if so, an estimate of when the waiver will no longer be needed (Env-Wt 204.03(h)):
The waiver is needed for permit approval only. Provide a complete explanation of why the applicant believes that having the waiver granted will meet the criteria in
Env-Wt 204.05 or 204.06, as applicable (Env-Wt 204.03(i)):
(a1) The waiver will not result in an adverse impact to the environment or public safety. (a2) It will not interfere with public waters. (a3) It will not result in an advance impact on abutting properties. NH RSA 482-A:26 (Dwellings Over Water) is not applicable.
SECTION 6 - REQUIRED CERTIFICATIONS (Env-Wt 204.04)
Initial each box and sign below to certify:
Initials: The information provided is true, complete, and not misleading to the knowledge and belief of the signer.
Initials: NAH The signer understands that: • Any waiver granted based on false, incomplete, or misleading information shall be subject to revocation; and

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	 He or she is subject to the penalties for falsification in official matters, currently established in RSA 641. 			
SECTION 7 - REQUESTOR SIGNATURE (Env-Wt 204.04)				
SIGNATURE (APPLICANT): *		PRINT NAME LEGIBLY:	DATE:	
See Owner's/Agent Letter of	f Authorization			
SIGNATURE (REQUESTOR):		PRINT NAME LEGIBLY:	DATE:	
		Tighe & Bond, Inc., c/o Neil Hansen	1/10/23	

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



WETLANDS RULE WAIVER OR DWELLING OVER WATER WAIVER REQUEST FORM CRITERIA/DECISION



WATER DIVISION/LAND RESOURCES MANAGEMENT WETLANDS BUREAU

(Keep this sheet for your reference; do not submit it with your application)

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

SECTION 1 - WAIVER CRITERIA

SECTION 1A - CRITERIA FOR WAIVERS TO RULES (Env-Wt 204.05)

- (a) The Department shall grant a waiver to a requirement established in subtitle Env-Wt that will not extend the duration of a wetlands permit only if:
 - (1) Granting a waiver will not result in:
 - a. An avoidable adverse impact on:
 - 1. The environment or natural resources of the state, including but not limited to jurisdictional areas and protected species or habitat; or
 - 2. Public health or public safety;
 - b. An impact on abutting properties that is more significant than that which would result from complying with the rule; or
 - c. A statutory requirement being waived; and
 - (2) Any benefit to the public or the environment from complying with the rule is outweighed by the operational or economic costs to the applicant.
- (b) The Department shall grant a waiver that has the effect of extending the duration of a wetlands permit that does not qualify for the statutory extension under RSA 482-A:3, XIV-a only if:
 - (1) The permit holder:
 - a. Was precluded from proceeding under the permit due to actions taken by persons opposed to the project; or
 - b. Rationally refrained from proceeding under the permit due to reasonable uncertainties surrounding the project's legal viability, which shall not include uncertainties regarding the project's financial viability;
 - (2) If other permits are required for the project, at least one other permit already has a duration that extends beyond the expiration of the wetlands permit or, if the other permit expires concurrently or prior to the wetlands permit, the permit holder reasonably anticipates that an extension will be obtained; and
 - (3) Extending the permit will not result in:
 - a. Adverse impacts on public health or safety, or the environment or natural resources of the state, that would be greater than those accounted for in the permit that was issued; or
 - b. Adverse impacts on abutting properties that is more significant than that which would have resulted if the project had been initiated in time to be completed during the permit term.

SECTION 1B - CRITERIA FOR WAIVERS UNDER RSA 482-A:26, III(b) (Env-Wt 204.06)

The Department shall grant a waiver under RSA 482-A:26, III(b) if:

- (a) The waiver will not result in:
 - (1) An avoidable adverse impact on the environment or natural resources of the state, public health or public safety;
 - (2) Any interference with the public trust in waters held by the state; or
 - (3) An adverse impact on abutting properties that is more significant than that which would result from complying with the rule; and
- (b) The following criteria from RSA 482-A:26, III(b) are met:
 - (1) The effect of the requested repair or reconstruction represents greater protection of public water or the environment;
 - (2) Such repair or reconstruction does not change a recreational, water-based activity to a land-based, residential or commercial activity;
 - (3) There will be no expansion of the existing footprint, outside dimensions, or square footage of floor space; and
 - (4) There will be a net reduction in the total square footage of kitchen, bathroom, shower, and toilet facilities.

SECTION 2 – DECISION (Env-Wt 204.07)

- (a) The Department shall notify the requestor of the decision in writing. If the request is denied, the Department shall identify the specific reason(s) for the denial.
- (b) If a waiver is granted, the Department shall impose such conditions, including time limitations, as the Department deems necessary to ensure that the activities conducted pursuant to the waiver will be consistent with the applicable criteria.



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.: Iron Horse Properties, LLC, Rob Simmons

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 proposed project will include demolition of the existing building on lot 157-1 and the existing buildings on Lot 164-4-2 The proposed project consists of constructing two (2) multi-family apartment buildings with basement level parking, one (1) mixed used building with first floor office and amenity space, and upper story apartments. The project will include a total of 152 dwelling units. The project will include associated site improvements that consist of a private road with cul-de-sac, parking, utilities, stormwater management, landscaping and lighting. The project will include permanent impacts, though will result in a net reduction of impervious surface within the Tidal Buffer Zone. This project will also include the construction of a portion of the City of Portsmouth's North Mill Pond Greenway project. This is a 10 ft wide porous asphalt pathway within the 50 ft buffer of North Mill Pond for public recreational use.

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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.

The North Mill Pond 100-foot tidal buffer can be divided into three zones within the project area: 1) a commercial area and all the paved and unpaved impervious surfaces associated with the buildings; 2) the disturbed forest aera around the old railroad turntable,; and 3) the shrub ticket extending along the narrow portion of the parcel.

The proposed project will result in a net reduction in impervious surfaces. Restoring impervious surfaces restores vegetation, reduces runoff to the tidal wetland, provides improved water quality treatment of runoff, allows for increased wetland screening for wildlife, and restores available wildlife habitat. Installation of the North Mill Pond trail and greenway would result in improved functions and values of the wetland and buffer including: Ecological Integrity, Recreation Potential, Aesthetic Quality, and possibly Educational Potential. Existing impacts to the 100-foot buffer will also be reduced from the trail and greenway improvements through the removal and restoration of impervious surfaces.

The result of the proposed mitigation will be 22,384 SF of restored previously disturbed tidal buffer area and 47,189 SF of previously disturbed tidal buffer enhancement area.

The 100-foot tidal buffer impact limits will be marked and erosion controls in place prior to project construction and monitoring will occur during and following construction to assure impacts are minimized and proposed restoration activities are properly carried out.

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

Surface waters will not be impacted by the project. All work will employ proper erosion and sediment control BMPs. No equipment will be used within surface waters or wetlands and no invasive species will be used to stabilize the site. The NH Natural Heritage Bureau DataCheck has determined that no rare species or critical habitats will be impacted. All work on this project is within previously developed and landscaped areas and will be consistent with the Shoreland Water Quality Protection Act. No work will be adjacent to designated prime wetlands. The project does not involve dredging or filling of wetlands. Areas of temporary soil disturbance will be stabilized within three days of final grading as described in the construction sequencing below. No work will be done within 10 feet of a property line without an abutter's prior written consent.

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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. A project design narrative, including monitoring, is attached.
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.
N/A

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.

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For any project that would impact tidal wetlands, tidal waters, or associated sand dunes, the applicant shall:
Use the results of the CFA to select the location of the proposed project having the least impact to tidal wetlands, tidal waters, or associated sand dunes;
Design the proposed project to have the least impact to tidal wetlands, tidal waters, or associated sand dunes;
Where impact to wetland and other coastal resource functions is unavoidable, limit the project impacts to the least valuable functions, avoiding and minimizing impact to the highest and most valuable functions; and
Include on-site minimization measures and construction management practices to protect coastal resource areas.
Projects in coastal areas shall use results of this CFA to:
Minimize adverse impacts to finfish, shellfish, crustacean, and wildlife;
Minimize disturbances to groundwater and surface water flow;
Avoid impacts that could adversely affect fish habitat, wildlife habitat, or both; and
Avoid impacts that might cause erosion to shoreline properties.
SECTION 4 - VULNERABILITY ASSESSMENT (Env-Wt 603.05) Refer to the New Hampshire Coastal Flood Risk Summary Part 1: Science and New Hampshire Coastal Flood Risk Summary Part II: Guidance for Using Scientific Projections or other best available science to:
Determine the time period over which the project is designed to serve.
The project useful life is expected to be 100 years. There are expected to be significant upgrades over that time period, which will include technologies to deal with rising sea levels as needed.
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.
NH Coastal Flood Risk Summary Part II, Step 2 Table: Medium Risk Tolerance

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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.
NH Coastal Flood Risk Summary Part II, Step 3 Table A: Sea level rise for Medium Risk Tolerance is 5.0 feet (13.00 feet NGVD88) by 2122.
NGV 200) by 2122.
Identify areas of the proposed project site subject to flooding from SLR.
The current 100 -year floodplain (Zone AE) base flood elevation is 8.0 feet NAVD88. The threshold for the parking garage is elevation 7.00 feet and the finished floor elevation of the first floor is 17.50 feet NGVD88. The below grade parking elevation is 7.00 feet. The 100-year floodplain is expected to be above the parking garage threshold within 36 years with a 2.0 foot sea level rise (elevation 10.76 feet) by 2058.
Identify areas currently located within the 100-year floodplain and subject to coastal flood risk.
Portions of the existing lawn on the northwest side of the property are currently within 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.
The proposed project consists of a 5-story residential use building with one level of below grade parking and one level of parking at grade and beneath the building. The threshold for the parking garage door is 10.75 feet and the finished floor elevation of the first floor is 14.75 feet NGVD29, nearly one foot above the predicted 2122 100-year floodplain .
Two forms of waterproofing are being employed to protect the basement parking garage from water seepage. The slab will be protected with a blind-side waterproofing membrane. The foundation walls will be protected by a water-

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proofing sheet membrane. These two membranes will connect below the footings along the building perimeter. Flood proofing technologies will be deployed to relieve potential flooding in the parking garage by 2058, when the

100-year floodplain is expected to exceed the garage threshold.

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Where there are conflicts between the project's purpose and t application meeting with the department to evaluate design al available science.	ternatives, engineering approaches, and use of the best
Pre-application meeting date held: Waived by S. Giallongo	via email to N Hansen July 19, 2021
SECTION 5 - DESIGN PLANS (Env-Wt 603.07, in addition to Env Submit design plans for the project in both plan and elevation elements.	
The plan view shall depict the following:	
The engineering scale used, which shall be no larger than or	ne inch equals 50 feet;
The location of tidal datum lines depicted as lines with the a Vertical Datum of 1988 (NAVD 88), derived from https://tidalcolor.org/lines/by-nt-1988 (NAVD 88), derived from	

• Tidal beach maintenance (Env-Wt 608).

• 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 feet statutery limit on the extent of the tidal buffer zone shall be measured beginning.
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.

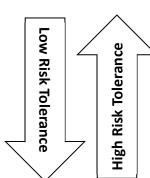
SECTION 10 – GUIDANCE

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.

Project Design Narrative

Project Discussion

- Env-Wt 307. Surface waters will not be impacted by the project. All work will employ proper erosion and sediment control BMPs. No equipment will be used within surface waters or wetlands and no invasive species will be used to stabilize the site. The NH Natural Heritage Bureau DataCheck has determined that no rare species or critical habitats will be impacted. All work on this project is within previously developed and landscaped areas and will be consistent with the Shoreland Water Quality Protection Act. No work will be adjacent to designated prime wetlands. The project does not involve dredging or filling of wetlands. Areas of temporary soil disturbance will be stabilized within three days of final grading as described in the construction sequencing below. No work will be done within 10 feet of a property line without an abutter's prior written consent.
- Env-Wt 311.07 & 313.03. Impacts from the project have been avoided and minimized by pulling portions of the new buildings and parking lot further back from the coastal wetland and utilizing underground parking, thus freeing up significant areas of impervious surfaces to be restored (see Appendix F for the mitigation proposal and wetland impact plan). All work is being done within the previously developed tidal buffer. The only direct wetland impact from the project is for the construction of three outfall pipe plunge pools.
- Env-Wt 313.01. As described throughout this application, the project will meet all permit approval criteria.
- Env-Wt 313.01(c). Impacts from the project have been avoided and minimized by pulling portions of the new buildings and parking lot further back from the coastal wetland and utilizing underground parking, thus freeing up significant areas of impervious surfaces to be restored (see Appendix F for the mitigation proposal and wetland impact plan). All work is being done within the previously developed tidal buffer. The only direct wetland impact from the project is for the construction of three outfall pipe plunge pools.
- Env-Wt 603.04. A Coastal Functional Assessment is provided in Appendix D
- Env-Wt 603.05. A Vulnerability Assessment is included on the Coastal Worksheet and includes consideration of sea level rise and flooding. Design plans are attached that include water depth information. The project has a medium risk tolerance. The threshold of the underground parking will be below the elevation of the predicted 100 year floodplain by 2058, however, flood proofing technologies will be installed to relieve flooding in that area before that time. The first floor finish elevation will be approximately one foot above the predicted 100-year floodplain in 2122.

Construction Sequencing

- 1. Prior written consent will be obtained from abutters prior to any soil disturbance less than 10 feet from property lines.
- 2. Cut and clear trees as required.
- 3. Construct temporary and permanent sediment, erosion and detention control facilities. Erosion, sediment, and detention measures shall be installed prior to any earth moving operations.
- 4. Establish a properly constructed dewatering area as needed. Wherever possible, the discharge from the dewatering structure shall drain to a well-vegetated buffer by sheet

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flow while maximizing the distance to the nearest water resource and minimizing the slope of the buffer area.

- 5. All permanent ditches, swales, detention, retention, and sedimentation basins to be stabilized using the vegetative and non-structural BMPs prior to directing runoff to them.
- 6. Clear and dispose of debris.
- 7. Construct temporary culverts and diversion channels as required.
- 8. Grade and gravel roadways and parking areas all roads and parking areas shall be stabilized within 72 hours of achieving finishing grade.
- 9. Begin permanent and temporary seeding and mulching. All cut and fill slopes shall be seeded and mulched within 72 hours of achieving finished grade daily, or as required.
- 10. Finish paving all roadways and parking lots.
- 11. Inspect and maintain all erosion and sediment control measures.
- 12. Complete permanent seeding and landscaping.
- 13. Remove trapped sediments from collector devices as appropriate and then remove temporary erosion control measures.

Project Monitoring, Maintenance, and Management

The project will be monitored during and following construction by a NH Certified Wetland Scientist or other qualified professional to be sure the site is stabilized, and all components have been properly installed. The restoration areas will be followed up with annual monitoring by a NH Certified Wetland Scientist or other qualified professional. Monitoring will continue until the site is fully stabilized and there is at least 75% survivorship of restoration plantings.

The public greenway trail that runs through the area is expected to be monitored by the conservation commission or other City entity.

The project building and grounds will be maintained by the owners as needed. The grounds will be maintained by contracted landscapers.

STEP 3 TABLE A. RECOMMENDED DECADAL RSLR ESTIMATES (IN FEET ABOVE 2000 LEVELS) BASED ON RCP 4.5, PROJECT TIMEFRAME, AND TOLERANCE FOR FLOOD RISK.

	HIGH TOLERANCE FOR FLOOD RISK	MEDIUM TOLERANCE FOR FLOOD RISK	LOW TOLERANCE FOR FLOOD RISK	VERY LOW TOLERANCE FOR FLOOD RISK	
TIMEFRAME		Plan for the following RSLR estimate (ft)* compared to sea level in the year 2000			
	Lower magnitude, Higher probability	—	—	Higher magnitude, Lower probability	
2030	0.7	0.9	1.0	1.1	
2040	1.0	1.2	1.5	1.6	
2050	1.3	1.6	2.0	2.3	
2060 ²⁰⁵⁸ (36 yr) = 2.0	ft 1.6	2.1	2.6	3.0	
2070	2.0	2.5	3.3	3.7	
2080	2.3	3.0	3.9	4.5	
2090	2.6	3.4	4.6	5.3	
2100	2.9	3.8	5.3	6.2	
2110	3.3	4.4	6.1	7.3	
2120 2122 (100 yr) = 5	.0 ft 3.6	4.9	7.0	8.3	
2130	3.9	5.4	7.9	9.3	
2140	4.3	5.9	8.9	10.5	
2150	4.6	6.4	9.9	11.7	

^{*}The colors (blue, red, purple, green) in Step 3 Table A correspond with the colors of the graph depicted in Figure 2 (see also Figure 4.5 in *Part I: Science*¹⁷). The RSLR estimates for High tolerance for flood risk projects correspond with K14, upper end of "likely" estimates for RCP4.5 (83% chance RSLR will not exceed this value). The RSLR estimates for Medium tolerance for flood risk projects correspond with K14, 1-in-20 chance estimates for RCP 4.5. The RSLR estimates for Low tolerance for flood risk projects correspond with K14, 1-in-100 chance estimates for RCP 4.5. The RSLR estimates for Very Low tolerance for flood risk projects correspond with K14, 1-in-200 chance estimates for RCP4.5. For K14, 1-in-1000 chance estimates, see Table 4.2 in *Part I: Science*.¹⁷ Note that while the Bayesian probabilities associated with RSLR projections are useful, they have some limitations as described in Box 4.3 in *Part I: Science*.¹⁷

Home (/) / Products (products.html) / Datums (stations.html?type=Datums) / 8419870 Seavey Island, ME Favorite Stations

Station Info

Tides/Water Levels

Meteorological Obs. (/met.html?id=8419870)

Phys. Oceanography (/physocean.html?id=8419870)

PORTS® (/ports/ports.html?id=8419870)

OFS (/ofs/ofs_station.html?stname=Seavey Island&ofs=gom&stnid=8419870&subdomain=0)

Datums for 8419870, Seavey Island ME

NOTICE: All data values are relative to the NAVD88.

Elevations on NAVD88

Station: 8419870, Seavey Island, ME Status: Accepted (Dec 6 2021)

Units: Feet

Control Station: 8418150 Portland, ME

T.M.: 0

Epoch: (/datum_options.html#NTDE) 1983-2001

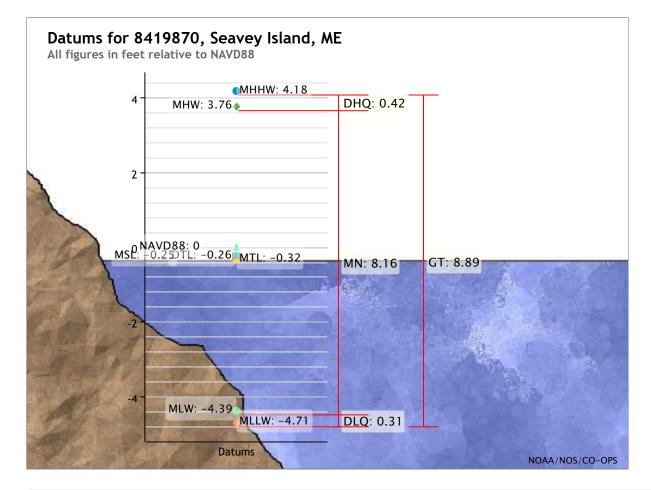
Datum: NAVD88

Datum	Value	Description
MHHW (/datum_options.html#MHHW)	4.18	Mean Higher-High Water
MHW (/datum_options.html#MHW)	3.76	Mean High Water
MTL (/datum_options.html#MTL)	-0.32	Mean Tide Level
MSL (/datum_options.html#MSL)	-0.25	Mean Sea Level
DTL (/datum_options.html#DTL)	-0.26	Mean Diurnal Tide Level
MLW (/datum_options.html#MLW)	-4.39	Mean Low Water
MLLW (/datum_options.html#MLLW)	-4.71	Mean Lower-Low Water
NAVD88 (/datum_options.html)	0.00	North American Vertical Datum of 1988
STND (/datum_options.html#STND)	-6.98	Station Datum
GT (/datum_options.html#GT)	8.89	Great Diurnal Range
MN (/datum_options.html#MN)	8.16	Mean Range of Tide

Datum	Value	Description
DHQ (/datum_options.html#DHQ)	0.42	Mean Diurnal High Water Inequality
DLQ (/datum_options.html#DLQ)	0.31	Mean Diurnal Low Water Inequality
HWI (/datum_options.html#HWI)	3.92	Greenwich High Water Interval (in hours)
LWI (/datum_options.html#LWI)	10.04	Greenwich Low Water Interval (in hours)
Max Tide (/datum_options.html#MAXTIDE)	7.89	Highest Observed Tide
Max Tide Date & Time (/datum_options.html#MAXTIDEDT)	02/07/1978 10:42	Highest Observed Tide Date & Time
Min Tide (/datum_options.html#MINTIDE)	-7.98	Lowest Observed Tide
Min Tide Date & Time (/datum_options.html#MINTIDEDT)	11/30/1955 00:00	Lowest Observed Tide Date & Time
HAT (/datum_options.html#HAT)	5.87	Highest Astronomical Tide
HAT Date & Time	11/15/2016 16:18	HAT Date and Time
LAT (/datum_options.html#LAT)	-6.51	Lowest Astronomical Tide
LAT Date & Time	01/14/2036 23:00	LAT Date and Time

Tidal Datum Analysis Periods

07/01/2020 - 06/30/2021





Products available at 8419870 Seavey Island, ME

TIDES/WATER LEVELS

Water Levels (/waterlevels.html?id=8419870)

NOAA Tide Predictions (/noaatidepredictions.html?id=8419870)

Harmonic Constituents (/harcon.html?id=8419870)

Sea Level Trends (/sltrends/sltrends_station.shtml?id=8419870)

Datums (/datums.html?id=8419870)

Bench Mark Sheets (/benchmarks.html?id=8419870)

Extreme Water Levels (/est/est_station.shtml?stnid=8419870)

Reports (/reports.html?id=8419870)

METEOROLOGICAL/OTHER

Meteorological Observations (/met.html?id=8419870)

Water Temp/Conductivity

PORTS®

Portsmouth PORTS® (/ports/index.html?port=pm)

PORTS® product page for Seavey Island (/ports/ports.html?id=8419870)

OPERATIONAL FORECAST SYSTEMS

Gulf of Maine (/ofs/gomofs/gomofs.html)

OFS product page for Seavey Island

INFORMATION

Station Home Page (/stationhome.html?id=8419870)

Data Inventory (/inventory.html?id=8419870)

Measurement Specifications (/measure.html)

Website Owner: Center for Operational Oceanographic Products and Services

National Oceanic and Atmospheric Administration (http://www.noaa.gov)

National Ocean Service (http://oceanservice.noaa.gov)

Privacy Policy (/privacy.html)

Disclaimer (/disclaimers.html)

Take Our Survey (/survey.html)

Freedom of Information Act (https://www.noaa.gov/foia-freedom-of-information-act)

Contact Us (/contact.html)

APPENDIX B



Appendix B

New Hampshire General Permits (GPs) Required Information and Corps Secondary Impacts Checklist

In order for the Corps of Engineers to properly evaluate your application, applicants must submit the following information along with the New Hampshire DES Wetlands Bureau application or permit notification forms. Some projects may require more information. For a more comprehensive checklist, go to https://www.nae.usace.army.mil/Missions/Regulatory/ "Useful Documents, Forms and Publications" and then "Corps Application Form and Guidance." Check with the Corps at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the State of New Hampshire DES Wetlands Bureau application and Permit by Notification forms.

All Projects:

- New Hampshire Department of Environmental Services (DES) Wetlands Permit Application.
- Request for Project Review Form by the New Hampshire Division of Historical Resources (DHR) https://www.nh.gov/nhdhr/review/rpr.htm.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible plans no larger than 11"x17" with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
 - Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
 - Horizontal state plane coordinates in U.S. survey feet based on the Traverse Mercator Grid system for the State of New Hampshire (Zone 2800) NAD 83.
 - Project limits with existing and proposed conditions.
 - Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
 - Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the OHW in inland waters and below the HTL in coastal waters.
 - Delineation of all waterways and wetlands on the project site,:
- Use Federal delineation methods and include Corps wetland delineation data sheets (GC 2).
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.

Appendix B August 2017



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.*	Х	
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?		Χ
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	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?	N.	/A
2.7 What is the area of the proposed fill in wetlands?		
2.8 What is the % of previously and proposed fill in wetlands to the overall project site?	N	/A
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

Appendix B August 2017

 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: https://wildlife.state.nh.us/wildlife/wap-high-rank.html. Data Mapper: www.granit.unh.edu. GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html. 		х
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)?		Х
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?	Х	
3.5 Are stream crossings designed in accordance with the GC 21?	N/A	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?	Х	
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?		Х
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**	INCL	UDED

August 2017 Appendix B

^{*}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.



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: February 16, 2022

Project Code: 2022-0008667

Project Name: 105 Bartlett Street - Proposed Multi-Family Development

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

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

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 Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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

Project Code: 2022-0008667

Event Code: None

Project Name: 105 Bartlett Street - Proposed Multi-Family Development

Project Type: Commercial Development

Project Description: Construction of two (2) multi-family buildings and one (1) mixed-used

building including 152 residential units, commercial space, and garage

parking.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.07287705,-70.77045978831826,14z



Counties: Rockingham County, New Hampshire

Endangered Species Act Species

There is a total of 2 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 Fisheries¹, 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.

1. <u>NOAA Fisheries</u>, 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

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

Insects

NAME STATUS

Monarch Butterfly *Danaus plexippus*

Candidate

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743

Critical habitats

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



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: February 16, 2022

Project code: 2022-0008667

Project Name: 105 Bartlett Street - Proposed Multi-Family Development

Subject: Consistency letter for the '105 Bartlett Street - Proposed Multi-Family Development'

project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this

species at 50 CFR §17.40(o).

Dear Colter Krzcuik:

The U.S. Fish and Wildlife Service (Service) received on February 16, 2022 your effects determination for the '105 Bartlett Street - Proposed Multi-Family Development' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take" of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

Monarch Butterfly Danaus plexippus Candidate

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

[1] Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

105 Bartlett Street - Proposed Multi-Family Development

2. Description

The following description was provided for the project '105 Bartlett Street - Proposed Multi-Family Development':

Construction of two (2) multi-family buildings and one (1) mixed-used building including 152 residential units, commercial space, and garage parking.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.07287705,-70.77045978831826,14z



Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

- Is the action authorized, funded, or being carried out by a Federal agency?

 No
- 2. Will your activity purposefully **Take** northern long-eared bats? *No*
- 3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

Yes

- 7. Will the action only remove hazardous trees for the protection of human life or property? *No*
- 8. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

9. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31 $\,$

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

n

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

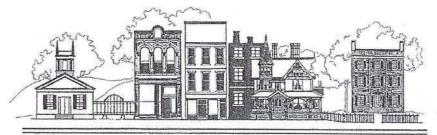
9. If known, estimated acres of prescribed fire from June 1 to July $31\,$

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0



NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

State of New Hampshire, Department of Natural and Cultural Resources
19 Pillsbury Street, Concord, NH 03301-3570
603-271-3558
TDD Access Relay NH 1-800-735-2964
FAX 603-271-3433
www.nh.gov/nhdhr
preservation@dncr.nh.gov

January 11, 2019

Steven D. Riker Ambit Engineering, Inc. 200 Griffin Road, Unit 3 Portsmouth, NH 03801

Re:

105 Bartlett Street Site Improvements, Portsmouth, NH (RPR #10228)

EPA

Dear Mr. Riker:

In accordance with Section 106 of the National Historic Preservation Act (16 U.S. C. 470), and with federal Advisory Council on Historic Preservation regulations, *Protection of Historic Properties* (36 CFR Part 800), the New Hampshire Division of Historical Resources/State Historic Preservation Office has reviewed the EPA undertaking referenced above, with respect to potential effects on properties listed, or potentially eligible for listing, in the National Register of Historic Places. The project includes infrastructure improvements and demolition of remnants of the National Register eligible Eastern Railroad Linear District (including turntable and roundhouse ruins).

David Trubey, New Hampshire Division of Historical Resources Historical Archaeologist and Review and Compliance Coordinator, has reviewed the materials submitted and made observations at a site visit of January 4, 2019. The DHR has determined that the project impact area lacks archaeological sensitivity through previous construction activities and no further archaeological studies are required.

For purposes of compliance with the federal Advisory Council on Historic Preservation regulations, *Protection of Historic Properties* (36 CFR Part 800), implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470), this determination may be construed as a finding of "No Historic Properties Affected" if the work is done as described in the following stipulations:

Stipulations: (1) All storm water features must be located outside the area in which the turntable and roundhouse ruins are located; (2) A written history to include narrative, historic photographs, and photographs taken after site clearing but before demolition of the turntable and roundhouse will be prepared by an Architectural Historian qualified under 36 CFR 61 and submitted for review to the New Hampshire Division of Historical Resources (DHR). Document will be utilized by the City of Portsmouth for future interpretive signage at the site if a walking trail is constructed. The Applicant will provide final copies (digital and archival hard copy) to the DHR, Portsmouth Public Library, and Portsmouth Athenaeum within 9 months of receipt of this correspondence.



This fulfills the project sponsor's duties for "Section 106" historic preservation review under EPA's Construction General Permit, unless any additional impacts are identified or if follow-up actions as noted above should be necessary. As the federal regulatory agency for this project, the EPA is responsible for completion of any "Section 106" historic preservation review procedures which pertain to its involvement.

Sincerely,

Nadine Miller

Deputy State Historic Preservation Officer

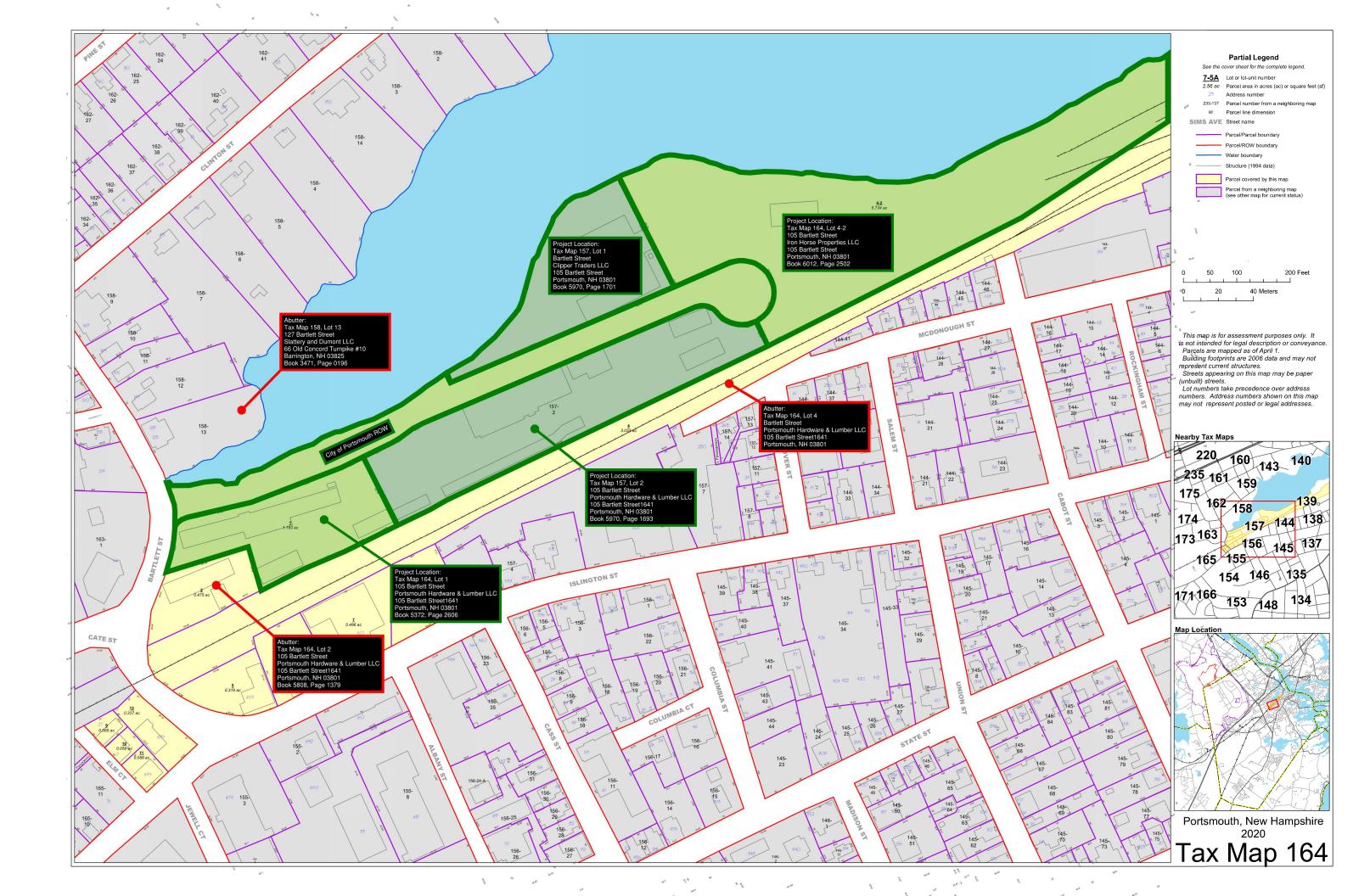
cc:

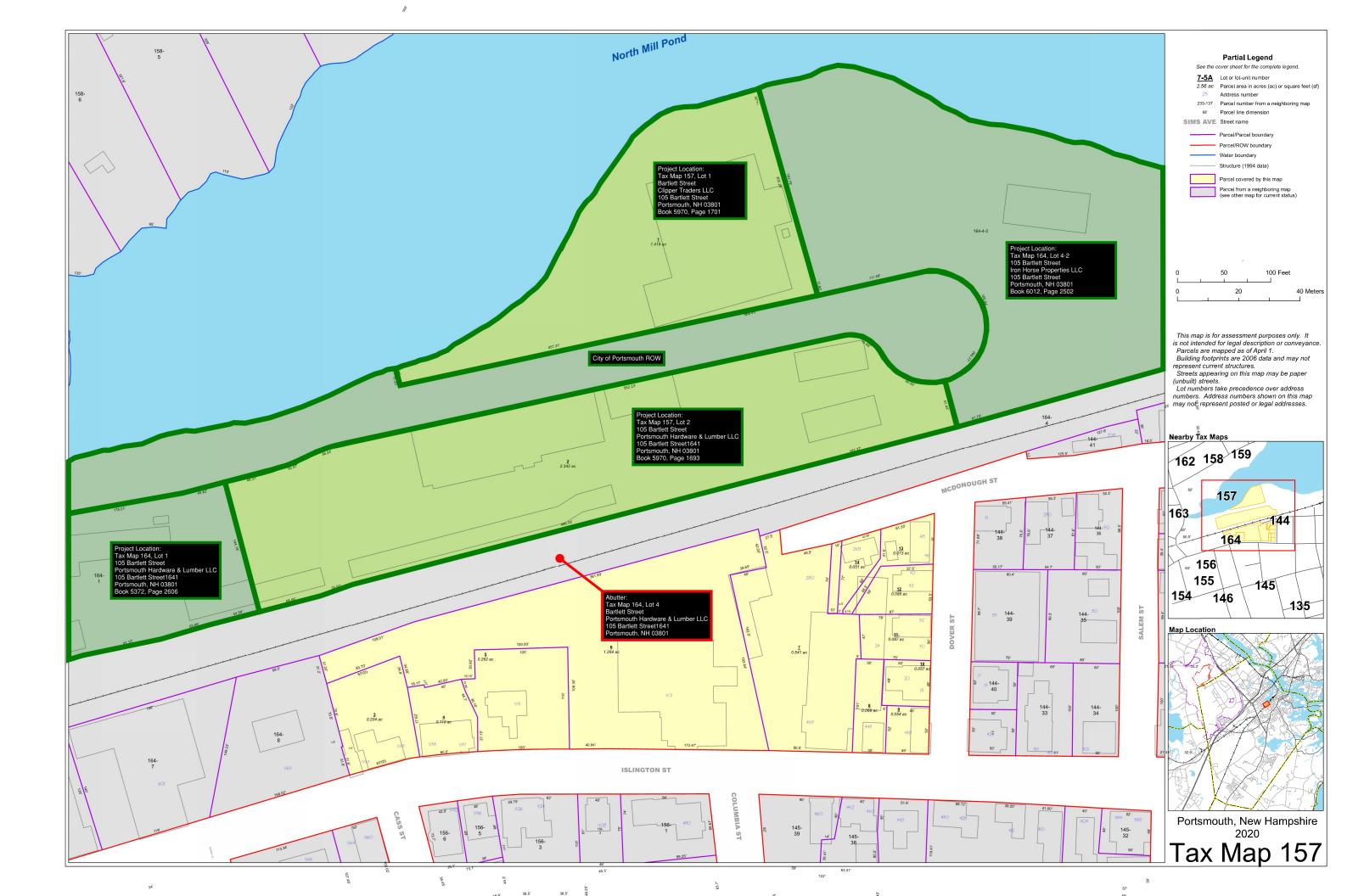
EPA

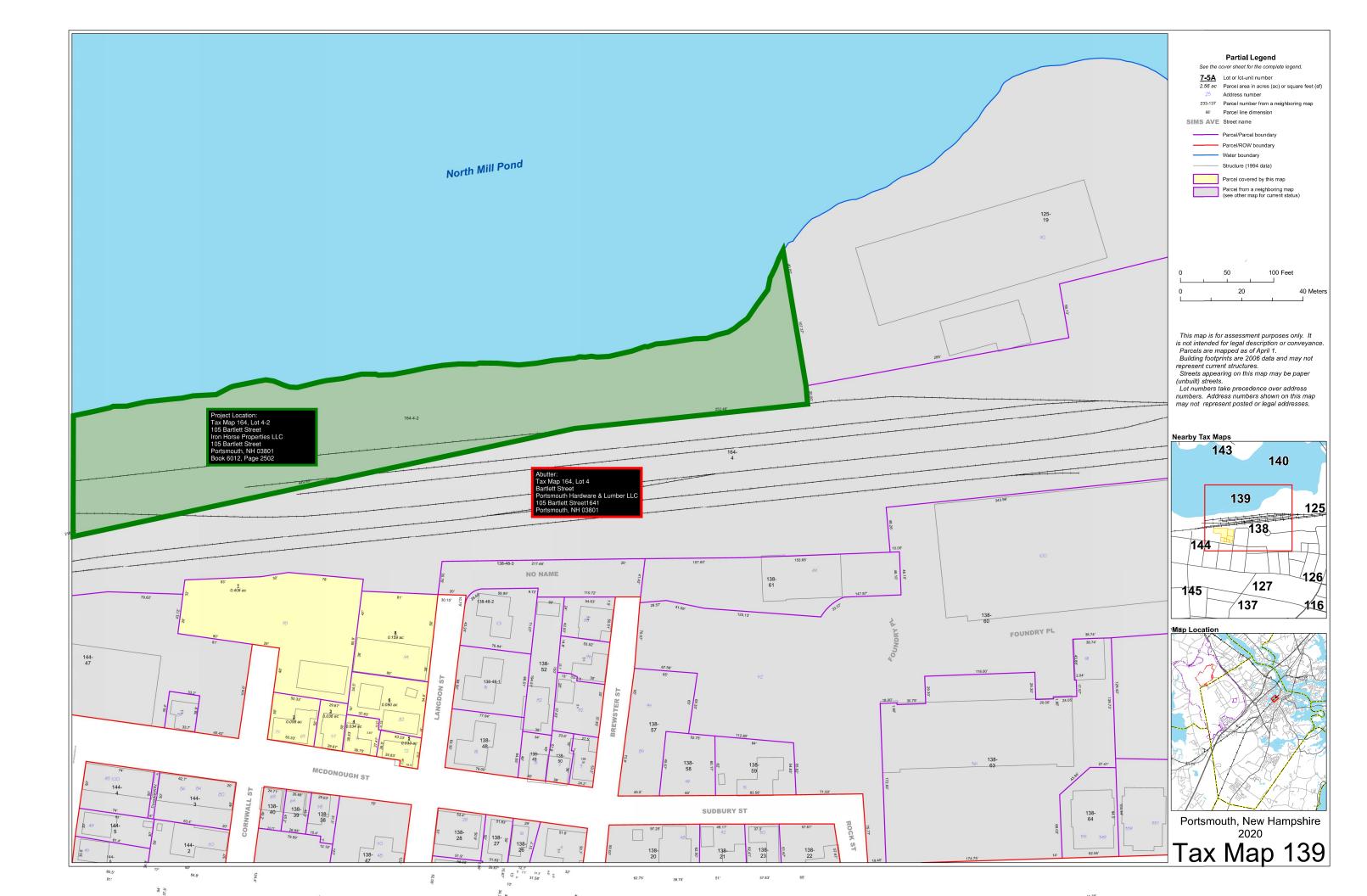
City of Portsmouth

Machi Melin

APPENDIX C







Abutters List

Proposed Multi-Family Development 105 Bartlett Street Portsmouth, New Hampshire

<u>ABUTTERS</u>	<u>MAP #</u>	LOT #
Slattery and Dumont LLC 66 Old Concord Turnpike #10 Barrington, NH 03825	158	13
Portsmouth Hardware & Lumber LLC 105 Bartlett Street Portsmouth, NH 03801 *Since this abutter is one of the property owners, notification	164 164 has been deen	2 4 ned unncessary.
OWNERS Clipper Traders LLC 105 Bartlett Street Portsmouth, NH 03801	157	1
Portsmouth Hardware & Lumber LLC 105 Bartlett Street Portsmouth, NH 03801	157 164	2
Iron Horse Properties LLC 105 Bartlett Street Portsmouth, NH 03801	164	4-2

APPLICANTS

Iron Horse Properties LLC 105 Bartlett Street Portsmouth, NH 03801

MUNICIPALITY

City of Portsmouth Planning Department 1 Junkins Ave Portsmouth, NH 03801

ENGINEER

Tighe & Bond, Inc. 177 Corporate Drive Portsmouth, NH 03801

PUBLIC NOTICE

NOTICE OF INTENT TO FILE

Please take notice that Iron Horse Properties, LLC, applicant, is intending to file a Wetland Permit with the New Hampshire Department of Environmental Services for proposed site improvements at 105 Bartlett Street in Portsmouth, New Hampshire.

The proposed development consists of three (3) multi-family apartment buildings including a total of 152 dwelling units. The project includes associated site improvements that consist of the private road cul-de-sac, surface parking, pedestrian access, utilities, lighting, landscaping and stormwater management systems. An Alteration of Terrain Permit (AoT-2026) was issued by NHDES on September 29, 2021.

The proposed project will result in 1,528 SF of permanent impacts to a small forested wetland, 209 SF of permanent impacts to the tidal wetland, and 34,639 SF of permanent impacts to the previously developed tidal buffer zone. Additionally, the project will result in 10,182 SF of temporary impacts to the previously developed tidal buffer zone.

Plans and details of this application are on file, for your review, at the City of Portsmouth Clerk's Office, 1 Junkins Avenue, Portsmouth, New Hampshire (8:00am - 4:30pm) or at the NHDES Wetlands Bureau, 29 Hazen Drive, Concord, New Hampshire (8:00am - 4:00pm).

(C-0960-006_Abutters notice.docx)

UNITED STATES				
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Photographic Log



Client: Iron Horse Properties, LLC Job Number: C-0960-006

Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 1 | **Date:** 3/25/2022 | **Direction Taken:** South

Description: Entrance to the site along Bartlett Street.



Photograph No.: 2 Date: 3/25/2022 Direction Taken: Northeast

Description: Paved buffer and eroding banks along North Mill Pond at low tide along the commercial area in southwest portion of the site.





Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 3 | Date: 3/25/2022 | Direction Taken: Southeast

Description: Lumber yard between Design Center and Ricci Lumber.



Photograph No.: 4 Date: 3/25/2022 Direction Taken: Northeast

Description: Paved buffer along North Mill Pond along the commercial area in southwest portion of the site.





Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 5 Date: 3/25/2022 Direction Taken: Northeast

Description: Paved parking area in wetland buffer at Great Rhythm Brewing Company.



Photograph No.: 6 Date: 3/25/2022 **Direction Taken:** East

Description: Remains of the railroad roundhouse and disturbed forest buffer northeast of the Great Rhythm Brewing Company.





Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 7 Date: 3/25/2022 Direction Taken: East

Description: Wetland dominated by Norway maple and red osier dogwood within the old railroad turntable approximately six feet below grade.



Photograph No.: 8 Date: 3/25/2022 Direction Taken: South

Description: Inside the remains of the railroad turntable.





Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 9 Date: 3/25/2022 Direction Taken: West

Description: Outside wall and foundations of remains of railroad roundhouse.



Photograph No.: 10 Date: 3/25/2022 Direction Taken: North

Description: Inside the remains of the railroad roundhouse.





Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 11 Date: 3/25/2022 Direction Taken: Northeast

Description: Compacted gravel are around the rear of existing 2 story brick building.



Photograph No.: 12 | Date: 3/25/2022 | Direction Taken: Southwest

Description: Compacted gravel area around the rear of the existing 2 story brick building.





Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 13 | **Date:** 3/25/2022 | **Direction Taken:** South

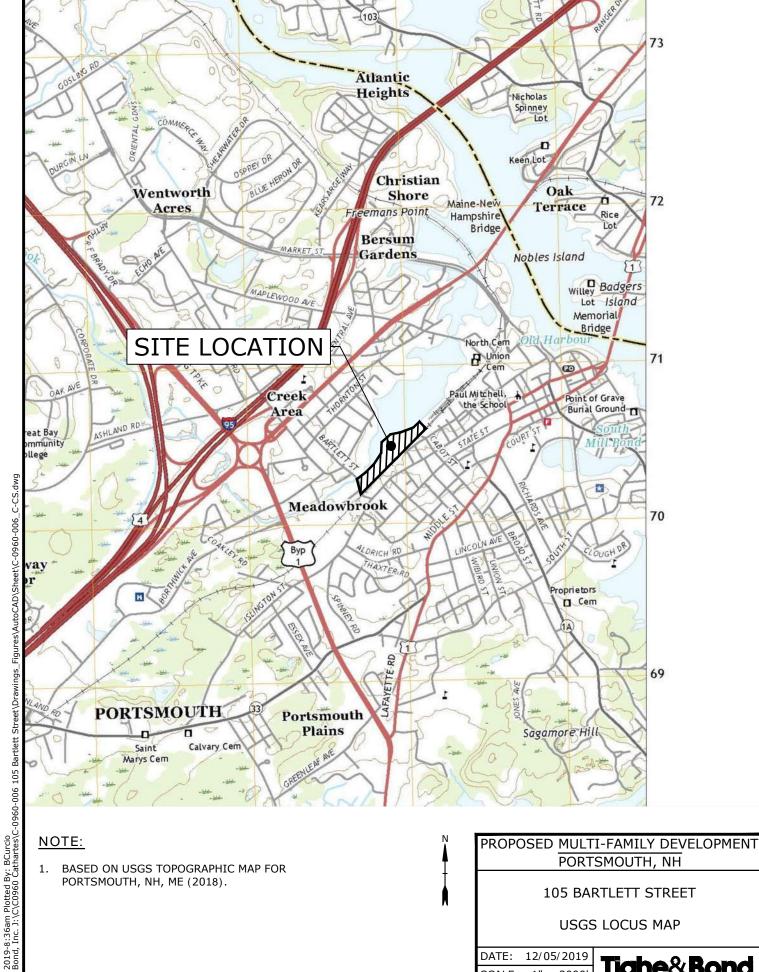
Description: Compacted gravel area around the side of the existing 2 story brick building.



Photograph No.: 14 Date: 3/25/2022 Direction Taken: Southwest

Description: Compacted gravel area in front of existing 2 story brick building, former contractor storage yard.





105 BARTLETT STREET

USGS LOCUS MAP

DATE: 12/05/2019

SCALE: 1'' = 2000'FIGURE: 1

Engineers | Environmental Specialists



(m) HOTHE PHONIX CONNERS NOBERT # 18051906 12/21/2018 02:19:25 PM Book 5970 Page 1701 Page 1 of 7 Register of Deeds, Rockingham County

Carey ann Seasey

LCHIP ROA434150 25.00
TRANSFER TAX RO085122 576.00
RECORDING 34.00
SURCHARGE 2.00

RELEASE DEED

The BOSTON AND MAINE CORPORATION, a corporation duly organized and existing under the laws of the State of Delaware, with offices at Iron Horse Park, North Billerica, Middlesex County, Massachusetts (the "Grantor") in consideration of Thirty-Eight Thousand Three Hundred Eighty-One and 00/100 Dollars (\$38,381.00) paid to it by CLIPPER TRADERS, LLC, with a mailing address of 105 Bartlett Street, Portsmouth, New Hampshire 03801 (the "Grantee") hereby grants to the Grantee all the Grantor's right, title and interest, without any warranties or covenants of title whatsoever, in a certain parcel of land, and the buildings, bridges, structures, crossings, fixtures and improvements thereon, if any, situated in Portsmouth, County of Rockingham, State of New Hampshire (the "Premises") described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF BY THIS REFERENCE.

This conveyance is subject to the following reservations, conditions, covenants and agreements:

- 1. This conveyance is made without granting any right of way, either by necessity or otherwise, over any remaining land or location of the Grantor.
- 2. The Grantor hereby reserves a permanent, exclusive right of way and easement in, on, over, under, across and through the Premises for the purpose of accessing, constructing, installing, operating, maintaining, modifying, repairing, replacing, relocating and removing a telecommunications system or other system for transmission of intelligence or information by any means, whether now existing or hereafter devised, including such poles, pipes, wires, fibers, fiber optic cables, repeater stations, attachments, appurtenances, structures or other equipment and property of any description necessary or useful for the same

(the "Telecommunications Easement"). The Grantor further reserves the right to freely lease, license, mortgage, assign, pledge and otherwise alienate the Telecommunications Easement. The Grantee hereby covenants with the Grantor to recognize the Telecommunications Easement and, without the payment of any further consideration, to execute, acknowledge and deliver such instruments suitable for recording with the registry of deeds as the Grantor may reasonably require to acknowledge title to the Telecommunications Easement in the Grantor. The Grantor covenants to reasonably repair and restore the surface of the easement area after any work.

- 3. The Grantor excepts from this conveyance any and all railroad tracks, railroad track materials (including, but not limited to, ties, connections, switches and ballast) and/or related equipment of any description located in whole or in part within the Premises (the "Trackage") and this conveyance is subject to the right of the Grantor to enter the Premises from time to time and at any and all times within the ninety (90) day period commencing with and subsequent to the date of delivery of this deed, with such men, equipment and materials as, in the reasonable opinion of the Principal Engineering Officer of the Grantor, are necessary for the removal of the Trackage. Days during the months of December, January, February and March shall not be included in the aforesaid ninety (90) day period. If the Trackage is not removed from the Premises by the expiration of said ninety (90) day period, the Trackage shall be deemed abandoned by the Grantor and shall then become the property of the Grantee.
- 4. The Grantor excepts from this conveyance any and all advertising signs and/or billboards located upon the Premises which are not owned by the Grantor. Furthermore, this conveyance is subject to the right of the owners of said signs and/or billboards to go upon the Premises and remove them within ninety (90) days from the date of delivery of this deed.
- 5. By the acceptance of this deed and as part consideration therefor, the Grantee hereby assumes any and all agreements, covenants, obligations and liabilities of the Grantor in respect to any underground facilities, drainage culverts, walls, crossings and/or other structures of any nature and description located in whole or in part within the Premises.
- 6. By the acceptance of this deed and as part consideration therefor, the Grantee agrees to irrevocably waives, gives up and renounces any and all claims or causes of action against the Grantor in respect of claims, suits and/or enforcement actions (including any administrative or judicial proceedings and any remedial, removal or response actions) ever asserted, threatened, instituted or requested by any person and/or governmental

agency on account of: (a) any release of oil or hazardous materials or substances of any description on, upon or into the Premises in contravention of any ordinance, law or statute (including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. Section 9601, et seq., as amended); and (b) any and all damage to real or personal property, natural resources and/or harm or injury to persons alleged to have resulted from such release of oil or hazardous materials or substances.

- 7. By the acceptance of this deed and as part consideration therefor, the Grantee hereby agrees to build and forever maintain fences (together with any necessary gates), suitable to the Principal Engineering Officer of the Grantor, along the boundaries of the Premises which are common to remaining land or location of the Grantor (the "Fences"), if Fences are ever required in the sole and reasonable opinion of said Principal Engineering Officer; provided, however, that such requirement shall be subject to Grantee's receipt of all necessary, final and unappealable, municipal permits and approvals to erect such fence on or immediately adjacent (within 2 feet) to the common property boundary.
- 8. This conveyance is subject to the following restriction for the benefit of other land or location of the Grantor, to wit: that from the date of delivery of this deed, the Grantor shall not be liable to the Grantee or any lessee or user of the Premises (or any part thereof) for any damage to any buildings or property upon them caused by fire, whether communicated directly or indirectly by or from locomotive engines of any description upon the railroad operated by the Grantor, or otherwise.
- 9. By the acceptance of this deed and as part consideration therefor, the Grantee hereby agrees to make no use of the Premises which, in the sole and reasonable opinion of the Principal Engineering Officer of the Grantor, adversely affects, increases or decreases drainage to, from, upon or in any remaining land or location of the Grantor. The Grantee agrees to indemnify and save the Grantor harmless from and against any and all loss, cost, damage or expense including, but not limited to, the cost of defending all claims and/or suits for property damage, personal injury or death arising out of or in any way attributable to any breach of the foregoing covenant
- 10. The Grantor excepts from this conveyance any and all overhead, surface or underground signal and communication line facilities of the Grantor located within the limits of the Premises and this conveyance is subject to the Grantor's use of any such facilities in their present locations and entry upon the Premises from time to time to maintain, repair, replace, renew, relay or remove such facilities.

- 11. Whenever used in this deed, the term "Grantor" shall not only refer to the **BOSTON AND MAINE CORPORATION**, but also its successors, assigns and affiliates and the term "Grantee" shall not only refer to the above-named Grantee, but also the Grantee's successors, assigns and grantees, as the case maybe.
- 12. The several exceptions, reservations, conditions, covenants and agreements contained in this deed shall be deemed to run with the land and be binding upon the Grantee forever. In addition to the acceptance and recording of this deed, the Grantee hereby signifies assent to the said several exceptions, reservations, conditions, covenants and agreements, by joining in its execution.

IN WITNESS WHEREOF, the said BOSTON AND MAINE CORPORATION has caused this release deed to be executed in its name and its corporate seal to be hereto affixed by David A. Fink, its President, thereunto duly authorized this of December, 2018.

GRANTOR: BOSTON AND MAINE CORPORATION

Bv.

David A. Fink, Presiden

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss.

DEC. 17, 2018

On this 17th day of December, 2018, before me, the undersigned notary public, personally appeared David A. Fink, President as aforesaid, proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

Notary Public

My Commission Expires:

GRANTEE: CLIPPER TRADERS, LLC

Witness

By: <u>Edward R. Hayes, Manage</u>

STATE OF NEW HAMPSHIRE

Rockingham,ss.

December 21,2018

The foregoing instrument was acknowledged before me on this 21st day of December, 2018, by Edward R. Hayes, as Manager of Clipper Traders, LLC, duly authorized.

Justice of the Peace/Notary Public

My Commission Expires:

EXHIBIT "A"

To be transferred from Boston and Maine Corporation to Clipper Traders, LLC Portsmouth, NH

Beginning at a spike at the base of a bent iron pipe at the northeasterly corner of land now or formerly of Clipper Traders, LLC; thence running across land now or formerly of the Boston and Maine Corporation the following five (5) courses: S 46°54'17" E a distance of 11.80 feet to a point; thence S 46°49'03" W a distance of 457.31 feet; thence N 46°49'43" W a distance of 11.20 feet; thence continuing on the last bearing 12 feet, more or less, to the mean high water line of North Mill Pond, so called, thence turning and running in a northeasterly direction along the mean high water line said North Mill Pond 41 feet more or less to land now or formerly of Clipper Traders, LLC; thence turning and running along land of Clipper traders a distance of 74 feet, more or less, to an iron rod; thence continuing along the land now or formerly of said Clipper Traders, LLC the following two (2) courses, N 52°50'28" E a distance of 170.00 feet to an iron rod; thence N 43°16'48" E a distance of 175.00 feet to a spike at the base of a bent iron pipe and the point of beginning. The above described parcel of land containing 5,483 square feet, more or less, is shown on a plan prepared by Ambit Engineering, Inc., dated DECEMBER 2018, recorded with the Rockingham County Registry of Deeds in Plan Book Plan D 41242.

HOPFUE PHOEN & GOAMLEY + ROBERUS.

18051905 12/21/2018 02:19:24 PM Book 5970 Page 1693 Page 1 of 8 Register of Deeds, Rockingham County

Carey ann Seacey

LCHIP ROA434149
TRANSFER TAX RO085121
RECORDING
SURCHARGE

25.00 11,600.00 38.00 2.00

RELEASE DEED

The BOSTON AND MAINE CORPORATION, a corporation duly organized and existing under the laws of the State of Delaware, with offices at Iron Horse Park, North Billerica, Middlesex County, Massachusetts (the "Grantor") in consideration of Seven Hundred Seventy-Three Thousand Three Hundred Thirty-Nine and 00/100 Dollars (\$773,339.00) paid to it by PORTSMOUTH LUMBER & HARDWARE, LLC, with a mailing address of 105 Bartlett Street, Portsmouth, New Hampshire 03801 (the "Grantee") hereby grants to the Grantee all the Grantor's right, title and interest, without any warranties or covenants of title whatsoever, in a certain parcel of land, and the buildings, bridges, structures, crossings, fixtures and improvements thereon, if any, situated in Portsmouth, County of Rockingham, State of New Hampshire (the "Premises") described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF BY THIS REFERENCE.

This conveyance is subject to the following reservations, conditions, covenants and agreements:

- 1. This conveyance is made without granting any right of way, either by necessity or otherwise, over any remaining land or location of the Grantor.
- 2. The Grantor hereby reserves a permanent, exclusive right of way and easement in, on, over, under, across and through the Premises for the purpose of accessing, constructing, installing, operating, maintaining, modifying, repairing, replacing, relocating and removing a telecommunications system or other system for transmission of intelligence or information by any means, whether now existing or hereafter devised, including such poles, pipes, wires, fibers, fiber optic cables, repeater stations, attachments, appurtenances, structures or other

equipment and property of any description necessary or useful for the same (the "Telecommunications Easement"). The Grantor further reserves the right to freely lease, license, mortgage, assign, pledge and otherwise alienate the Telecommunications Easement. The Grantee hereby covenants with the Grantor to recognize the Telecommunications Easement and, without the payment of any further consideration, to execute, acknowledge and deliver such instruments suitable for recording with the registry of deeds as the Grantor may reasonably require to acknowledge title to the Telecommunications Easement in the Grantor. The Grantor covenants to reasonably repair and restore the surface of the easement area after any work.

- The Grantor excepts from this conveyance any and all railroad 3. tracks, railroad track materials (including, but not limited to, ties, connections, switches and ballast) and/or related equipment of any description located in whole or in part within the Premises (the "Trackage") and this conveyance is subject to the right of the Grantor to enter the Premises from time to time and at any and all times within the ninety (90) day period commencing with and subsequent to the date of delivery of this deed, with such men, equipment and materials as, in the reasonable opinion of the Principal Engineering Officer of the Grantor, are necessary for the removal of the Trackage. Days during the months of December, January, February and March shall not be included in the aforesaid ninety (90) day period. If the Trackage is not removed from the Premises by the expiration of said ninety (90) day period, the Trackage shall be deemed abandoned by the Grantor and shall then become the property of the Grantee.
- 4. The Grantor excepts from this conveyance any and all advertising signs and/or billboards located upon the Premises which are not owned by the Grantor. Furthermore, this conveyance is subject to the right of the owners of said signs and/or billboards to go upon the Premises and remove them within ninety (90) days from the date of delivery of this deed.
- 5. By the acceptance of this deed and as part consideration therefor, the Grantee hereby assumes any and all agreements, covenants, obligations and liabilities of the Grantor in respect to any underground facilities, drainage culverts, walls, crossings and/or other structures of any nature and description located in whole or in part within the Premises.
- 6. By the acceptance of this deed and as part consideration therefor, the Grantee agrees to irrevocably waives, gives up and renounces any and all claims or causes of action against the Grantor in respect of claims, suits and/or enforcement actions (including any administrative or judicial proceedings and any remedial, removal or response actions) ever asserted,

threatened, instituted or requested by any person and/or governmental agency on account of: (a) any release of oil or hazardous materials or substances of any description on, upon or into the Premises in contravention of any ordinance, law or statute (including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. Section 9601, et seq., as amended); and (b) any and all damage to real or personal property, natural resources and/or harm or injury to persons alleged to have resulted from such release of oil or hazardous materials or substances.

- 7. By the acceptance of this deed and as part consideration therefor, the Grantee hereby agrees to build and forever maintain fences (together with any necessary gates), suitable to the Principal Engineering Officer of the Grantor, along the boundaries of the Premises which are common to remaining land or location of the Grantor (the "Fences"), if Fences are ever required in the sole and reasonable opinion of said Principal Engineering Officer; provided, however, that such requirement shall be subject to Grantee's receipt of all necessary, final and unappealable, municipal permits and approvals to erect such fence on or immediately adjacent (within 2 feet) to the common property boundary.
- 8. This conveyance is subject to the following restriction for the benefit of other land or location of the Grantor, to wit: that from the date of delivery of this deed, the Grantor shall not be liable to the Grantee or any lessee or user of the Premises (or any part thereof) for any damage to any buildings or property upon them caused by fire, whether communicated directly or indirectly by or from locomotive engines of any description upon the railroad operated by the Grantor, or otherwise.
- 9. By the acceptance of this deed and as part consideration therefor, the Grantee hereby agrees to make no use of the Premises which, in the sole and reasonable opinion of the Principal Engineering Officer of the Grantor, adversely affects, increases or decreases drainage to, from, upon or in any remaining land or location of the Grantor. The Grantee agrees to indemnify and save the Grantor harmless from and against any and all loss, cost, damage or expense including, but not limited to, the cost of defending all claims and/or suits for property damage, personal injury or death arising out of or in any way attributable to any breach of the foregoing covenant
- 10. The Grantor excepts from this conveyance any and all overhead, surface or underground signal and communication line facilities of the Grantor located within the limits of the Premises and this conveyance is subject to the Grantor's use of any such facilities in their present locations

and entry upon the Premises from time to time to maintain, repair, replace, renew, relay or remove such facilities.

- 11. Whenever used in this deed, the term "Grantor" shall not only refer to the **BOSTON AND MAINE CORPORATION**, but also its successors, assigns and affiliates and the term "Grantee" shall not only refer to the above-named Grantee, but also the Grantee's successors, assigns and grantees, as the case maybe.
- 12. The several exceptions, reservations, conditions, covenants and agreements contained in this deed shall be deemed to run with the land and be binding upon the Grantee forever. In addition to the acceptance and recording of this deed, the Grantee hereby signifies assent to the said several exceptions, reservations, conditions, covenants and agreements, by joining in its execution.

WITNESS WHEREOF. AND IN the said BOSTON MAINE CORPORATION has caused this release deed to be executed in its name and its corporate seal to be hereto affixed by David A. Fink, its President, thereunto duly 17h day of December, 2018. authorized this

> GRANTOR: BOSTON AND MAINE CORPORATION

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss.

day of December, 2018, before me, the undersigned notary public,

DEC. 17,2018

On this personally appeared David A. Fink, President as aforesaid, proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

My Commission Expires:

GRANTEES: PORTSMOUTH LUMBER & HARDWARE, LLC

Edward R. Hayes, Manager

STATE OF NEW HAMPSHIRE

Rockingham,ss.

December 21,2018

The foregoing instrument was acknowledged before me on this 2184 day of December, 2018, by Edward R. Hayes, as Manager of Portsmouth Lumber & Hardware, LLC, duly authorized.

Justice of the Peace/Notary Public

My Commission Expires:



Book: 5970 Page: 1699

EXHIBIT "A"

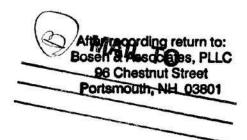
To be transferred from Boston and Maine Corporation to Portsmouth Lumber and Hardware, LLC Portsmouth, NH

Beginning at a point on the northeasterly side of Bartlett Street, so called, said point being located 39.83 feet left of Station 2970+18.15 on the Boston and Maine Corporation Centerline of Location; thence running along the northeasterly side of said Bartlett Street N 13°40'31" W a distance of 66.68 feet to a point; thence turning and running along land now or formerly of Portsmouth Lumber and Hardware, LLC the following ten (12) courses, on a curve turning to the left with an arc length of 111.58 feet. with a radius of 993.54 feet, said curve having a chord bearing of N 46°41'16" E, with a chord length of 111.52 feet; thence on a curve turning to the left with an arc length of 40.77 feet, with a radius of 993.54 feet, said curve having a chord bearing of N 42°17'42" E, with a chord length of 40.77 feet; thence on a curve turning to the left with an arc length of 47.40 feet, with a radius of 1101.05 feet, said curve having a chord bearing of N 39°52'54" E, with a chord length of 47.40 feet; thence on a curve turning to the right with an arc length of 12.23 feet, with a radius of 1370.56 feet, said curve having a chord bearing of N 38°54'14" E, with a chord length of 12.23 feet; thence on a curve turning to the right with an arc length of 56.34 feet, with a radius of 1370.56 feet, said curve having a chord bearing of N 40°20'14" E, with a chord length of 56.34 feet; thence N 41°30'53" E a distance of 170.76 feet; thence N 48°29'11" W a distance of 42.16 feet; S 53°33'53" W a distance of 121.62 feet; N 38°21'53" W a distance of 11.17 feet; thence on a curve turning to the right with an arc length of 42.05 feet, with a radius of 816.13 feet, said curve having a chord bearing of S 62°52'35" W, with a chord length of 42.04 feet; thence turning and running over and across land now or formerly of said Boston and Maine Corporation the following eighteen (18) courses, N 48°38'22" E a distance of 160.53 feet; thence N 44°10'56" E a distance of 45.82 feet; thence N 44°29'34" E a distance of 49.31 feet; thence on a curve turning to the left with an arc length of 42.87 feet, with a radius of 200.00 feet, said curve having a chord bearing of N 38°21'07" E, with a chord length of 42.79 feet; thence on a curve turning to the right with an arc length of 38.24 feet, with a radius of 150.00 feet, said curve having a chord bearing of N 39°30'52" E, with a chord length of 38.14 feet; thence N 46°49'03" E a distance of 552.23 feet; thence on a curve turning to the right with an arc length of 45.66 feet, with a radius of 35.00 feet, said curve having a chord bearing of N 84°11'20" E, with a chord length of 42.49 feet; thence on a curve turning to the left with an arc length of 80.92 feet, with a radius of 60.00 feet, said curve having a chord bearing of N 82°55'23" E, with a chord length of 74.93feet; thence S 45°30'58" E a distance of 51.44 feet; thence S 44°29'02" W a distance of 182.37 feet; thence S 44°19'01" W a distance of 486.35 feet; thence S 40°03'53" W a distance of 35.57 feet; thence S 44°17'25" W a distance of 112.65 feet (being 68.06 feet and 44.59 feet); thence S 43°15'05" W a distance of 63.86 feet; thence S 46°55'09" W a distance of 87.10 feet; thence S 43°22'17" W a distance of 147.08 feet (being 86.86 feet and 60.22 feet); thence S 39°31'55" W a distance of 38.45 feet; thence S 45°20'50" W a distance of 138.59 feet to the northeasterly side of said Bartlett Street and the point of beginning. The

Book: 5970 Page: 1700

above described parcel of land containing 110,477 square feet, more or less, is shown on a plan prepared by Ambit Engineering, Inc., dated DECEMBEL DOIS, recorded with the Rockingham County Registry of Deeds in Plan Book Plan Plan and excludes any property previously conveyed to the Grantee by deed from Ricci Supply Company, Inc. dated October 30, 2012 and recorded in the Rockingham County Registry of Deeds at Book 5372, Page 2606, being Parcels 2 and 3 of said deed.

Return to:







WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS: That, Ricci Supply Company, Inc., a New Hampshire corporation of 105 Bartlett Street, Portsmouth, NH 03801, for consideration paid grant(s) to Portsmouth Lumber & Hardware, LLC, a New Hampshire limited liability Company, of with an address of c/o Bosen & Associates, PLLC 96 Chestnut Street, Portsmouth, NH 03801, with WARRANTY COVENANTS:

Parcel 1:

A certain piece or parcel of land situated in Portsmouth, County of Rockingham and State of New Hampshire located on the Easterly side of Bartlett Street, so called, in Portsmouth, and being 3 parcels of land as shown on a plan entitled "Subdivision of Land, Portsmouth, New Hampshire, for George and Pauline J. Frisbee" dated December, 1976, John W. Durgin, Civil Engineers, said plan being recorded in the Rockingham County Registry of Deeds as Plan #C-6587, and said parcels being bounded and described as follows:

Beginning in the Northwesterly corner of said parcel at land now or formerly of the Boston & Maine Railroad; thence running North 53° 52' 15" East, 55.91 feet to a point; thence running by a curve to the right having a radius of 448.97 feet a distance of 94.55 feet, more or less, to a point; thence running by a curve to the left having a radius of \$16.11 feet a distance of 58.22 feet, more or less to a set iron pin; thence turning and running South 35° 58' 45" East a distance of 13.19 feet to a set iron pin; thence turning and running North 54° 01' 15" East a distance of 121.62 feet, more or less, to land of the Boston & Maine Railroad; thence turning and running South 48° 01' 45" East a distance of 42.16 feet to a set iron pin at land of the Boston & Maine Railroad; thence turning and running South 41° 58' 15" West, by and along land of the Boston & Maine Railroad a distance of 132 feet, more or less, to a set iron pin; thence continuing South 41° 58' 15" West a distance of 38.76 feet to a point; thence turning and running by a curve to the left having a radius of 1,370.60 feet a distance of 56.34 feet to a set iron pin at land now or formerly of Ricci Construction Company a distance of 27 feet to a set drill hole; thence turning and running South 45° 56' 05" West a distance of 102.50 feet to a point; thence turning and running North 41° 10' 40" West a distance of 10 feet to a point; thence turning and running South 49° 15' 25" West by and along said land of Frisbee a distance of 65.69 feet to a point on the Southerly sideline of Bartlett Street; thence turning and running by a curve to the left having a radius of 288.61 feet by and along the Easterly sideline of Bartlett Street a distance of 116.21 feet to a set iron pin.

This deed is given subject to and together with the right to use in common with others the 15 foot right of way as shown on said plan.

Meaning and intending to describe and convey all of the premises described in Deed from George E. Frisbee dated November 15, 1984 and recorded in the Rockingham County Registry of Deeds in Book 2520, Page 1564.

The above description is a re-draft of the same description set forth in the deed recorded at Book 2520, Page 1564. That description inadvertently included Parcel #2 on the aforesaid plan which parcel had previously been conveyed to Arthur W. and Carol J. Frisbee, by deed dated January 21, 1977 and recorded in the Rockingham County Registry of Deeds at Book 2274, Page 1241.

Parcel 2:

A certain piece or parcel of land situated in Portsmouth, County of Rockingham and State of New Hampshire, bounded and described as follows:

Beginning at remaining land of the Boston and Maine Railroad at a point 124.02 feet North 43° 03' 05" West from Station 2975 + 36.23 on the center line of location of the main line "East Route", so called, of the Portland Division of said railroad; thence running by said remaining land of said Railroad on six (6) courses as follows: North 43° 03' 05" West 52.60 feet, North 46° 56' 55" East 308.00 feet, South 43° 03' 05" East 65.02 feet, South 43° 30' 15" West 40.29 feet, Southwesterly on a curve to the right having a radius of 383.07 feet, 99.58 feet and South 58° 23' 55" West 70.28 feet to the point of beginning, be all of said measurement more or less, said parcel containing about 20,949 square feet and being shown upon plan marked "Land in Portsmouth, NH Boston and Maine Railroad-to-Erminio A. Ricci J. F. Kerwin Eng'r. of Design May, 1957", recorded in the Rockingham County Registry of Deeds.

Together with a right of way to Bartlett Street as set forth in deeds recorded at Book 1435, Page 485 and Book 1436, Page 371.

And this conveyance is made subject to such other restrictions, conditions and covenants as described in Deed of Boston and Maine Railroad to Erminio A. Ricci dated June 21, 1957 and recorded in the Rockingham County Registry of Deeds at Book 1435, Page 485.

Meaning and intending to describe and convey the same premises from Erminio A. Ricci dated June 28, 1957 and recorded in the Rockingham County Registry of Deeds at Book1436, Page 371.

Parcel 3:

A certain piece or parcel of land located off Bartlett Street, Portsmouth, County of Rockingham and State of New Hampshire, and being further bounded and described as follows:

Beginning at land of the Boston and Maine Railroad at a point 43° 03' 05" West, ninety three and six hundredths (93.06) feet from Station 2978 plus 44.79 on the center line of location of Portland Main Line (East) Boston Division of said Railroad; thence running North 43° 03' 05" West by land of Erminio A. Ricci, sixty five and two hundredths (65.02) feet to a point eight

Page 2 of 3

(8.00) feet Southeasterly from the Easterly track of a side trick of said Railroad; thence turning and running North 46° 56' 55" East one hundred and thirty two (132.00) feet to a point; thence turning and running South 43° 03' 05" East forty-nine (49.00) feet to a point; thence turning and running South 40° 01' 49" West one hundred thirty- two and ninety-six hundredths (132.96) feet to the point of beginning, the last three (3) courses all being by remaining land of said Railroad, be all of said measurements more or less, and containing about seven thousand five hundred and twenty five (7525) square feet of land as shown on a plan entitled A Land of Portsmouth, NH Boston and Maine Railroad – to – Erminio A. Ricci, J.F. Kewin Asst. Chief Engineer, Apr. 1960", which has been recorded in the Rockingham County Registry of Deeds at Plan #02612.

Subject to the conditions and exceptions as set forth in the deed from Boston and Maine Railroad to Erminio A. Ricci dated June 30, 1961 and recorded in the Rockingham County Registry of Deeds at Book1595, Page 87.

Meaning and intending to describe and convey the same premises conveyed to the Grantor herein by Deed from Joanne Grasso, Robert A. Ricci, Sr., Alice E. Hayes and Margaret Gagne dated February 12, 1999 and recorded in the Rockingham County Registry of Deeds in Book 3368, Page 2165.

Reference is made to a Deed from Henry M. Tidgwell and Lynn B. Tidgwell dated May 15, 2012 and recorded in the Cumberland County Registry of Deeds in Book 25942, Page 298.

Executed this 30 day of October, 2012.

Ricci Supply Company, Inc.

By: Edward R. Hayes, President

STATE of NEW HAMPSHIRE COUNTY of ROCKINGHAM

The foregoing instrument was acknowledged before me this day of October, 2012 by Edward R. Hayes, President of Ricci Supply Company, Inc. a New Hampshire corporation on behalf of the corporation.

CHRISTOPHER P. MULLIGAN
Justice of the Peace - New Hampshire
My Commission Expires January 30, 2013

Notary Public Justice of the Peace Commission expiration:



Hoefle Phoenix Gormley + Noberts 10 Bux 4480 Porkmonth NH 03803-04480 # 19023885 06/28/2019 01:40:28 PM Book 6012 Page 2502 Page 1 of 7 Register of Deeds, Rockingham County

CHIP ROA452140

LCHIP ROA452140
TRANSFER TAX RO089141 5,9
RECORDING
SURCHARGE

25.00 5,969.00 34.00 2.00

RELEASE DEED

The BOSTON AND MAINE CORPORATION, a corporation duly organized and existing under the laws of the State of Delaware, with offices at Iron Horse Park, North Billerica, Middlesex County, Massachusetts (the "Grantor") in consideration of Three Hundred Ninety-Seven Thousand Eight Hundred Fifty-Three and 50/100 Dollars (\$397,853.50) paid to it by IRON HORSE PROPERTIES, LLC with a mailing address of 105 Bartlett Street, Portsmouth, New Hampshire 03801, (the "Grantee") hereby grants to the Grantee all the Grantor's right, title and interest, without any warranties or covenants of title whatsoever, in a certain parcel of land, and the buildings, bridges, structures, crossings, fixtures and improvements thereon, if any, situated in Portsmouth, County Rockingham, State of New Hampshire (the "Premises") described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF BY THIS REFERENCE.

This conveyance is subject to the following reservations, conditions, covenants and agreements:

- 1. This conveyance is made without granting any right of way, either by necessity or otherwise, over any remaining land or location of the Grantor.
- 2. The Grantor hereby reserves a permanent, exclusive right of way and easement in, on, over, under, across and through the Premises for the purpose of accessing, constructing, installing, operating, maintaining, modifying, repairing, replacing, relocating and removing a telecommunications system or other system for transmission of intelligence or information by any means, whether now existing or hereafter devised, including such poles, pipes, wires, fibers, fiber optic cables, repeater stations, attachments, appurtenances, structures or other equipment and property of any description necessary or useful for the same

(the "Telecommunications Easement"). The Grantor further reserves the right to freely lease, license, mortgage, assign, pledge and otherwise alienate the Telecommunications Easement. The Grantee hereby covenants with the Grantor to recognize the Telecommunications Easement and, without the payment of any further consideration, to execute, acknowledge and deliver such instruments suitable for recording with the registry of deeds as the Grantor may reasonably require to acknowledge title to the Telecommunications Easement in the Grantor. The Grantor covenants to reasonably repair and restore the surface of the easement area after any work.

- 3. The Grantor excepts from this conveyance any and all railroad tracks, railroad track materials (including, but not limited to, ties, connections, switches and ballast) and/or related equipment of any description located in whole or in part within the Premises (the "Trackage") and this conveyance is subject to the right of the Grantor to enter the Premises from time to time and at any and all times within the ninety (90) day period commencing with and subsequent to the date of delivery of this deed, with such men, equipment and materials as, in the reasonable opinion of the Principal Engineering Officer of the Grantor, are necessary for the removal of the Trackage. Days during the months of December, January, February and March shall not be included in the aforesaid ninety (90) day period. If the Trackage is not removed from the Premises by the expiration of said ninety (90) day period, the Trackage shall be deemed abandoned by the Grantor and shall then become the property of the Grantee.
- 4. The Grantor excepts from this conveyance any and all advertising signs and/or billboards located upon the Premises which are not owned by the Grantor. Furthermore, this conveyance is subject to the right of the owners of said signs and/or billboards to go upon the Premises and remove them within ninety (90) days from the date of delivery of this deed.
- 5. By the acceptance of this deed and as part consideration therefor, the Grantee hereby assumes any and all agreements, covenants, obligations and liabilities of the Grantor in respect to any underground facilities, drainage culverts, walls, crossings and/or other structures of any nature and description located in whole or in part within the Premises.
- 6. By the acceptance of this deed and as part consideration therefor, the Grantee agrees to irrevocably waives, gives up and renounces any and all claims or causes of action against the Grantor in respect of claims, suits and/or enforcement actions (including any administrative or judicial proceedings and any remedial, removal or response actions) ever asserted, threatened, instituted or requested by any person and/or governmental

agency on account of: (a) any release of oil or hazardous materials or substances of any description on, upon or into the Premises in contravention of any ordinance, law or statute (including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. Section 9601, et seq., as amended); and (b) any and all damage to real or personal property, natural resources and/or harm or injury to persons alleged to have resulted from such release of oil or hazardous materials or substances.

- 7. By the acceptance of this deed and as part consideration therefor, the Grantee hereby agrees to build and forever maintain fences (together with any necessary gates), suitable to the Principal Engineering Officer of the Grantor, along the boundaries of the Premises which are common to remaining land or location of the Grantor (the "Fences"), if Fences are ever required in the sole and reasonable opinion of said Principal Engineering Officer; provided, however, that such requirement shall be subject to Grantee's receipt of all necessary, final and unappealable, municipal permits and approvals to erect such fence on or immediately adjacent (within 2 feet) to the common property boundary.
- 8. This conveyance is subject to the following restriction for the benefit of other land or location of the Grantor, to wit: that from the date of delivery of this deed, the Grantor shall not be liable to the Grantee or any lessee or user of the Premises (or any part thereof) for any damage to any buildings or property upon them caused by fire, whether communicated directly or indirectly by or from locomotive engines of any description upon the railroad operated by the Grantor, or otherwise.
- 9. By the acceptance of this deed and as part consideration therefor, the Grantee hereby agrees to make no use of the Premises which, in the sole and reasonable opinion of the Principal Engineering Officer of the Grantor, adversely affects, increases or decreases drainage to, from, upon or in any remaining land or location of the Grantor. The Grantee agrees to indemnify and save the Grantor harmless from and against any and all loss, cost, damage or expense including, but not limited to, the cost of defending all claims and/or suits for property damage, personal injury or death arising out of or in any way attributable to any breach of the foregoing covenant.
- 10. The Grantor excepts from this conveyance any and all overhead, surface or underground signal and communication line facilities of the Grantor located within the limits of the Premises and this conveyance is subject to the Grantor's use of any such facilities in their present locations and entry upon the Premises from time to time to maintain, repair, replace, renew, relay or remove such facilities.

- 11. Whenever used in this deed, the term "Grantor" shall not only refer to the **BOSTON AND MAINE CORPORATION**, but also its successors, assigns and affiliates and the term "Grantee" shall not only refer to the above-named Grantee, but also the Grantee's successors, assigns and grantees, as the case maybe.
- 12. The several exceptions, reservations, conditions, covenants and agreements contained in this deed shall be deemed to run with the land and be binding upon the Grantee forever. In addition to the acceptance and recording of this deed, the Grantee hereby signifies assent to the said several exceptions, reservations, conditions, covenants and agreements, by joining in its execution.

IN WITNESS WHEREOF, the said BOSTON AND MAINE CORPORATION has caused this release deed to be executed in its name and its corporate seal to be hereto affixed by David A. Fink, its President, thereunto duly authorized this 2577 day of June, 2019.

GRANTOR: BOSTON AND MAINE CORPORATION

ho:

By: Nac Q fr

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss.

b/25 ,2019

On this 25 day of TUNE, 2019, before me, the undersigned notary public, personally appeared David A. Fink, President as aforesaid, proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

My Commission Expires

GRANTEE: IRON HORSE PROPERTIES, LLC

Witness

By:___

STATE OF NEW HAMPSHIRE

Rækingham ,ss.

June 28 ,2019

On this 28th day of ware , 2019, before me, the undersigned notary public, personally appeared Edward Run, , , , , , , , , , , , as aforesaid, proved to me through satisfactory evidence of identification, which was a New Hampshire driver's license, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

Notary Public

My Commission Expires:

EXHIBIT "A"

Boston and Maine Corporation to Iron Horse Properties, LLC

> Conveyance of Land in Portsmouth, NH

Beginning at a point located 84.90 feet left of Station 2997+56.71 on the Boston and Maine Corporation Centerline of Location; thence turning and running over and across land now or formerly of said Boston and Maine Corporation the following three (2) courses, S 43°02'53" W a distance of 252.48 feet to a point; thence S 36°51'07" W a distance of 449.80 feet to a point at land of Iron Horse Properties, LLC, said point being 36.35 feet left of Station 2990+57.06 on the Boston and Maine Corporation Centerline of Location; thence turning and running along land of Iron Horse Properties, LLC N 48°48'48" W a distance of 105.59 feet to an iron rod, and continuing along the same course 34 feet +/- to the mean high water line of the North Mill Pond; thence turning and running 787 feet more or less along the mean high water line of said North Mill Pond to a point at land of the David F. Mahoney Marital OTIP Trust of 1999 at the mean high water line; thence turning and running along land of the Mahoney Trust S 50°34'45" E a distance of 40 feet more or less to an iron rod set; thence continuing along land of the Mahoney Trust S 50°34'45" E a distance of 107.37 feet to a point at land of the Boston and Maine Corporation; thence running across land of the Boston and Maine Corporation S 46°57'07" E a distance of 20.00 feet to the point of beginning. The above described parcel of land having an area of 72,337 square feet, more or less, as shown on plan entitled "Lot Line Relocation Plan Tax Map 164 - Lots 4 & 4-2" dated April 2019, prepared by Ambit Engineering, Inc. and recorded with Rockingham County Registry of Deeds as plan number D-41570.

Owner's Letter of Authorization

This letter is to authorize <u>Iron Horse Properties</u>, <u>LLC</u> (Applicant/Owner) to represent the interest of <u>Clipper Traders</u>, <u>LLC</u> (owner) in all site design and permitting matters for the proposed development project located at 105 Bartlett Street in Portsmouth, New Hampshire on parcels of land identified as Tax Map 157 Lot 1. This authorization shall include any required signatures for local, state and federal permit applications.

E. R. Hayes	Edward Hayer, member	15 Apr 20
Signature	Print Name C.T.	Date
I little	In bishtereti	4/15/20
Witness	Print Name	Date

Owner's Letter of Authorization

This letter is to authorize <u>Iron Horse Properties</u>, <u>LLC</u> (Applicant/Owner) to represent the interest of <u>Portsmouth Lumber & Hardware</u>, <u>LLC</u> (owner) in all site design and permitting matters for the proposed development project located at 105 Bartlett Street in Portsmouth, New Hampshire on parcels of land identified as Tax Map 164 Lot 1 and Tax Map 157 Lot 2. This authorization shall include any required signatures for local, state and federal permit applications.

E. L. Hayes	Edward Hayer, Mgn.	15 APR 2.
Signature	Print Name P.L.H.	Date
Intertation	In hichtenstol.	4/15/20
Witness	Print Name	Date

Agent Letter of Authorization

I, Edward Hayes, Meron, of Iron Horse Properties, LLC (Applicant/Owner) hereby give
lighe & Bond (site/civil Engineer) permission to be my agent in all site design and
permitting matters for the proposed development project located at 105 Bartlett Street in
Portsmouth, New Hampshire on parcels of land identified as Tax Map 164 Lot 1 & Lot 4-2
and Tax Map 157 Lot 1 & Lot 2. This authorization shall include any required signatures for
local, state and federal permit applications.

New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

To: Colter Krzcuik, Tighe and Bond

177 Corporate Drive

Portsmouth, NH 03801

From: NH Natural Heritage Bureau

Date: 4/11/2022 (valid until 4/11/2023)

Re: Review by NH Natural Heritage Bureau of request submitted 3/29/2022

Permits: NHDES - Alteration of Terrain Permit, NHDES - Wetland Standard Dredge & Fill

- Major

NHB ID: NHB22-1202 Applicant: Iron Horse Properties, LLC,

Rob Simmons

Location: Portsmouth

105 Bartlett Street

Project

Description: The re-development of an existing property into a multi-use and

multi-family residential complex.

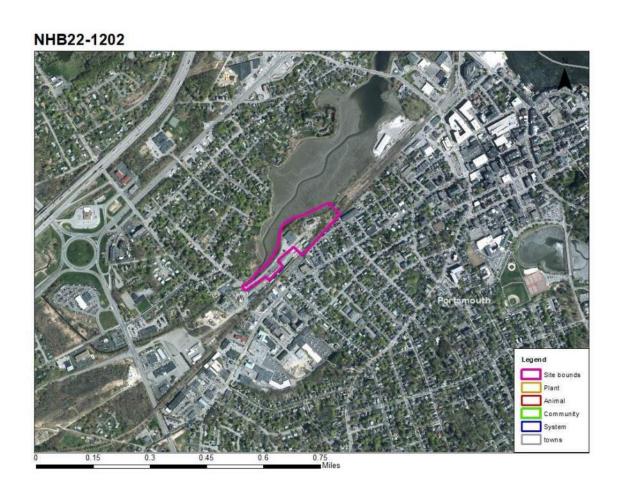
The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 2022-03-29 10:56:56 AM, and cannot be used for any other project.

Based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

MAP OF PROJECT BOUNDARIES FOR: NHB22-1202



Neil A. Hansen

From: Jeremy Degler

Sent: Tuesday, June 1, 2021 12:42 PM **To:** Neil A. Hansen; Patrick M. Crimmins

Cc: Leonard Lord

Subject: FW: NHFG TEWHA Review: NHB21-0540_Multi-Family Dev Portsmouth_AoT 210405-047

Good afternoon -

Please see below for the Fish & Game comments for the project at 105 Bartlett Street. They've requested that their conditions be incorporated into the sheet plans and provided for final review.

Let me know if you have any questions,

Jeremy Degler, PWS, CWS | Project Environmental Scientist

Tighe & Bond | 177 Corporate Drive | Portsmouth, NH 03801

Direct: 603.294.9211 | Cell: 603.732.7906

www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

Tighe&Bond

From: Doperalski, Melissa < Melissa.J.Doperalski@wildlife.nh.gov>

Sent: Monday, May 31, 2021 9:44 PM

To: Jeremy Degler < JDegler@TigheBond.com>

Cc: McCarthy, Bethann <Bethann.M.McCarthy@des.nh.gov>; Price, David <DAVID.A.PRICE@des.nh.gov>; Giallongo,

Stefanie <Stefanie.M.Giallongo@des.nh.gov>

Subject: NHFG TEWHA Review: NHB21-0540_Multi-Family Dev Portsmouth_AoT 210405-047

[Caution - External Sender]

Jeremy,

The New Hampshire Fish and Game has completed our review of the threatened and endangered wildlife and habitat assessment (TEWHA) report dated March 2021 and prepared by Tighe & Bond, for the removal of all existing structures and the subsequent development of two (2) multi-family apartment buildings with basement level parking and one (1) mixed-use building with first floor office and amenity space and upper story apartments on +/- 12 acres located at 105 Bartlett Street on five properties identified on tax maps as Map 157, Lots 1 and 2 (1.42 and 2.34 acres, respectively), Map 164, Lots 1 and 4-2 (1.19 and 5.73 acres, respectively), and a private roadway lot (1.60 acres) in Portsmouth, New Hampshire (Site).

NHFG provided comments on the wetlands application for this proposed project that included the applicant's proposed conservation measures below:

Due to the presence of shrub thicket habitat and food sources, sweeps for protected species should be conducted prior to work commencement if conducted during the nesting periods for the species identified as potentially utilizing the site for feeding or breeding. If any erosion control blankets are used, they should be made of biodegradable, wildlife friendly netting to help avoid wildlife from becoming entangled in the materials. There should be no sumps in detention basin outlets and catch basins adjacent to wetlands and tidal areas to avoid entrapment and mortality to wildlife. The use of welded plastic or 'biodegradable plastic' netting or thread (e.g. polypropylene) in erosion control matting should be avoided, if needed. The use of erosion control berm, white

Filtrexx Degradable Woven Silt Sock, or several 'wildlife friendly' options such as woven organic material (e.g. coco or jute matting such as North American Green SC150BN or equivalent) are readily available.

NHFG commented in addition to the above on the following (email comm. 04/01/2021): Kim Tuttle, NHFG Biologist:

- Where sumps have been removed from detention basin outlets and catch basins adjacent to wetlands and tidal areas, they should be immediately daylighted to enable entrapped wildlife to escape.
- Because of the high density development, a natural slow release fertilizer such as Pro Gro 5-3-4 or similar should be specified in the plans to protect water quality where fertilizer is needed. Please confirm that this has been included in the plans. Natural fertilizers should be specified for the long-term lawn care program for the development and the use of chemical pesticides, fungicides, and herbicides should be prohibited to reduce indirect impacts to tidal waters.

Based on the NHB datacheck results letter and the information provided in the assessment and associated plans, NHFG agrees with the TEWHA that if all conservation measures are incorporated as described, the project design will not jeopardize the continued existence of state or federally threatened and endangered. We request the following recommended permit conditions be incorporated into the sheet plans as requested and provided to NHDES cc NHFG for final review. Please update highlighted text below.

New Hampshire Fish and Game AoT Permit Conditions Related to Threatened and Endangered Species:

- The shrub thicket habitat shall be surveyed for protected species prior to work commencement by an
 experienced wildlife biologist if conducted during the nesting periods for the species identified as potentially
 utilizing the site for feeding or breeding.
- No sumps shall be included in catch basins for the protection of wildlife.
- Due to the proximity of the site to North Mill Pond, the use of fertilizers shall be avoided to extent possible. If fertilizer is necessary, a natural slow release nitrogen fertilizer shall be used.
- All manufactured erosion and sediment control products, utilized for, but not limited to, slope protection, runoff diversion, slope interruption, perimeter control, and inlet protection, check dams, sediment traps, and silt fence installed in accordance with Env-Wq 1506.04, shall not contain welded plastic, plastic, or multi-filament or monofilament polypropylene netting or mesh.
- All observations of threatened or endangered species <u>shall be reported immediately</u> to the New Hampshire Fish and Game Department Nongame and Endangered Wildlife Environmental Review Program by phone at 603-271-2461 and by email at <u>NHFGreview@wildlife.nh.gov</u>. Email subject line: <u>NHBXX-XXXX, PROJECT NAME, Wildlife Species Observation.</u> Photographs shall be provided for verification as feasible; and
- The New Hampshire Fish and Game Department shall have access to the property during the term of the permit.

NHFG has completed its project review consistent with the requirements of RSA 212-A and Env-Wq 1503.19(h). No further coordination with NHFG is requested if the above recommended permit conditions are incorporated into the project plan set/project design, and there are no additional plan/design modifications.

Please let me know if you have any questions.

Thank you, Melissa

Melissa Doperalski

Certified Wildlife Biologist®
Nongame and Endangered Wildlife Program
New Hampshire Fish and Game Department
11 Hazen Drive
Concord, New Hampshire 03301

Melissa.doperalski@wildlife.nh.gov

Phone: 603-271-1738

http://www.wildlife.state.nh.us/nongame/index.html



Check out reptiles and amphibians of NH! http://www.wildlife.state.nh.us/nongame/reptiles-amphibians.html

Report your sightings of reptiles and amphibians in 3 ways:

- 1) Email details of observation or completed form to RAARP@wildlife.nh.gov
- 2) Enter your observation online at http://nhwildlifesightings.unh.edu.
- 3) Mail your reporting slip http://www.wildlife.state.nh.us/nongame/documents/raarp-report-form.pdf

APPENDIX D



WETLANDS FUNCTIONAL ASSESSMENT WORKSHEET

Water Division/Land Resource Management Wetlands Bureau



Check the Status of your Application

RSA/Rule: RSA 482-A / Env-Wt 311.03(b)(10); Env-Wt 311.10

APPLICANT LAST NAME, FIRST NAME, M.I.: Iron Horse Properties, LLC

As required by Env-Wt 311.03(b)(10), an application for a standard permit for minor and major projects must include a functional assessment of all wetlands on the project site as specified in Env-Wt 311.10. This worksheet will help you compile data for the functional assessment needed to meet federal (US Army Corps of Engineers (USACE); if applicable) and NHDES requirements. Additional requirements are needed for projects in tidal area; please refer to the <u>Coastal Area</u> Worksheet (NHDES-W-06-079) for more information.

Both a desktop review and a field examination are needed to accurately determine surrounding land use, hydrology, hydroperiod, hydric soils, vegetation, structural complexity of wetland classes, hydrologic connections between wetlands or stream systems or wetland complex, position in the landscape, and physical characteristics of wetlands and associated surface waters. The results of the evaluation are to be used to select the location of the proposed project having the least impact to wetland functions and values (Env-Wt 311.10). This worksheet can be used in conjunction with the <u>Avoidance and Minimization Written Narrative (NHDES-W-06-089)</u> and the <u>Avoidance and Minimization Checklist (NHDES-W-06-050)</u> to address Env-Wt 313.03 (Avoidance and Minimization). If more than one wetland/ stream resource is identified, multiple worksheets can be attached to the application. All wetland, vernal pools, and stream identification (ID) numbers are to be displayed and located on the wetlands delineation of the subject property.

SECTION 1 - LOCATION (USACE HIGHWAY	Y METHODOLOGY)			
	buildings with lawns and parking lots, abandoned buildings, railroad			
CONTIGUOUS UNDEVELOPED BUFFER ZO	NE PRESENT? 🗌 Yes 🛛 No			
DISTANCE TO NEAREST ROADWAY OR OT	HER DEVELOPMENT (in feet): 0 ft			
SECTION 2 - DELINEATION (USACE HIGHV	NAY METHODOLOGY; Env-Wt 311.10)			
CERTIFIED WETLAND SCIENTIST (if in a non-tidal area) or QUALIFIED COASTAL PROFESSIONAL (if in a tidal area) who prepared this assessment: Leonard Lord, PhD, CWS				
DATE(S) OF SITE VISIT(S): 10/29/19, 12/2/2019	DELINEATION PER ENV-WT 406 COMPLETED? ☐ Yes ☐ No			
CONFIRM THAT THE EVALUATION IS BASED ON: Office and Field examination.				
 ☑ Field examination. METHOD USED FOR FUNCTIONAL ASSESSMENT (check one and fill in blank if "other"): ☑ USACE Highway Methodology. ☑ Other scientifically supported method (enter name/ title): Maine Citizens Guide to Evaluating, Restoring, and Managing Tidal Marshes (Bryan et al., 1997) 				

Irm@des.nh.gov or (603) 271-2147

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

www.des.nh.gov

SECTION 3 - WETLAND RESOURCE SUMMARY (USACE HIGH	WAY METHODOLOGY; Env-Wt 311.10)
WETLAND ID:	LOCATION: (LAT/ LONG) 43°04'23.7"N / 70°46'13.6"W
WETLAND AREA: N/A	DOMINANT WETLAND SYSTEMS PRESENT: Mudflats, Rocky Shore, High Salt Marsh along the site
HOW MANY TRIBUTARIES CONTRIBUTE TO THE WETLAND? N/A	COWARDIN CLASS: E2US3N, E2RS2N, EEM1N
IS THE WETLAND A SEPARATE HYDRAULIC SYSTEM? ☐ Yes ☑ No	IS THE WETLAND PART OF: A wildlife corridor or A habitat island?
if not, where does the wetland lie in the drainage basin? Bottom	IS THE WETLAND HUMAN-MADE? ☐ Yes ☑ No
IS THE WETLAND IN A 100-YEAR FLOODPLAIN? ☑ Yes ☐ No	ARE VERNAL POOLS PRESENT? Yes No (If yes, complete the Vernal Pool Table)
ARE ANY WETLANDS PART OF A STREAM OR OPEN-WATER SYSTEM? Yes No	ARE ANY PUBLIC OR PRIVATE WELLS DOWNSTREAM/ DOWNGRADIENT? Yes No
PROPOSED WETLAND IMPACT TYPE: Redevelopment of upland buffer	PROPOSED WETLAND IMPACT AREA: 245 sf
·	

SECTION 4 - WETLANDS FUNCTIONS AND VALUES (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)

The following table can be used to compile data on wetlands functions and values. The reference numbers indicated in the "Functions/ Values" column refer to the following functions and values:

- 1. Ecological Integrity (from RSA 482-A:2, XI)
- 2. Educational Potential (from USACE Highway Methodology: Educational/Scientific Value)
- 3. Fish & Aquatic Life Habitat (from USACE Highway Methodology: Fish & Shellfish Habitat)
- 4. Flood Storage (from USACE Highway Methodology: Floodflow Alteration)
- 5. Groundwater Recharge (from USACE Highway Methodology: Groundwater Recharge/Discharge)
- 6. Noteworthiness (from USACE Highway Methodology: Threatened or Endangered Species Habitat)
- 7. Nutrient Trapping/Retention & Transformation (from USACE Highway Methodology: Nutrient Removal)
- 8. Production Export (Nutrient) (from USACE Highway Methodology)
- 9. Scenic Quality (from USACE Highway Methodology: Visual Quality/Aesthetics)
- 10. Sediment Trapping (from USACE Highway Methodology: Sediment /Toxicant Retention)
- 11. Shoreline Anchoring (from USACE Highway Methodology: Sediment/Shoreline Stabilization)
- 12. Uniqueness/Heritage (from USACE Highway Methodology)
- 13. Wetland-based Recreation (from USACE Highway Methodology: Recreation)
- 14. Wetland-dependent Wildlife Habitat (from USACE Highway Methodology: Wildlife Habitat)

First, determine if a wetland is suitable for a particular function and value ("Suitability" column) and indicate the rationale behind your determination ("Rationale" column). Please use the rationale reference numbers listed in Appendix A of USACE *The Highway Methodology Workbook Supplement*. Second, indicate which functions and values are principal ("Principal Function/value?" column). As described in *The Highway Methodology Workbook Supplement*, "functions and values can be principal if they are an important physical component of a wetland ecosystem (function only) and/or are considered of special value to society, from a local, regional, and/or national perspective".

2020-05

"Important Notes" are to include characteristics the evaluator used to determine the principal function and value of the wetland. **PRINCIPAL** FUNCTIONS/ SUITABILITY **RATIONALE** FUNCTION/VALUE? **IMPORTANT NOTES VALUES** (Y/N) (Reference #) (Y/N) X Yes Ecological Integrity: Rationale not l Yes Highly developed buffer, filling, 1 No No ⊠ No included in Highway Methodology impaired water quality l Yes Yes 2 Education Potential: N/A No access No No ⊠ No Mudflat supports fish, shellfish, 🔀 Yes Yes 3 Fish & Aquatic Life: 1, 4 waterfowl but impaired water No. No quality and no shellfish harvesting Yes Yes 4 Flood Storage: N/A No. ⊠ No Yes Yes Groundwater Recharge (only): N/A 5 ⊠ No 🕅 No Yes Yes 6 Noteworthiness (RTE): No rare species at site No No No. Yes Yes Nutrient Trapping/Retention: N/A No. No. Export of nutirents as food and in X Yes Yes 8 Production Export: 1,4,5,6,10 sediments but low ecological No No No integrity X Yes Scenic vistas surrounded by highly Yes 9 Scenic Quality:2,6,8, 🕅 No No developed areas. Yes | Yes Sediment Trapping: N/A 10 No No Shoreline is fill with bricks and rocks Yes Yes Shoreline Anchoring: 2,3,10,12 11 ⊠ No No that provide anchoring Contributes to the character of the X Yes Uniqueness/Heritage: 1,314,17,19,22, Yes 12 area. Scienic views in urban setting. No No No Low ecological integrity. Provides boating and fishing Wetland Based Recreation: X Yes Yes opportunities. Somewhat offset by 13 No 2,5,7,8,9,10, No. low ecological integrity.

14	Yes No	Water Dependent Wildlife: 8,12,18,21,	Yes No	Mudflats are important for wildlife habitat. Somewhat offset by low ecological integrity
----	--------	---------------------------------------	--------	------------------------------------------------------------------------------------------

SECTION 5 - VERNAL POOL SUMMARY (Env-Wt 311.10)

Delineations of vernal pools shall be based on the characteristics listed in the definition of "vernal pool" in Env-Wt 104.44. To assist in the delineation, individuals may use either of the following references:

- *Identifying and Documenting Vernal Pools in New Hampshire 3rd Ed.*, 2016, published by the New Hampshire Fish and Game Department; or
- The USACE *Vernal Pool Assessment* draft guidance dated 9-10-2013 and form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

All vernal pool ID numbers are to be displayed and located on the wetland delineation of the subject property.

"Important Notes" are to include documented reproductive and wildlife values, landscape context, and relationship to other vernal pools/wetlands.

Note: For projects seeking federal approval from the USACE, please attach a completed copy of The USACE "Vernal Pool Assessment" form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

Guidance.						
VERNAL POOL ID NUMBER	DATE(S) OBSERVED	PRIMARY INDICATORS PRESENT (LIST)	SECONDAR' INDICATOR: PRESENT (LIS	S LENGTH OF	IMPORTANT NOTES	
1						
2						
3						
4						
5						
SECTION 6	6 - STREAM RE	SOURCES SUMMARY	Y			
DESCRIPTION OF STREAM:				STREAM TYPE (ROSGEN):		
HAVE FISHERIES BEEN DOCUMENTED? Yes No				DOES THE STREAM SYSTEM APPEAR STABLE? Yes No		
OTHER KE	OTHER KEY ON-SITE FUNCTIONS OF NOTE:					

Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095
www.des.nh.gov

2020-05 Page 4 of 6

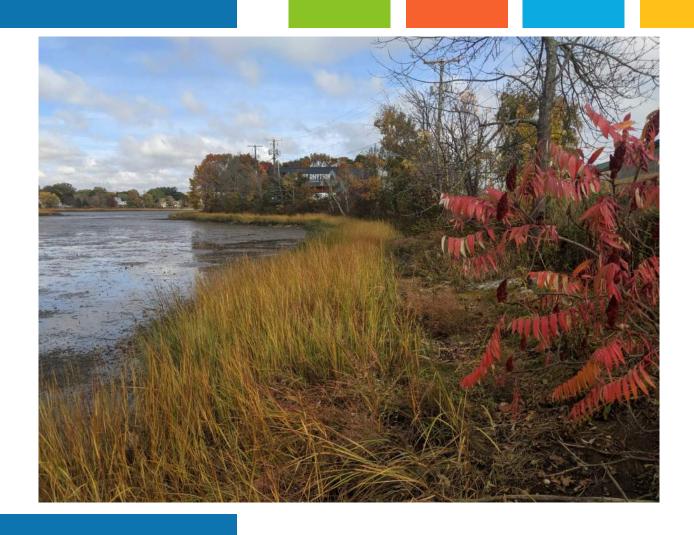
The following table can be used to compile data on stream resources. "Important Notes" are to include characteristics the evaluator used to determine principal function and value of each stream. The functions and values reference number are defined in Section 4. PRINCIPAL FUNCTIONS/ SUITABILITY FUNCTION/VALUE? **RATIONALE** IMPORTANT NOTES **VALUES** (Y/N) (Y/N) Yes Yes 1 No No Yes Yes 2 No No Yes l Yes 3 No No Yes Yes 4 No No Yes Yes 5 No No Yes Yes 6 No No Yes Yes 7 No No Yes Yes 8 No No Yes Yes 9 No No Yes Yes 10 No No Yes l l Yes 11 No No Yes l Yes 12 No No Yes Yes 13 No No Yes Yes 14 No No SECTION 7 - ATTACHMENTS (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10) Wildlife and vegetation diversity/abundance list.

- Photograph of wetland.
- Wetland delineation plans showing wetlands, vernal pools, and streams in relation to the impact area and surrounding landscape. Wetland IDs, vernal pool IDs, and stream IDs must be indicated on the plans.

Page 5 of 6

NHDES-W-06-049

For projects in tidal areas only: additional information required by Env-Wt 603.03/603.04. Please refer to the	
To projects in tidal areas only: additional information required by Life wit 603.03/003.04. Thease refer to the	
Coastal Area Worksheet (NHDES-W-06-079) for more information.	
Coastal Alea Wolksheet (WIDES W 60 675) for more information.	



Cathartes 105 Bartlett Street Project Portsmouth, NH

WETLAND
DELINEATION AND
ASSESSMENT
OF FUNCTIONS
AND VALUES

April 2020

Last Revised: January 2021





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1.0 Introduction

The purpose of this report is to characterize wetlands and buffers in the vicinity of a proposed multi-family development at 105 Bartlett Street in Portsmouth, NH. The site is long and narrow and is located between an active railroad and North Mill Pond. It includes commercial buildings with paved and gravel parking areas, abandoned railroad structures, disturbed forest, and a dense shrub thicket. The area is highly disturbed, being originally filled by the railroad in the late 1800s.

2.0 Methods

On October 29 and December 2, 2019, Tighe & Bond reviewed and assessed 2,000+/-linear feet of tidal wetlands and buffers along the North Mill Pond. The review was limited to the vicinity of a proposed multi-family development, extending from Bartlett Street to an area opposite Cornwall Street, which runs roughly perpendicular to the parcel.

The wetland delineation review was based on criteria specified in the *Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1* (January 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (January 2012). The Highest Observable Tide Line was reviewed based on the definition found in NH Department of Environmental Services Wetland Rules, Env-Wt 101.49/Env-Wt 602.23. Wetlands were classified based on *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979).

The Highest Observable Tide Line (HOTL) had been previously delineated by another consulting firm in 2017. This line was reviewed by exporting the 2017 surveyed line into ArcGIS to overlay on an aerial photographic base map. This base map was then uploaded to an iPad and paired with a Trimble R1 submeter GPS for in-field verification. Using the iPad and GPS as a guide, the line was then evaluated in the field. The HOTL was deemed accurate and the previous 2017 delineation was accepted by Tighe & Bond. A previously unidentified freshwater wetland was also found within a six-foot +/- deep abandoned railroad turntable. Tighe & Bond delineated this area with sequentially numbered flagging and located the wetland boundary using the GPS technology described above.

Functions and values were assessed in the vicinity of the proposed project. Assessment methodologies were adapted from the *Maine Citizens Guide to Evaluating, Restoring, and Managing Tidal Marshes* (Bryan et al., 1997) and *The Highway Methodology Workbook Supplement—Wetland Functions and Values: A Descriptive Approach*, NAEEP-360-1-30a, US Army Corps of Engineers, New England Division, September 1999.

Photographs of the wetlands and buffers are provided in Appendix A.

3.0 North Mill Pond

North Mill Pond is a 79+/- acre tidal pond at the outlet of Hodgson Brook. It receives tidal flows under Maplewood Avenue at the northeast end of the pond. The pond consists predominantly of exposed mudflats at low tide, and is classified as Estuarine, Intertidal, Unconsolidated Shore, Mud, Regularly Flooded (E2US3N). A narrow band of salt marsh reaching up to 35+/- feet wide was identified between the mudflats and upland (Photo 1). The marsh is dominated by smooth cordgrass (*Spartina alterniflora*), with species such as

saltmeadow cordgrass (*Spartina patens*), sea lavender (*Limonium carolinianum*), and seaside goldenrod (*Solidago sempervirens*) more dominant toward the upland edge. This marsh area was classified as Estuarine, Intertidal, Emergent, Persistent, Regularly Flooded (E2EM1N).

North Mill Pond provides several important wetland functions and values, though many have been degraded by development and human activity. The following functions and values were assessed for the wetland in the vicinity of the proposed project.

3.1 Ecological Integrity

Ecological Integrity relates to how much the wetland has retained its native biotic and abiotic features and how these may have been degraded by human influences.

The Ecological Integrity of North Mill Pond has been compromised due to the presence of a tidal restriction, development of the upland buffer, water quality degradation, and filling along the project site. Efforts have been made in recent years to improve water quality entering the pond, improve tidal flushing, and restore some of the salt marshes. The peripheral salt marsh appears to be healthy and is comprised of native species along the project area.

3.2 Wildlife, Finfish, and Shellfish Habitat

The Wildlife, Finfish, and Shellfish Habitat function is the suitability of the habitat to support wildlife.

North Mill Pond contains extensive mudflats and a healthy but narrow peripheral salt marsh that contribute to wildlife habitat value. However, this value has been compromised by all the factors affecting Ecological Integrity described above. The area is likely to support a variety of wildlife, including migratory birds, finfish, and shellfish. Wildlife Action Plan mapping (Appendix B) depicts several small areas of the highest ranked wildlife value habitat around the pond. These high value habitats include two salt marsh areas in the vicinity of the proposed project; one directly across from the project and another just to the northeast of it.

3.3 Recreational and Commercial Potential

Recreational and Commercial Potential is the suitability of the wetland to support activities such as hiking, boating, hunting, bird watching, and shellfish harvesting.

North Mill Pond has the potential for use by small boats during high tide, though access appears to be limited to a boat launch on Marsh Lane, north of Maplewood Avenue. Shellfish harvesting is not allowed within the mudflats. Bird watching is a potential activity but public access is limited. There is an informal trail that runs through the proposed project area between Bartlett Street and Maplewood Avenue across private property that could be used for bird watching, but public access is not currently guaranteed. There is no visitor center, formally maintained trails, or access for disabled persons that would make this a more valuable area for recreation.

3.4 Aesthetic Quality

Aesthetic Quality refers to the ability of the wetland to provide interesting views and natural vistas.

The areas surrounding North Mill Pond are highly developed commercial and residential areas. There are few public viewing areas, but in locations where the pond can be seen it generally offers wide vistas and aesthetically pleasing views.

3.5 Educational Potential

Educational Potential consists of the ability of the wetland to serve as an outdoor classroom.

There is no safe public access to North Mill Pond near the project site. In addition to being private property, the project site has dangerous construction debris and steep banks to the pond, further diminishing the educational potential of this wetland.

3.6 Noteworthiness

Noteworthiness includes important qualities of the wetland not identified in previous functions, such as historic sites or unique natural features.

This area of North Mill Pond is noteworthy as it contains a salt marsh in a developed setting, which adds to its importance aesthetically and as part of the character of the area. In addition, the adjacent uplands have been proposed as part of the North Mill Pond Greenways project, which was presented to stakeholders in January 2019. (https://www.cityofportsmouth.com/planportsmouth/north-mill-pond-trail-and-greenway).

The wetland itself is not known for having any important historical features in the vicinity of the project area, though there have been historic structures and activities along its banks. The project area has some significance as the site of an old railroad yard with a turntable and roundhouse.

4.0 North Mill Pond Tidal Buffer

The North Mill Pond 100-foot tidal buffer can be divided into three zones within the project area: 1) a commercial area, including the Ricci Supply and Ace Hardware complex, the Great Rhythm Brewery building, a former railroad machine shop, and all the paved and unpaved impervious surfaces associated with those buildings; 2) the disturbed forest directly northeast and northwest of Great Rhythm Brewery, including the area around the old railroad turntable and roundhouse remains; and 3) the shrub thicket extending along the narrow portion of the parcel to the northeast. These areas all include historic filling 2-16 feet deep associated with railroad activities. The fill includes coal, coal ash, and possible slag.

4.1 Commercial Area Buffer

The commercial area (Photos 1-3) is comprised almost completely of impervious surfaces. These include buildings, paved and compact gravel parking lots, and a narrow strip of vegetation 10-20 feet wide extending down a steep bank to the tidal wetland. The vegetation includes lawn and species associated with disturbed sites such as staghorn sumac (*Rhus typhina*), autumn olive (*Elaeagnus umbellata*), black cherry (*Prunus serotina*), and Asiatic bittersweet (*Celastrus orbiculatus*). This area has little to offer in the way of functions and values other than contributing to stabilization of steep eroding

banks along the wetland. Runoff from this area likely contributes to the degraded water quality in North Mill Pond.

4.2 Disturbed Forest Buffer

The disturbed forested area northeast and southwest of Great Rhythm Brewery (Photos 4-6) is dominated by Norway Maple (*Acer platanoides*), black cherry, and staghorn sumac. The area includes significant rubble and debris as well as the railroad turntable and roundhouse remains. This area provides some screening for wildlife using the North Mill Pond and provides cover and food for small mammals and birds. However, it is dominated by invasive vegetation, and is highly disturbed by human activity.

4.3 Shrub Thicket Buffer

The shrub thicket northeast of the commercial area (Photos 7-8) is dominated by autumn olive with lesser amounts of staghorn sumac and other shrub species. This area provides wildlife habitat for small mammals and birds as well as screening for wildlife using North Mill Pond. Though invasive, the autumn olive provides prolific fruits utilized by birds and other frugivores. Bedding, clothing, campfire remains, trash, and other evidence suggests that this densely vegetated area has been used as camp sites by homeless individuals.

4.4 Buffer Impacts and Mitigation

The proposed project will not include any work within the 25-foot buffer to North Mill Pond. In addition, a 50-foot easement from the mean high water will be granted to the City of Portsmouth by the developer to build the North Mill Pond Trail and Greenway, which will provide improvements to the buffer, including invasive species management and revegetation with native species. Installation of the trail and greenway would result in improved functions and values of the wetland and buffer including: Ecological Integrity, Recreation Potential, Aesthetic Quality, and possibly Educational Potential. Existing impacts to the 100-foot buffer will be reduced from the trail and greenway improvements through the removal and restoration of impervious surfaces.

Table 4.1105 Bartlett Street Multi-Family Development Buffer Impact Reductions

Overall Bu	Overall Buffer Impact Area					
Wetland Buffer Setback Existing Impact Proposed Im						
0 - 25 FT	12,788 SF	6,788 SF				
25 - 50 FT	30,479 SF	22,089 SF				
50 - 100 FT	66,844 SF	52,443 SF				
Total Impact	110,111 SF	81,320 SF				
NET BUFFER IMPROVEMENT		28,792 SF				

5.0 Excavated Palustrine Forested Wetland

A small wetland was delineated by Tighe & Bond within the base of the six-foot +/- deep, concrete walled railroad roundtable (Photos 9-10) within the disturbed forested area. The soils in this wetland are poorly drained marine silts and clays. The vegetation is dominated

by Norway maple and red osier dogwood (*Cornus sericea*). Nearby test pits identified approximately two to four feet of fill in the vicinity of the structure. Therefore, it is likely this wetland was at least partly excavated into native marine sediments during construction of the turntable. It is unclear if this area was originally a wetland or if the wetland was created by the excavation. This wetland was classified as Palustrine, Forested, Deciduous, Saturated (PFO1B). The small size of the wetland and its location within a man-made structure in a highly disturbed landscape has resulted in this system providing negligible wetland functions and values.

6.0 Summary

Two wetlands were delineated and evaluated on the site:

North Mill Pond is a 79+/- acre tidal wetland with expansive mud flats (E2US3N) and a narrow fringe of salt marsh (E2EM1N). Wetland functions and values are primarily Wildlife, Finfish, and Shellfish Habitat, as well as Aesthetic Quality and Noteworthiness. It is noteworthy as an important aesthetic component of the area and as an important potential site for a greenways trail project. It also has compromised but improving Ecological Integrity and some Recreation Potential. Upland buffers to the wetland have been compromised by development and invasive species, but limited vegetation does provide some screening for wildlife in the wetland.

A small excavated forested wetland (PFO1B) was identified within the old railroad turntable, approximately six feet below existing grade within a concrete wall. The small size of the wetland and its location within a man-made structure in a highly disturbed landscape has resulted in this system providing negligible wetland functions and values.

APPENDIX A



Client: Cathartes Job Number: C-0960006

Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 1 Date: 10/29/19 Direction Taken: Northeast

Description: Salt marsh fringe along North Mill Pond at low tide opposite a commercial area in southwest portion of the site.



Photograph No.: 2 Date: 10/29/19 Direction Taken: Northeast

Description: Paved buffer and eroding banks along North Mill Pond at low tide along the commercial area in southwest portion of the site.





Client: Cathartes Job Number: C-0960006

Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 3 Date: 10/29/19 Direction Taken: Northeast

Description: Compact gravel drive and old railroad repair shop at the northern end of the commercial area with impervious surfaces.



Photograph No.: 4 Date: 10/29/19 Direction Taken: Northeast

Description: Buffer fill slope with rubble adjacent to a narrow salt marsh along the disturbed forest just northwest of the Great Rhythm Brewing Company.





Client: Cathartes Job Number: C-0960006

Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 5 Date: 10/29/19 Direction Taken: Southwest

Description: Lawn and disturbed forest buffer northwest of the Great Rhythm Brewing Company.



Photograph No.: 6 Date: 10/29/19 Direction Taken: East

Description: Remains of the railroad roundhouse and disturbed forest buffer northeast of the Great Rhythm Brewing Company.





Client: Cathartes Job Number: C-0960006

Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 7 Date: 10/29/19 Direction Taken: Northeast

Description: Shrub thicket and existing informal trail at the northeast end of the proposed project



Photograph No.: 8 Date: 10/29/19 Direction Taken: Northeast

Description: Evidence of use as camp sites by homeless individuals within the shrub thicket at the northeast end of the project area.





Client: Cathartes Job Number: C-0960006

Site: 105 Bartlett St., Portsmouth, NH

Photograph No.: 9 Date: 12/2/19 Direction Taken: South

Description: Wetland dominated by Norway maple and red osier dogwood within the old railroad turntable approximately six feet below grade.

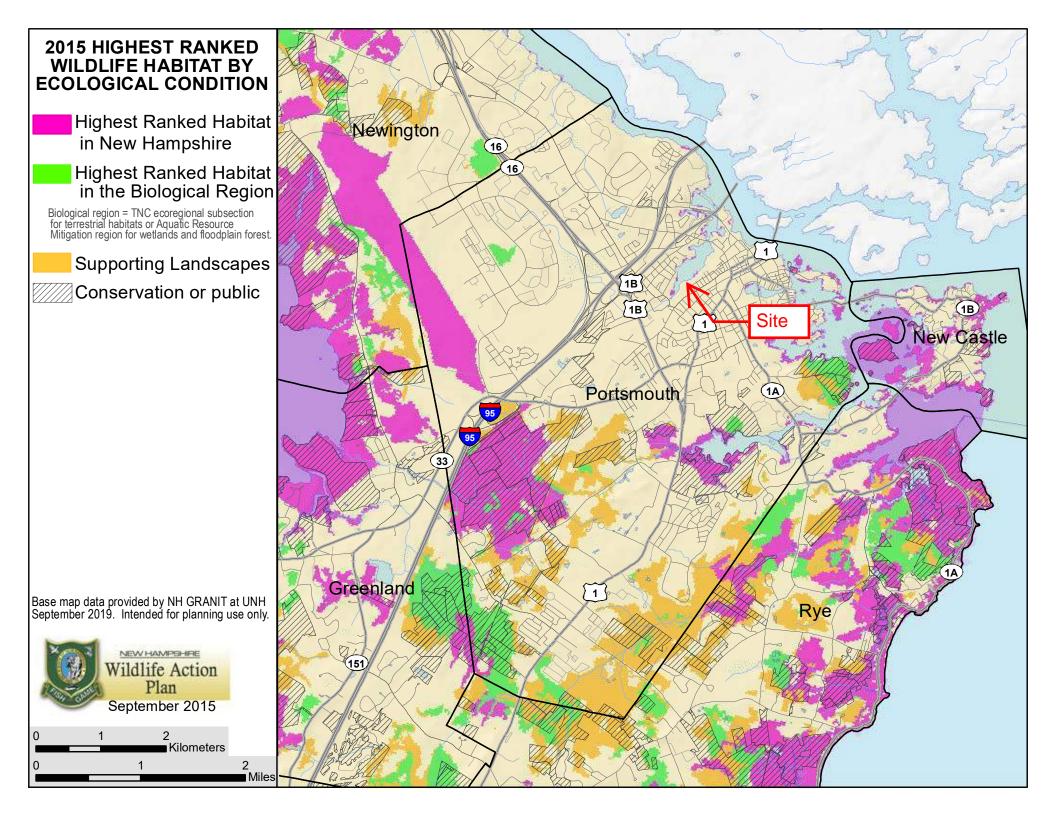


Photograph No.: 10 Date: 12/2/19 Direction Taken: n/a

Description: Poorly drained marine silts and clays observed in the bottom of the old railroad turntable.

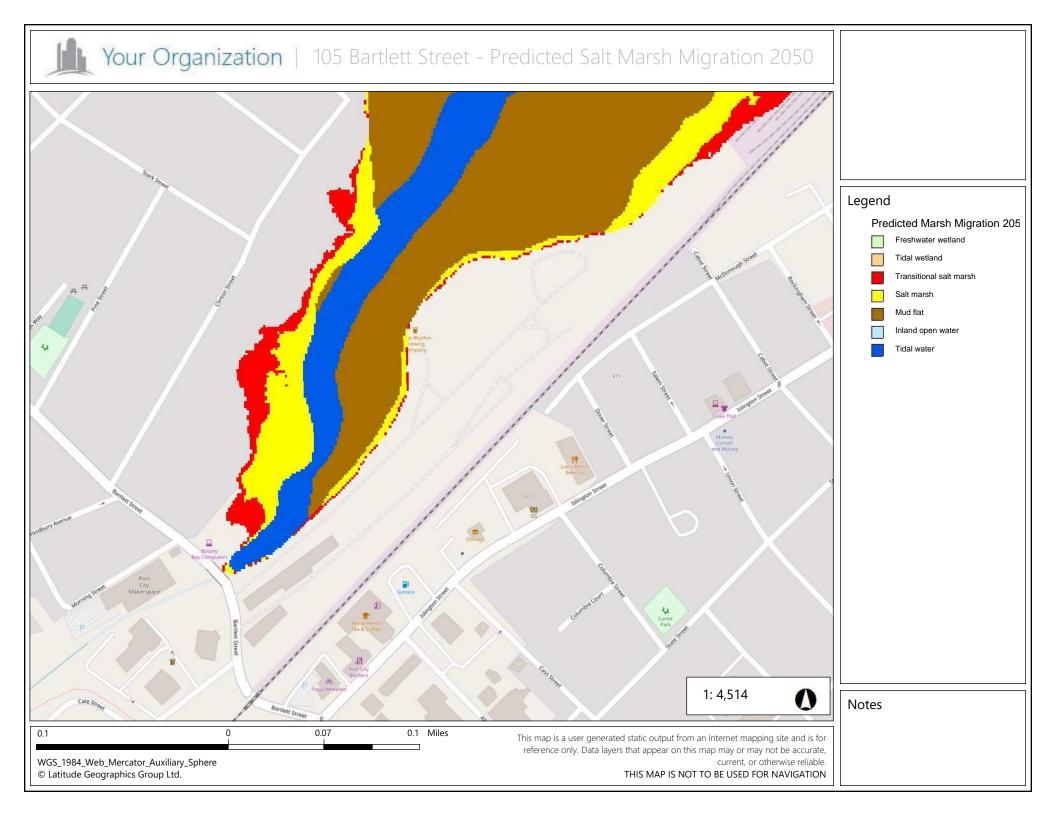


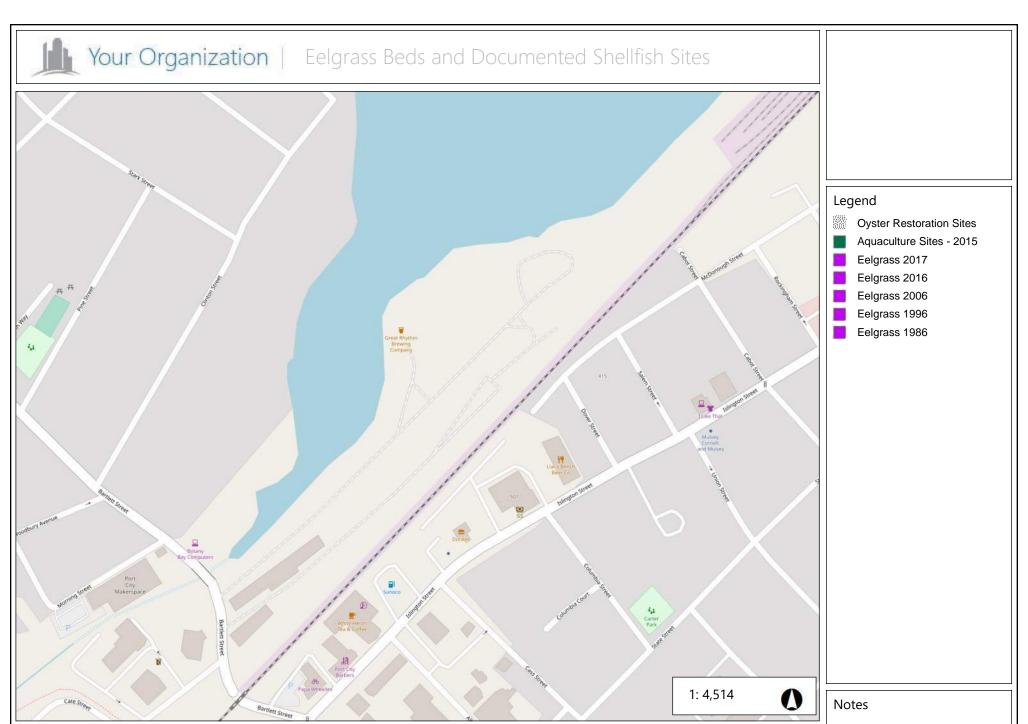
APPENDIX B



www.tighebond.com

APPENDIX E





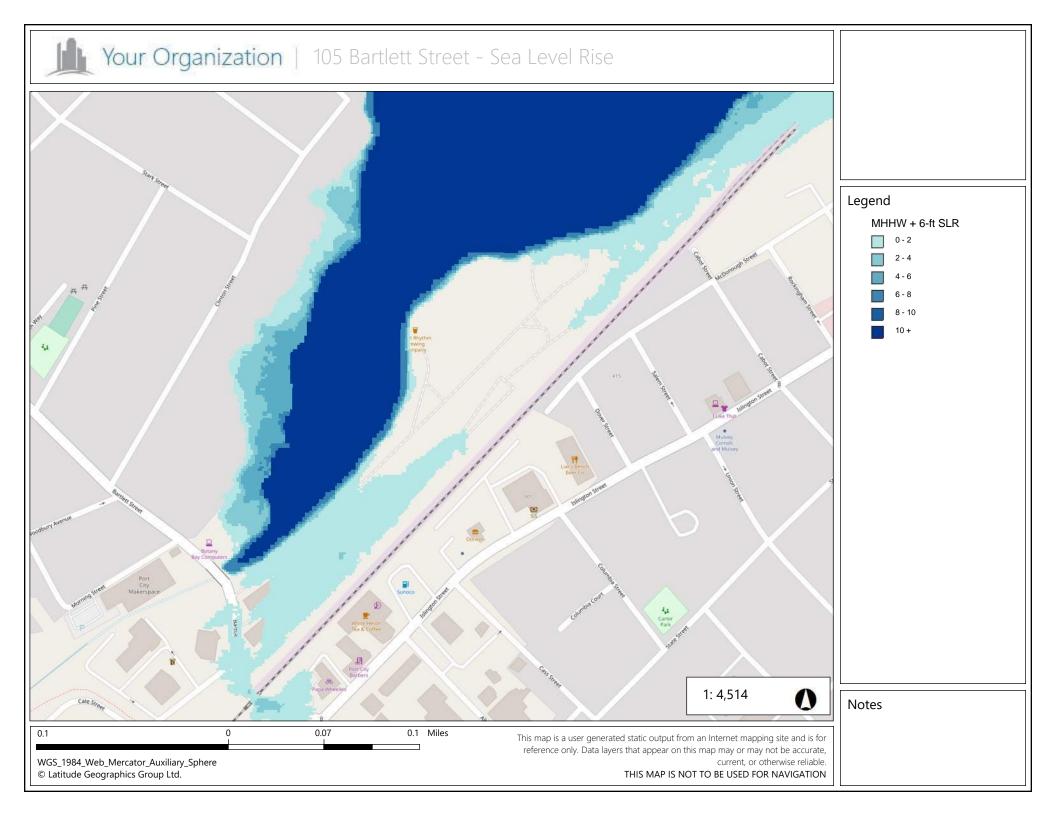
0.1 0.07 0.1 Miles

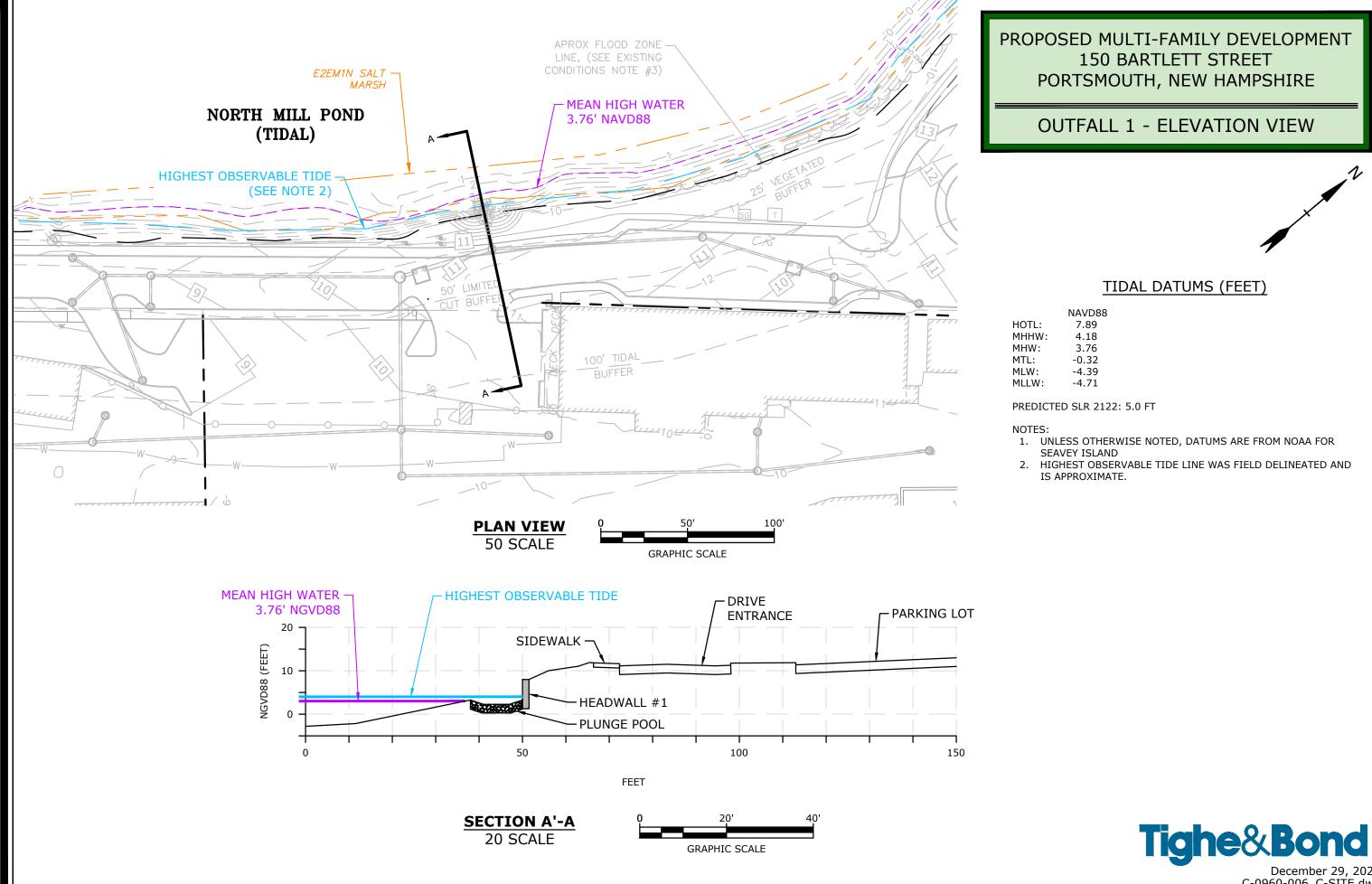
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

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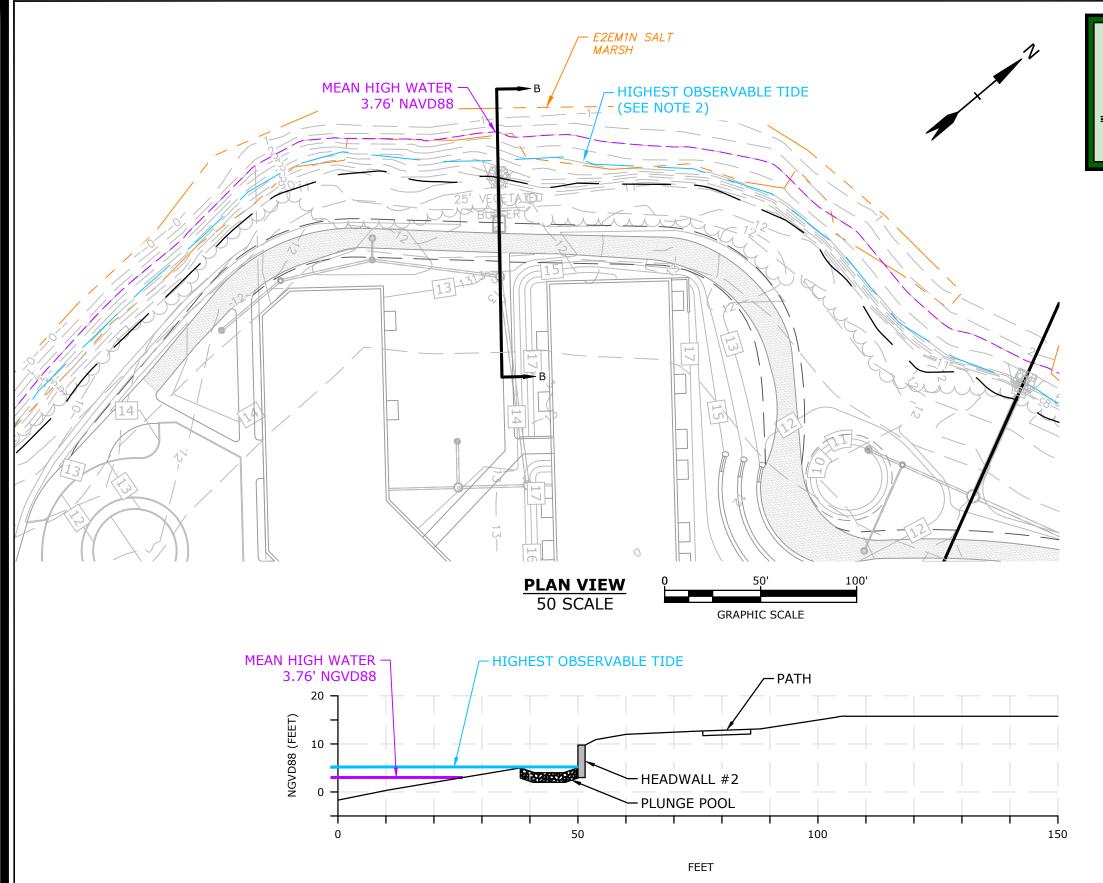
THIS MAP IS NOT TO BE USED FOR NAVIGATION

THIS MAP IS NOT TO BE USED FOR NAVIGATION**





December 29, 2022 C-0960-006_C-SITE.dwg



PROPOSED MULTI-FAMILY DEVELOPMENT 105 BARTLETT STREET PORTSMOUTH, NEW HAMPSHIRE

OUTFALL 2 - ELEVATION VIEW

TIDAL DATUMS (FEET)

NAVD88

HOTL: 7.89 MHHW: 4.18 MHW: 3.76 -0.32 MTL: -4.39 MLW: MLLW: -4.71

PREDICTED SLR 2122: 5.0 FT

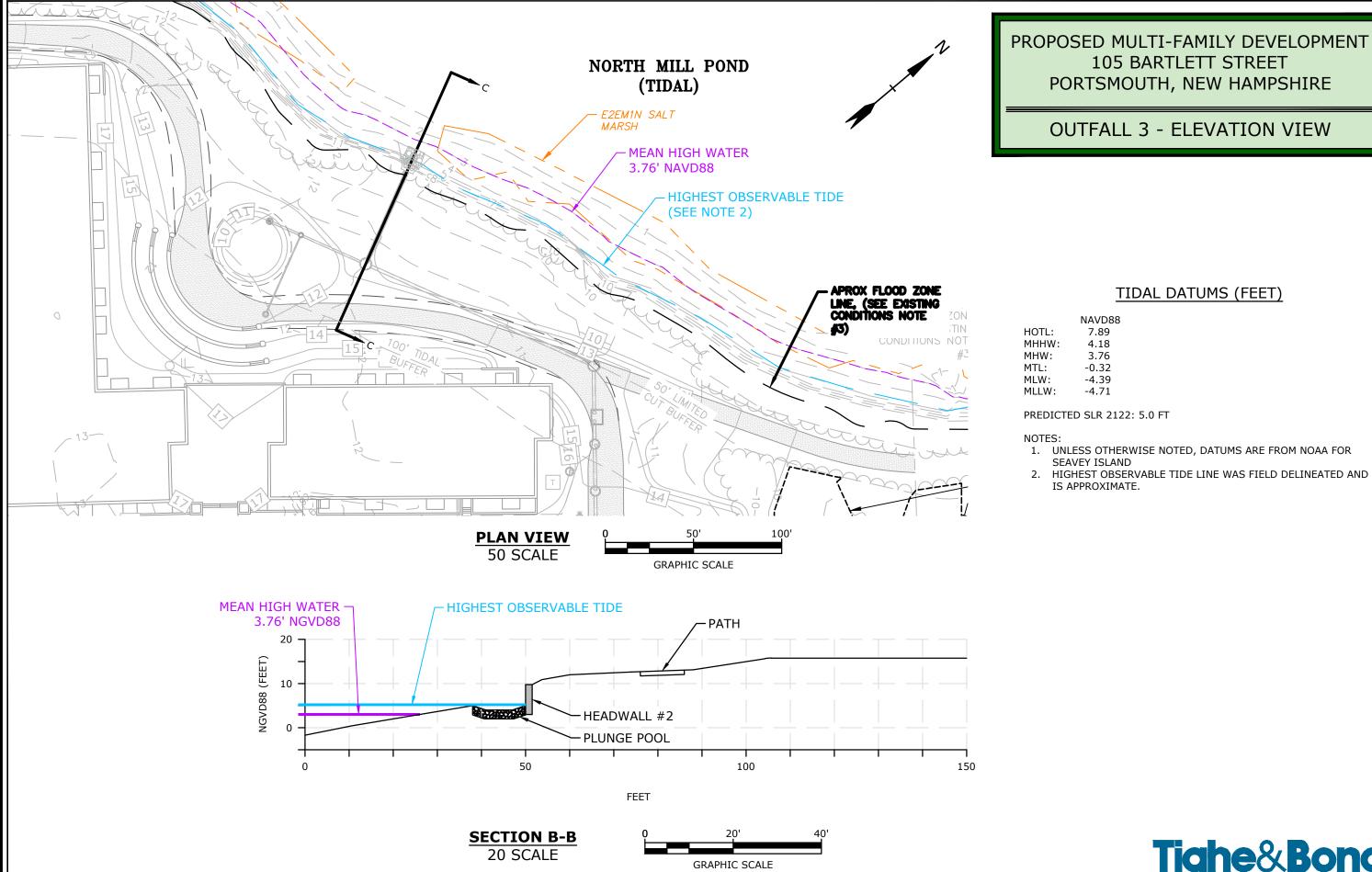
- 1. UNLESS OTHERWISE NOTED, DATUMS ARE FROM NOAA FOR SEAVEY ISLAND

 2. HIGHEST OBSERVABLE TIDE LINE WAS FIELD DELINEATED AND
- IS APPROXIMATE.

SECTION B-B 20 SCALE

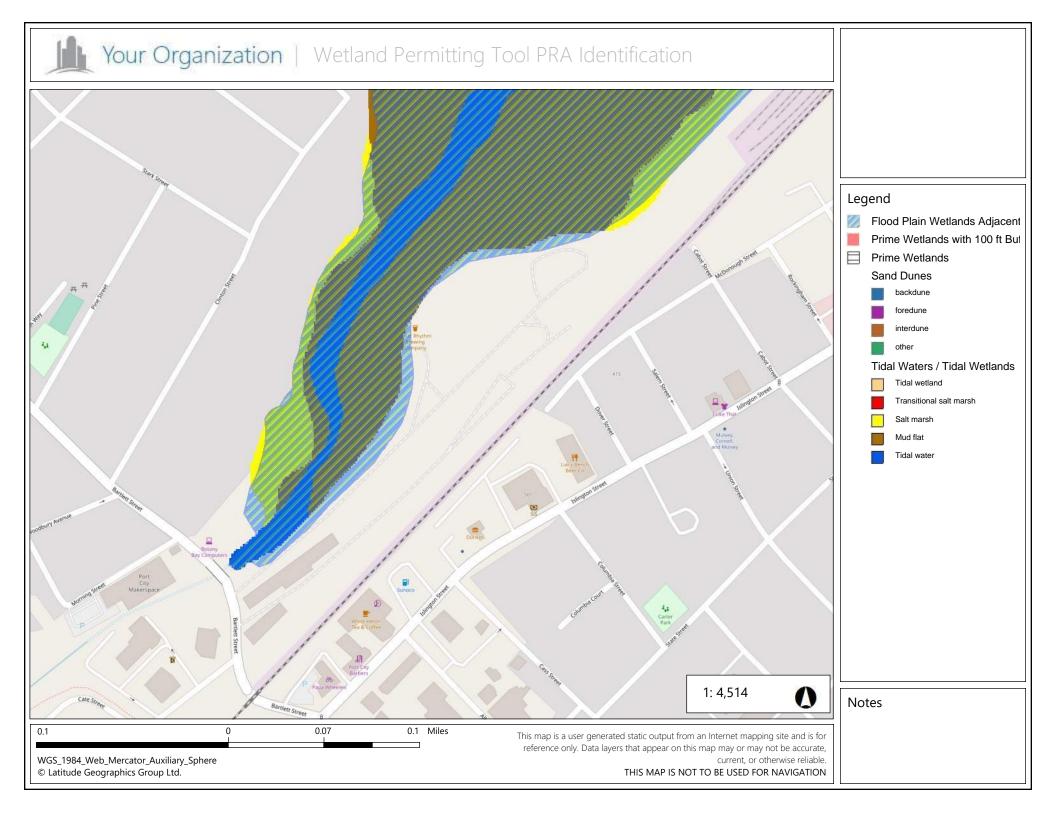






Tighe&Bond

December 16, 2022 C-0960-006_C-SITE.dwg



2/16/22, 10:53 AM EFH Report

EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

<u>Greater Atlantic Regional Office</u> <u>Atlantic Highly Migratory Species Management Division</u>

Query Results

Degrees, Minutes, Seconds: Latitude = 43° 4' 25" N, Longitude = 71° 13' 48" W

Decimal Degrees: Latitude = 43.074, Longitude = -70.770

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

*** W A R N I N G ***

Please note under "Life Stage(s) Found at Location" the category "ALL" indicates that all life stages of that species share the same map and are designated at the queried location.

EFH

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
<u>"</u>	•	Atlantic Sea Scallop	ALL	New England	Amendment 14 to the Atlantic Sea Scallop FMP
<u>"</u>	•	Atlantic Wolffish	ALL	New England	Amendment 14 to the Northeast Multispecies FMP
<u>"</u>	•	Winter Flounder	Eggs Juvenile Larvae/Adult	New England	Amendment 14 to the Northeast Multispecies FMP
<u>"</u>	•	Little Skate	Juvenile Adult	New England	Amendment 2 to the Northeast Skate Complex FMP
P	•	Atlantic Herring	Juvenile Adult Larvae	New England	Amendment 3 to the Atlantic Herring FMP
<u>"</u>	•	Atlantic Cod	Larvae Adult Eggs	New England	Amendment 14 to the Northeast Multispecies FMP

2/16/22, 10:53 AM EFH Report

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
<u>"</u>	•	Pollock	Juvenile Eggs Larvae	New England	Amendment 14 to the Northeast Multispecies FMP
Į.	(2)	Red Hake	Adult Eggs/Larvae/Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
P	•	Windowpane Flounder	Adult Larvae Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
<u>"</u>	②	Winter Skate	Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
<u>~</u>	•	Smooth Skate	Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
<u>"</u>	•	White Hake	Adult Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
P	•	Thorny Skate	Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
P	•	Atlantic Mackerel	Eggs Larvae Juvenile	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
P	•	Bluefish	Adult Juvenile	Mid-Atlantic	Bluefish
<u>"</u>	•	Atlantic Butterfish	Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11

Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.

**For links to all EFH text descriptions see the complete data inventory: open data inventory -->

2/16/22, 10:53 AM EFH Report

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.

**For links to all EFH text descriptions see the complete data inventory: open data inventory -->

All spatial data is currently available for the Mid-Atlantic and New England councils, Secretarial EFH,

Bigeye Sand Tiger Shark,

Bigeye Sixgill Shark,

Caribbean Sharpnose Shark,

Galapagos Shark,

Narrowtooth Shark,

Sevengill Shark,

Sixgill Shark,

Smooth Hammerhead Shark,

Smalltail Shark

National Flood Hazard Layer FIRMette

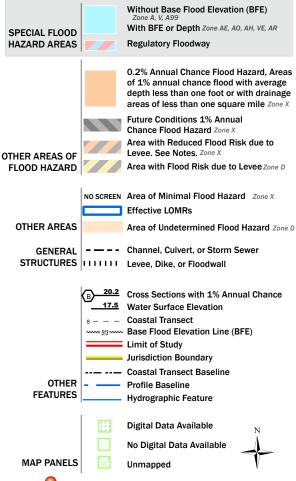


Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The pin displayed on the map is an approximate point selected by the user and does not represent

an authoritative property location.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/16/2022 at 10:59 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX F



C-0960-006 December 29, 2022

Ms. Lori Sommer, Wetland Mitigation Coordinator New Hampshire DES Wetlands Bureau 29 Hazen Drive PO Box 95 Concord, New Hampshire 03302

Re: NHDES Wetland Impact Permit – Preliminary Mitigation Proposal Iron Horse Properties, LLC, 105 Bartlett Street Portsmouth, NH

Dear Ms. Sommer:

On behalf of Iron Horse Properties, LLC, we are pleased to provide the following information relative to a Mitigation Proposal associated with the Wetland Impact Permit Application for the above reference project:

- Summary of Wetland and Buffer Functions and Mitigation Memo, dated March 30, 2021;
- Wetland Buffer Impact and Mitigation Plan, dated February 17, 2022;
- ARM Fund Calculator Form;

As per our pre-application meetings on March 18, 2021, and March 22, 2022, the proposed Multi-Family Development project at 105 Bartlett Street in Portsmouth will require a Wetland Impact Permit. The project is proposing to impact 209 SF of tidal wetland, 34,639 SF of tidal buffer, and 1,528 SF of forested wetland which will require mitigation for a total mitigation area of 36,376 SF. As described in the Wetland Permit Application, the 100-foot tidal buffer on these parcels can be divided into three zones within the project area: 1) a commercial area, including the Ricci Supply and Ace Hardware complex, the Great Rhythm Brewery building, a former railroad machine shop, and all the paved and unpaved impervious surfaces associated with those buildings; 2) the disturbed forest directly northeast and northwest of Great Rhythm Brewery, including the area around the old railroad turntable and roundhouse remains; and 3) the shrub thicket extending along the narrow portion of the parcel to the northeast. These areas all include historic filling 2-16 feet deep associated with railroad activities.

The proposed project will provide improvements to the buffer, including invasive species management and revegetation with native species. Installation of the North Mill Pond trail and greenway would result in improved functions and values of the wetland and buffer including: Ecological Integrity, Recreation Potential, Aesthetic Quality, and possibly Educational Potential. Existing impacts to the 100-foot buffer will be reduced by the trail and greenway improvements through the removal and restoration of impervious surfaces. A detailed description of the proposed restoration and enhancement of the buffer and be found in the enclosed Summary of Wetland and Buffer Functions and Mitigation Memo.

The result of the proposed mitigation will be 22,384 SF of restored previously disturbed tidal buffer area and 46,087 SF of previously disturbed tidal buffer enhancement area. The previously disturbed tidal buffer enhancement area will count towards mitigation at a 10:1 ratio. As such, the applicant respectfully proposes the following mitigation for the 36,376 SF of impact:

- 22,384 SF of restored previously disturbed tidal buffer area be counted toward the mitigation of the wetland buffer impact counted at a 1:1 ratio.
- 46,087 SF of previously disturbed tidal buffer enhancement area be counted towards mitigation at a 10:1 ratio, for an effective mitigation area of 4,609 SF.
- The balance of the previously disturbed tidal buffer and forested impacts, 9,383 SF, will be mitigated through a contribution to the ARM fund in the amount of \$60,377.45.

We look forward to working with you on this Mitigation Proposal. If you have any questions or need any additional information, please contact Neil Hansen by phone at (603) 294-9213 or by email at nahansen@tighebond.com.

Sincerely,

TIGHE & BOND, INC.

Patrick M. Crimmins, PE

Vice President

Neil A. Hansen, PE Project Manager

Enclosures

Cc: Iron Horse Properties, LLC (via e-mail)



Memorandum Tighe&Bond

105 Bartlett Street, Portsmouth – Summary of Wetland and Buffer Functions and Mitigation

To: Lori Sommer, NHDES

Stefanie Giallongo, NHDES

David Price, NHDES

FROM: Leonard A. Lord, PhD, CSS, CWS

DATE: March 30, 2021

North Mill Pond is a 79+/- acre tidal wetland that includes expansive mud flats (E2US3N) with a narrow fringe of salt marsh (E2EM1N) along the project area. The upland buffer to this wetland has been highly degraded by development, impervious areas, trash, and rundown buildings. Below is a summary of the wetland and buffer functions and impact mitigation. Evaluation of these functions was primarily based on criteria adapted from the *Maine Citizens Guide to Evaluating, Restoring, and Managing Tidal Marshes* (Bryan et al., 1997).

For more information and photographs, please refer to the Tighe & Bond Wetland Delineation and Assessment of Functions and Values report included with the Wetland Impact Permit Application packet. For quantification of wetland and buffer impacts as well as quantification of proposed mitigation, please refer to the Wetland Buffer Impact Plan.

Ecological Integrity

- Existing Function at North Mill Pond: Compromised due to tidal restriction, development of the upland buffer, water quality degradation, and filling.
- Existing Function at Project Upland Buffer: Compromised due to development, rundown buildings, compaction and impervious surfaces, trash, invasive species, and filling/grading.
- Proposed Function Enhancement: The upland buffer will be enhanced by removing rundown buildings, upgrading the development, removal of trash, and removal of invasive species. Native plantings will be installed as part of the landscape plan and much of the area within 50 feet of the mean high water line will be seeded with a conservation/wildlife seed mix, with mowing occurring annually to discourage reestablishment of invasive species.
- Proposed Function Restoration: The project will result in a net reduction in impervious surfaces. Restoring impervious surfaces restores vegetation, reduces runoff to the tidal wetland, provides improved water quality treatment of runoff, allows for increased wetland screening for wildlife, and restores available wildlife habitat.

Wildlife, Finfish, and Shellfish Habitat

- Existing Function at North Mill Pond: Despite having compromised Ecological Integrity, North Mill Pond likely supports a variety of wildlife, including migratory birds, finfish, and shellfish. Salt marshes are among the Wildlife Action Plan highest ranked wildlife value habitats. There is a narrow band of salt marsh along the project area and larger salt marsh areas to the northeast and across the pond.
- Existing Function at Project Upland Buffer: The upland buffer in the project area has highly degraded Ecological Integrity. The vegetated portions of the buffer currently help support the wildlife habitat functions at North Mill Pond by providing screening and providing some water quality renovation of runoff. In addition, the pockets of

MEMO Tighe&Bond

dense forest and shrubland vegetation are likely to provide habitat for small mammals and songbirds. Though limited in area and compromised by invasive species, the site does include a variety (four) of identified vegetation types, which would increase the potential to support a diversity of species. The vegetation types include a narrow Mixed Sapling/Shrub Thicket, a Norway Maple Grove, a Quaking Aspen Gray Birch Grove, and an Autumn Olive Thicket.

- Proposed Function Enhancement: Enhancement of Wildlife, Finfish, and Shellfish Habitat will be achieved through the methods and reasons described for enhancing Ecological Integrity.
- Proposed Function Restoration: Restoration of Wildlife, Finfish, and Shellfish Habitat associated with the upland buffer will be achieved through the methods and reasons described for restoring Ecological Integrity. This involves the restoration and revegetation of impermeable surfaces.

Recreational and Commercial Potential

- Existing Function at North Mill Pond: North Mill Pond has potential for use by small boats during high tides, is not suitable for shellfish harvesting, and is not suitable for hunting. There is potential for birdwatching, but there is currently no public access at the project site except in the commercial parking lot at the southwest end of the project. However, views of North Mill Pond and potential bird habitat from the parking lot are very limited and compromised by vehicular traffic, noise, and activity as compared to the northeastern end of the site.
- Existing Function at Project Upland Buffer: There is no Recreational or Commercial Potential associated with the upland buffer other than an informal walking trail used by local residents.
- Proposed Function Enhancement: Since there will be no attempt to enhance the existing bird watching or other recreational activities from the commercial parking lot, there will be no enhancement of this function.
- Proposed Function Restoration: The project will create and restore recreational
 opportunities by providing a public greenway trail that will allow for birdwatching and
 recreational enjoyment of the North Mill Pond and upland buffer. Expansive views of
 the North Mill Pond and associated bird habitat from the northern portion of the site
 will be made open to the public.

Aesthetic Quality

- Existing Function at North Mill Pond: The areas surrounding North Mill Pond are highly
 developed commercial and residential areas. There are few public viewing areas, but
 in locations where the pond can be seen it generally offers wide vistas and aesthetically
 pleasing views. There are no public viewing areas at the project site other than at the
 commercial parking lot at the southwest end of the project. However, views of North
 Mill Pond from the parking lot are very limited and compromised by vehicular traffic,
 noise, and human activity as compared to the northeastern end of the site.
- Existing Function at Project Upland Buffer: The upland buffer is highly degraded aesthetically. It is full of trash and rundown buildings at its northern end and is a highly developed commercial area at its southern end. There is essentially no aesthetic quality to the buffer.
- Proposed Function Enhancement: Since there will be no attempt to enhance existing aesthetics associated the public viewing or North Mill Pond from the commercial parking lot, there will be no enhancement of this function for the pond.

MEMO Tighe&Bond

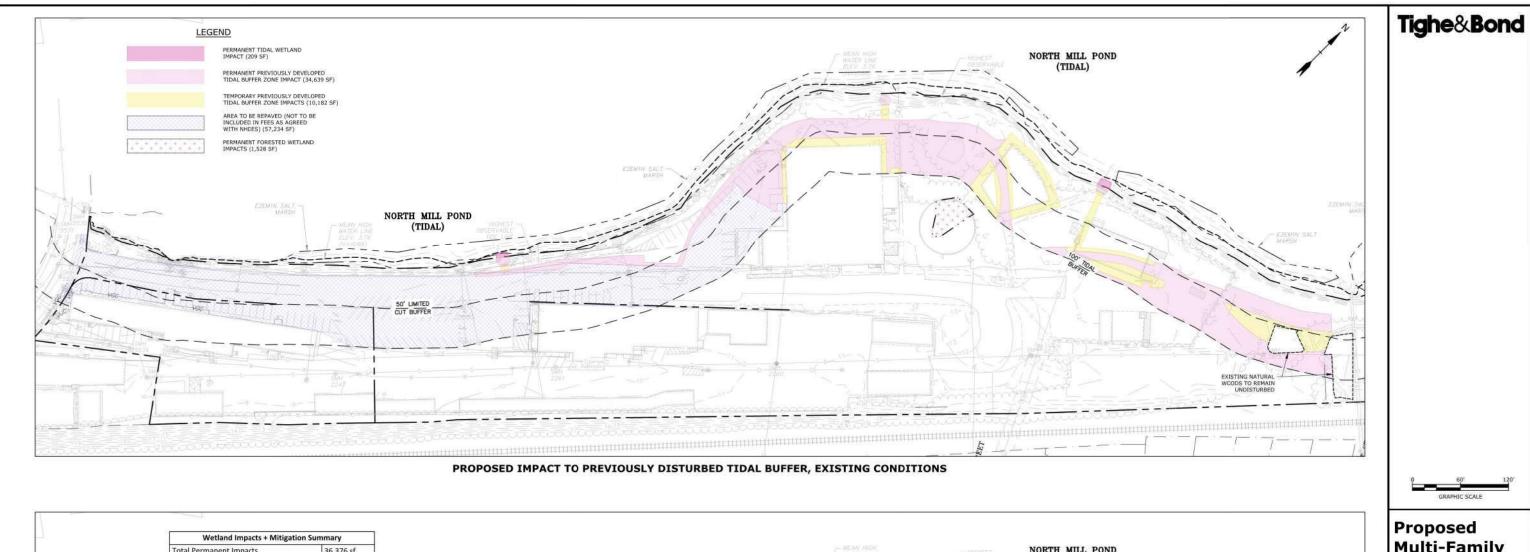
Proposed Function Restoration: The project will create and restore aesthetic enjoyment
of North Mill Pond through all the ways the Ecological Integrity will be restored and
enhanced. The upland buffer will be cleaned up, rundown buildings will be removed,
and a public greenway trail will be created that will allow for strolling and multiple
viewing opportunities along the North Mill Pond and upland buffer. Expansive views of
the North Mill Pond visible from the northern portion of the site that are not currently
available will be made open to the public.

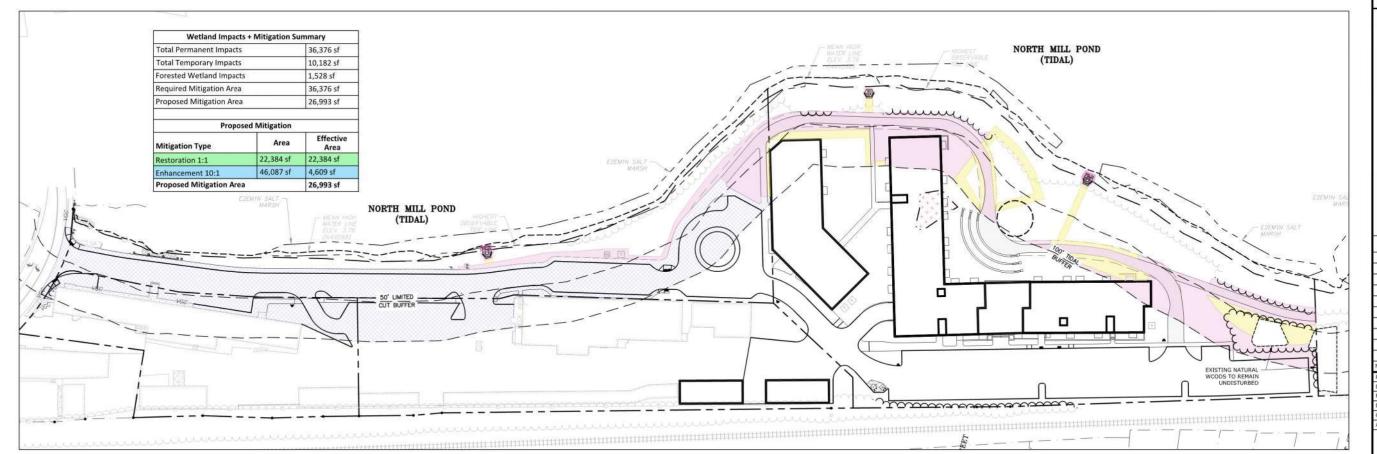
Educational Potential

- Existing Function at North Mill Pond: There is no safe public access to North Mill Pond near the project site. In addition to being private property, the southern portion of the site is a commercial parking lot, and the northern portion of the project site has dangerous trash and building debris. Access to the North Mill Pond is also limited by steep banks, further diminishing the educational potential of this wetland.
- Existing Function at Project Upland Buffer: Same as for North Mill Pond.
- Proposed Function Enhancement: Since there is currently no access for Educational Potential, this function does not exist and cannot be enhanced.
- Proposed Function Restoration: By restoring the upland buffer and providing access along a greenway trail, some educational potential will be achieved. Although there will be no direct access to the North Mill Pond provided from the trail, there will be multiple viewing points, including views of the pond, salt marsh, and mudflats from the project site. The trail will also connect to other nearby habitats including more extensive salt marsh, shrublands, and native grassland (little bluestem, Schizachyrium scoparium).

Noteworthiness

- Existing Function at North Mill Pond: This area of North Mill Pond does not include any rare species, though the larger salt marsh to the northeast and across the pond are considered as highly ranked wildlife habitat, which is noteworthy. In addition, the pond provides for some open vistas in a developed setting, which adds to its importance aesthetically and as part of the character of the area.
- Existing Function at Project Upland Buffer: The upland buffer is somewhat noteworthy as an old railroad yard, but it has been so degraded that this diminishes its noteworthiness.
- Proposed Function Enhancement: Restoring and enhancing the upland buffer while
 providing a greenway trail will enhance the character of the area and provide
 recreational, educational, and aesthetic opportunities to the public that would not
 otherwise be readily available.
- Proposed Function Restoration: Since noteworthiness is an existing function, it will be enhanced by the project, rather than restored.





PROPOSED IMPACT TO PREVIOUSLY DISTURBED TIDAL BUFFER, PROPOSED CONDITIONS

Multi-Family Development

Iron Horse Properties, LLC

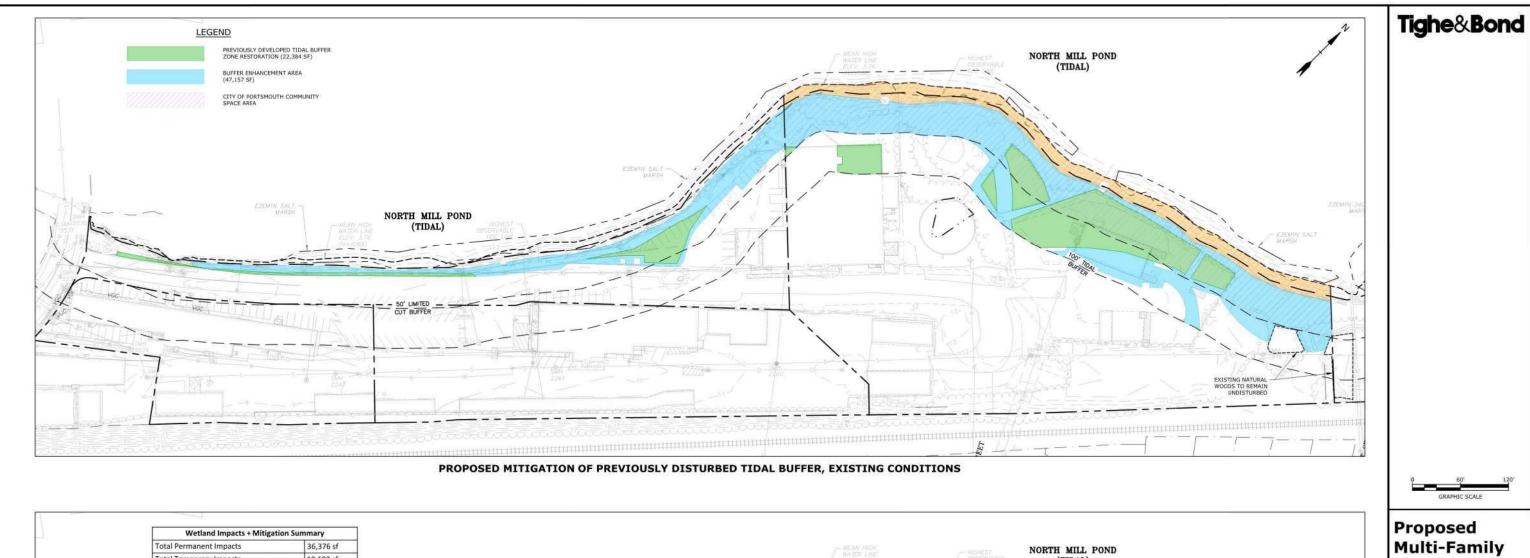
105 Bartlett Street Portsmouth, New Hampshire

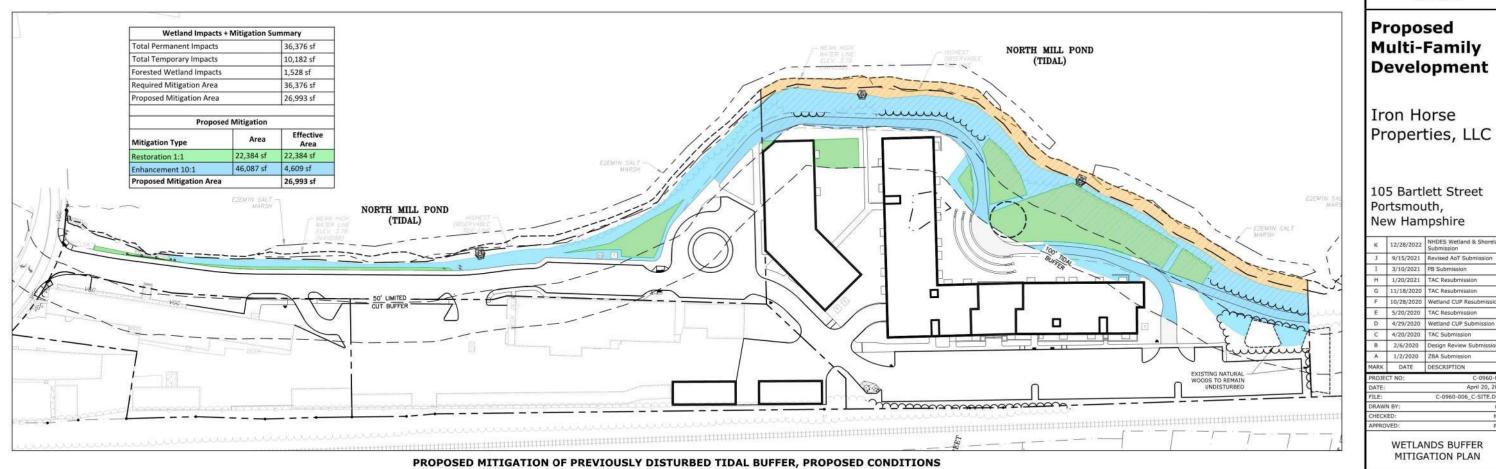
к	12/28/2022	NHDES Wetland & Shoreland Submission
J	9/15/2021	Revised AoT Submission
1	3/10/2021	PB Submission
н	1/20/2021	TAC Resubmission
G	11/18/2020	TAC Resubmission
F	10/28/2020	Wetland CUP Resubmission
E	5/20/2020	TAC Resubmission
D	4/29/2020	Wetland CUP Submission
С	4/20/2020	TAC Submission
В	2/6/2020	Design Review Submission
Α	1/2/2020	ZBA Submission
MARK	DATE	DESCRIPTION
PROJE	CT NO:	C-0960-006

WETLANDS BUFFER IMPACT PLAN

SCALE: AS SHOWN

1 OF 2





WETLANDS BUFFER MITIGATION PLAN

2 OF 2

AS SHOWN

TOWN	LAND VALUE				
			AQUATIC RESOU ETLAND PAYMEN		
Plainfield	3154		ETLAND PAYMEN INSERT AMOUNTS II		
Plaistow	53267			LLLOW SELL	
Plymouth	7923				
Portsmouth	53267	1	Convert square feet	of impact to acı	es:
Randolph	954	INSERT SQ FT OF IMPACT	Square feet of impac		
Raymond	23309			43560.00	
Richmond	1456		Acres of impact =	0.2154	
Rindge	10261 29642				
Rochester			D.4		
Rollinsford Roxbury	32458 761	2	Determine acreage	0.3231	truction:
Rumney	761 4204		Forested wetlands:		
Rve	53267		Tidal wetlands: All other areas:	0.6462 0.3231	
Salem	53267		All Other areas.	0.3231	
Salisbury	2413				
Sanbornton	11075	2	Wetland construction	n cost:	
Sandown	37557		Forested wetlands:	\$33.103.65	
Sandwich	5002		. 5.55tou wottailus.	\$55,105.05	
Sargent's	5002		Tidal Wetlands:	\$66,207.30	
Purchase	494		All other areas:	\$33,103.65	
Seabrook	53267		outor arous.	\$00,100.00	
Second College	33207				
Grant	494	4	Land acquisition co	st (See land valu	ue table):
Sharon	1729	INSERT LAND VALUE	Town land value:	53267	
Shelburne	500	FROM TABLE WHICH	Forested wetlands:	\$17,210.89	
Somersworth	43798	APPEARS TO THE LEFT.	Tidal wetlands:	\$34,421.78	
	.5.50	(Insert the amount do not	All other areas:	\$17,210.89	
South Hampton	15895	copy and paste.)			
Springfield	3452	5	Construction + land	costs:	
Stark	789		Forested wetland:	\$50,314.54	
Stewartstown	1242		Tidal wetlands:	\$100,629.08	
Stoddard	4934		All other areas:	\$50,314.54	
Strafford	8396				
Stratford	494	6	NHDES Administrat	ive cost:	
Stratham	53267		Forested wetlands:	\$10,062.91	
Success	494		Tidal wetlands:	\$20,125.82	
Sugar Hill	8401		All other areas:	\$10,062.91	
Sullivan	1665				
Sunapee	53267	********	TOTAL ARM PAYM		
Surry	3226		Forested wetlands:	\$60,377.45	
Sutton	7136				
Swanzey	8224		Tidal wetlands:	\$120,754.90	
Tamworth	4771		All other areas:	\$60,377.45	
Temple	4371				
Thompson &					
Meserve's					
Purchase	494				
Thornton	5115				
Tilton	35234				
Troy	3430				
Tuftonboro	30222				
Unity	3136				
Wakefield	27165				
Walpole	8528				
Warner	3312				
Warren	852				
Washington	5420				
Waterville					
Valley	1737				
Weare	11359				
Webster Wentworth	6440				
Wentworth Wentworth's	1477				
	,				
Location	494				
Westmoreland Whitefield	2753 2975				
Whitefield Wilmot	2975 4608				
Wilmot Wilton					
Wilton Winchester	11438 3171				
Winchester	31/1 53267				
Windsor Wolfeboro	2522				
Woodstock	41723 2321				



APPENDIX G

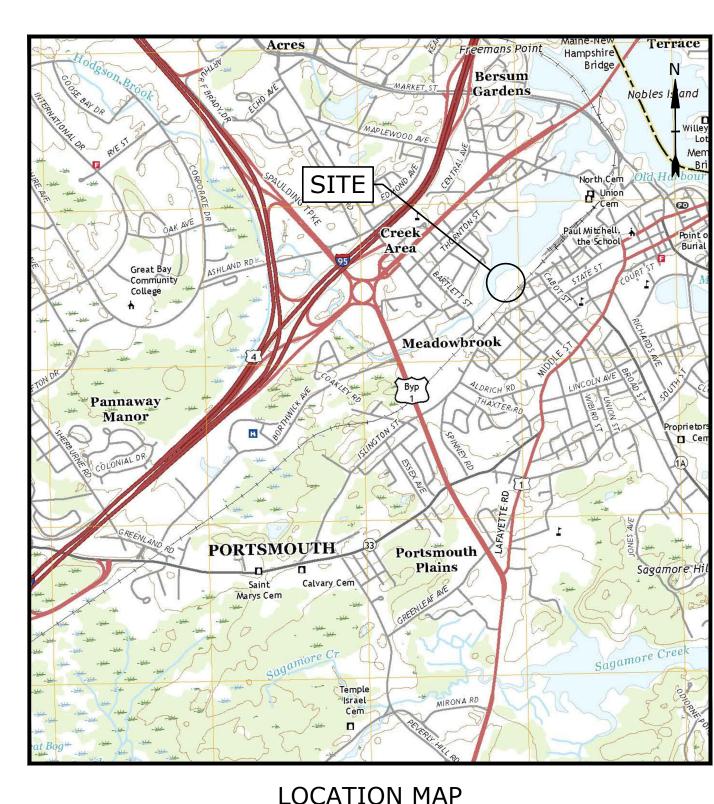
PROPOSED MULTI-FAMILY DEVELOPMENT

105 BARTLETT STREET PORTSMOUTH, NEW HAMPSHIRE

JANUARY 2, 2020

3
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LIST OF DRAWINGS		
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	01/10/2023
1 OF 5	LOT LINE RELOCATION PLAN	01/19/2021
2 OF 5	LOT LINE RELOCATION PLAN	01/19/2021
3 OF 5	LOT LINE RELOCATION PLAN	01/19/2021
4 OF 5	LOT LINE RELOCATION PLAN	01/19/2021
5 OF 5	LOT LINE RELOCATION PLAN	01/19/2021
C-101	OVERALL EXISTING CONDITIONS AND DEMOLITION PLAN	12/28/2022
C-101.1	EXISTING CONDITIONS AND DEMOLITION PLAN	12/28/2022
C-101.2	EXISTING CONDITIONS AND DEMOLITION PLAN	12/28/2022
C-102	OVERALL SITE PLAN	12/28/2022
C-102.1	SITE PLAN	12/28/2022
C-102.2	SITE PLAN	12/28/2022
C-102.3	BASEMENT LEVEL SITE PLAN	12/28/2022
C-103.1	GRADING, DRAINAGE, AND EROSION CONTROL PLAN	12/28/2022
C-103.2	GRADING, DRAINAGE, AND EROSION CONTROL PLAN	12/28/2022
C-104.1	UTILITIES PLAN	12/28/2022
C-104.2	UTILITIES PLAN	12/28/2022
C-501	EROSION CONTROL NOTES AND DETAILS SHEET	12/28/2022
C-502	DETAILS SHEET	12/28/2022
C-503	DETAILS SHEET	12/28/2022
C-504	DETAILS SHEET	12/28/2022
C-505	DETAILS SHEET	12/28/2022
C-506	DETAILS SHEET	12/28/2022
C-507	DETAILS SHEET	12/28/2022
C-508	DETAILS SHEET	12/28/2022
C-509	DETAILS SHEET	12/28/2022
L-1	SITE LANDSCAPE PLAN	01/09/2023
L-2	FOUNDATION PLANTING PLAN	01/09/2023



LOCATION MAP SCALE: 1" = 2000'

PREPARED BY:

603-433-8818

OWNERS:

TAX MAP 157, LOT 1 CLIPPER TRADERS, LLC 105 BARTLETT STREET PORTSMOUTH, NEW HAMPSHIRE 03801

TAX MAP 164, LOT 4-2 IRON HORSE PROPERTIES, LLC

105 BARTLETT STREET PORTSMOUTH, NH 03801

TAX MAP 157 LOT 2 TAX MAP 164, LOT 1 PORTSMOUTH HARDWARE & LUMBER, LLC 105 BARTLETT STREET PORTSMOUTH, NH 03801

SURVEYOR:

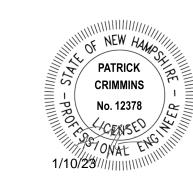
AMBIT ENGINEERING, INC.

200 GRIFFIN ROAD - UNIT 3 PORTSMOUTH, NEW HAMPSHIRE 03801

APPLICANT:

IRON HORSE PROPERTIES, LLC PORTSMOUTH, NEW HAMPSHIRE 03801

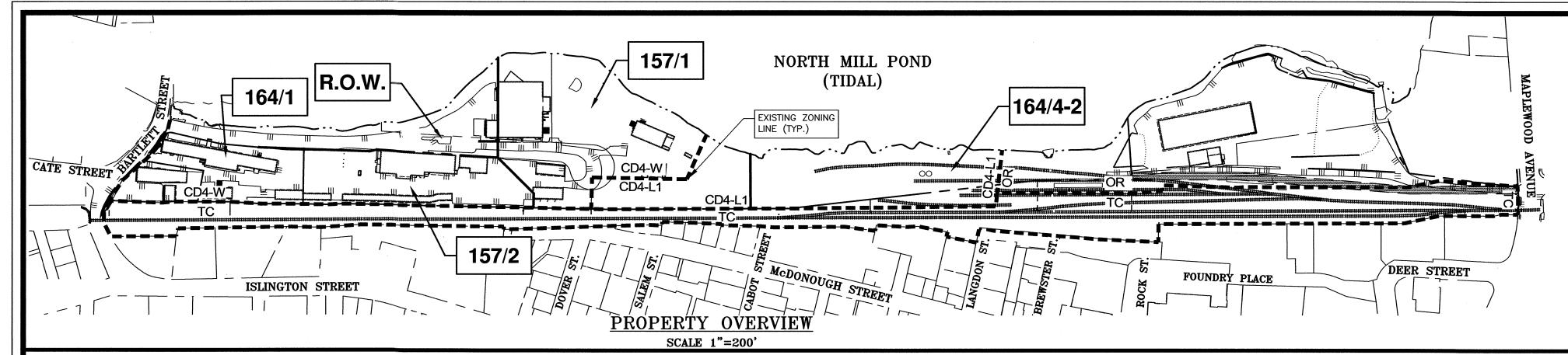
LIST OF PERMITS		
LOCAL	STATUS	DATE
SITE PLAN REVIEW PERMIT	APPROVED	4/15/2021
LOT LINE REVISION PERMIT	APPROVED	4/15/2021
CONDITIONAL USE PERMIT - SHARED PARKING	APPROVED	4/15/2021
CONDITIONAL USE PERMIT - WETLAND BUFFER	APPROVED	4/15/2021
STATE		
NHDES - ALTERATION OF TERRAIN PERMIT	APPROVED	9/29/2021
NHDES - WETLAND PERMIT	PENDING	
NHDES - SHORELAND PERMIT	PENDING	
NHDES - SEWER CONNECTION PERMIT	PENDING	
FEDERAL		
EPA - NPDES CGP	PENDING	





NHDES WETLAND & **SHORELAND SUBMISSION COMPLETE SET 28 SHEETS**

T&B PROJECT NO: C0960-006



PLAN REFERENCES:

- 1) LAND IN PORTSMOUTH, N.H. BOSTON AND MAINE RAILROAD TO ERMINIO A.RICCI, SCALE : 1" = 40', APRIL 1960 RCRD 1595/091.
- 2) LAND IN PORTSMOUTH, N.H. BOSTON AND MAINE RAILROAD TO ERMINIO A.RICCI, SCALE: 1" = 40', MAY 1957 RCRD 02612.
- 3) EASEMENT OF LAND IN PORTSMOUTH, N.N. BOSTON AND MAINE RAILROAD TO UNITED STATES OF HAMPSHIRE, PREPARED BY AMBIT ENGINEERING, INC. SCALE: 1" = 30', DATED SEPTEMBER 2012, AMERICA, SCALE 1" = 20', MAY 1957, RCRD 02633.
- 5) LAND IN PORTSMOUTH, N.H. MARY E. MORAN TO BOSTON AND MAINE RAILROAD, SCALE 1" = 40', MARCH 1920, RCRD 00540.
- 6) PLAN OF LAND OF MARY E. MORAN ON BARTLETT AND ISLINGTON STREETS PORTSMOUTH, N.H., 24) SITE REDEVELOPMENT NED & BILL PROPERTIES 621-627 ISLINGTON STREET PORTSMOUTH,

PREPARED BY JOHN W. DURGIN, SCALE 1" = 20', MAY 1920, RCRD 08.

- 7) DRAINAGE EASEMENT GEORGE E. FRISBEE TO THE CITY OF PORTSMOUTH, N.H., PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES, SCALE : 1" = 20', JUNE 1981, RCRD B-10456.
- 8) LAND IN PORTSMOUTH, N.H. BOSTON AND MAINE RAILROAD TO PORTSMOUTH FACTORY BUILDING SEPTEMBER 21, 1988, RCRD D-18742.
- ASSOCIATION, SCALE 1" = 20' OCTOBER 1923, RCRD 00356.
- OF CONTINENTAL SHOE CORP. PORTSMOUTH, N.H., SCALE 1'' = 30', 11-27-53, RCRD 1303/378. = 100'', JUNE 30, 1914 VAL V3NH SL55.
- RAILROAD AND CONCORD AND PORTSMOUTH RAILROAD COVERING RELOCATION OF TRACKS OF CONCORD AND PORTSMOUTH RAILROAD IN PORTSMOUTH, N.H. OCCASIONED BY CONSTRUCTION OF NEW 1" = 100', JUNE 30, 1914 VAL V3NH SL55A. HIGHWAY AND BRIDGE BY MAINE -- NEW HAMPSHIRE INTERSTATE BRIDGE AUTHORITY, SCALE 1" = 500', DECEMBER 1936, RCRD 0934.
- 11) LAND IN PORTSMOUTH, N.H. BOSTON AND MAINE RAILROAD TO CITY CONCRETE CO.,INC., SCALE 1" = 80', JANUARY 1955, RCRD 02897.
- 12) LAND IN PORTSMOUTH, N.H. BOSTON AND MAIN RAILROAD TO ALL STATE REALTY CORPORATION. SCALE 1" = 50", FEBRUARY 1961, RCRD 160.
- 13) LAND IN PORTSMOUTH, N.H. BOSTON AND MAINE RAILRAOD TO VITO P. MASSARO, SCALE 1" = 40', APRIL 1949, RCRD 01450.
- 14) DRAINAGE EASEMENT STUART AND PAULA BOXER AND ARANOSIAN OIL COMPANY TO THE CITY OF DECEMBER 13, 2018. R.C.R.D. PLAN D-41242. PORTSMOUTH, N.H., PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES, SCALE: 1" = 20', JUNE 1981, RCRD B-10455.
- 15) CONDOMINIUM PLAN ISLINGTON PLACE PREPARED FOR ANCHOR BUILDING ASSOCIATES, PREPARED LLC. OFF McDONOUGH STREET, CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM, STATE OF NEW BY KIMBALL CHASE COMPANY, INC., SCALE 1" = 20', 12-10-86, RCRD D-15826.
- 16) PLAN OF LOT 565-581 ISLINGTON STREET PORTSMOUTH, N.H., PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS, SCALE 1" = 10', DECEMBER 1949 REVISED JANUARY 1963, RCRD B28.
- JOHN W. DURGIN CIVIL ENGINEERS PROFESSIONAL ASSOCIATION, SCALE" 1" = 30', DECEMBER 1976, RCRD C-6587.
- 18) RIGHT OF WAY AND TRACK MAP BOSTON AND MAINE R.R. OPERATED BY THE BOSTON AND MAINE R.R.STATION 2966+20 TO STATION 3019+0, SCALE 1" = 100', JUNE 30, 1914, VAL V3NH 55.
- 19) PLAN OF LAND FOR DEER STREET ASSOCIATES DEER AND BRIDGE STREETS AND MAPLEWOOD AVENUE PORTSMOUTH, N.H. COUNTY OF ROCKINGHAM, PREPARED BY AMBIT SURVEY, SCALE: 1" = 30', SEPTEMBER 1993.
- 20) PROPOSED EASEMENTS- BARTLETT STREET BARTLETT SEWER SEPERATION PROJECT OVER LAND OF PAN AM RAILWAYS PORTSMOUTH, NEW HAMPSHIRE FOR CITY OF PORTSMOUTH, PREPARED BY JAMES VERRA AND ASSOCIATES, INC., SCALE: 1" = 20', DATED 10-01-2007 RCRD D-35477.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN

- 21) SEWER AND STORM DRAIN EASEMENT PLAN 105 BARTLETT STREET PORTSMOUOTH, NEW HAMPSHIRE ASSESSOR'S PARCEL 164-001 & 164-003 EASEMENT OWNER CITY OF PORTSMOUTH, PREPARED BY JAMES VERRA AND ASSOCIATES, INC., SCALE 1" = 20', DATED 01/05/2012, RCRD
- 22) EASEMENT PLAN TAX MAP 164 LOT 4 BOSTON & MAINE CORPORATION TO THE CITY OF PORTSMOUTH OFF BREWSTER STREET CITY OF PORTSMOUTH COUNTY OF ROCKINGHAM STATE OF NEW RCRD D-37720
- 4) LAND IN PORTSMOUTH, N.H. VITO P. MASSARO TO PORT CITY BEVERAGE CO, SCALE 1" = 40', 23) STANDARD BOUNDARY SURVEY TAX MAP 157 LOTS 7,8,10,11,12,13,14,AND 15 WASHBURN REALTY, INC. AND WASHBURN PLUMBING AND HEATING SUPPLY COMPANY, INC. FOR JAY McSHARRY 449 & 459 ISLINGTON STREET AND 18, 30, 40, & 46 DOVER STREET AND 268 & 280 MCDONOUGH STREET CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM STATE OF NEW HAMPSHIRE, PREPARED BY AMBIT ENGINEERING. INC., SCALE 1" = 20', DATED JANUARY 2012, NOT RECORDED.
 - N.H., PREPARED BY AMBIT ENGINEERING, INC., SCALE 1" = 10', DATED MARCH 2006, NOT
 - 25) PLAN OF LAND FOR SAGAMORE ENTERPRISES 653 ISLINGTON STREET COUNTY OF ROCKINGHAM PORTSMOUTH N.H., PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES, SCALE 1" = 10', DATED
- 26) STATION MAP LANDS BOSTON AND MAINE R.R. OPERATED BY THE BOSTON AND MAINE R.R. 9) NH ELECTRIC CO. PLAN SHOWING AREA RESERVED FOR TRANSFORMER SUBSTATION ON PROPERTY STATION 2966+20 TO STATION 3019+0, OFFICE OF VALUATION ENGINEER. BOSTON, MASS, SCALE 1"
- 10) BOSTON AND MAINE RAILROAD PLAN TO ACCOMPANY AGREEMENT BETWEEN BOSTON AND MAINE 27) STATION MAP LANDS CONCORD AND PORTSMOUTH R,R, OPERATED BY THE BOSTON AND MAINE R.R. STATION 0+0 TO STATION 33+0, OFFICE OF VALUATION ENGINEER. BOSTON, MASS, SCALE
 - 28) SUBDIVISION PLAN TAX MAP 157 LOTS 1 & 2 TAX MAP 164 LOTS 1, 2, 3, & 4 OWNER OF RECORD TAX MAP 157, LOT 2 & TAX MAP 164, LOTS 1, 2, & 3: PORTSMOUTH LUMBER AND HARDWARE, LLC OWNER OF RECORD TAX MAP 157, LOT 1: CLIPPER TRADERS, LLC OWNER OF RECORD TAX MAP 164, LOT 4: BOSTON AND MAINE CORPORATION PROPERTY LOCATED AT: 105 BARTLETT STREET, CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM, STATE OF NEW HAMPSHIRE. PREPARED BY AMBIT ENGINEERING, INC. DATED FEBRUARY 2018, FINAL REVISION DATE DECEMBER 14, 2018. R.C.R.D. PLAN D-41241.
 - 29) LAND TRANSFER PLAN TAX MAP 164 LOT 4 LAND OF: BOSTON AND MAINE CORPORATION TO CHARACTER DISTRICT CD4-W: BE CONVEYED TO: PORTSMOUTH LUMBER AND HARDWARE, LLC & CLIPPER TRADERS, LLC PROPERTY LOCATED AT 105 BARTLETT STREET, CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM, STATE OF NEW FRONTAGE: HAMPSHIRE. PREPARED BY AMBIT ENGINEERING, INC. DATED DECEMBER 2018, FINAL REVISION DATE
 - 30) WATERLINE EASEMENT PLAN OVER TAX MAP 164 LOT 4 LAND OF BOSTON AND MAINE CORPORATION FOR BENEFIT OF PORTSMOUTH LUMBER AND HARDWARE, LLC & CLIPPER TRADERS, HAMPSHIRE. PREPARED BY AMBIT ENGINEERING, INC. DATED DECEMBER 2018, FINAL REVISION DATE DECEMBER 19, 2018. R.C.R.D. PLAN B-41243.
- 31) LOT LINE RELOCATION PLAN TAX MAP 164 LOTS 4 & 4-2 OWNERS OF RECORD TAX MAP 164 LOT 4: BOSTON AND MAINE CORPORATION, OWNER OF RECORD TAX MAP 164 LOT 4-2: IRON 17) SUBDIVISION OF LAND PORTSMOUTH, N.H. FOR GEORGE AND PAULINE J. FRISBEE, PREPARED BY HORSE PROPERTIES, LLC, PROPERTY LOCATED BETWEEN BARTLETT STREET & MAPLEWOOD AVENUE, ENGINEERING, INC. DATED APRIL 2019, FINAL REVISION DATE MAY 30, 2019. R.C.R.D. PLAN
 - CORPORATION TO BENEFIT IRON HORSE PROPERTIES, LLC, PROPERTY LOCATED BETWEEN BARTLETT STREET & MAPLEWOOD AVENUE, CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM, STATE OF NEW HAMPSHIRE. PREPARED BY AMBIT ENGINEERING, INC. DATED JUNE 2019, FINAL REVISION DATE JUNE 27, 2019. R.C.R.D. PLAN D-41578.

ZONING DISTRICT DIMENSIONAL **REQUIREMENTS:**

OFFICE RESEARCH (OR)*: *PARCELS ARE SUBJECT TO EXCEPTIONS TO DIMENSIONAL STANDARDS AS OUTLINED IN CITY OF PORTSMOUTH ZONING ORDINANCE SECTION 10.532.10 & 10.532.20, MODIFIED DIMENSIONS LISTED BELOW

MIN. LOT AREA: 2 ACRES FRONTAGE: 200 FEET SETBACKS: FRONT 70 FEET 50 FEET REAR 50 FEET MAXIMUM STRUCTURE HEIGHT: 70 FEET (45 FEET WITHIN 200 FEET OF

NORTH MILL POND) MAXIMUM STRUCTURE COVERAGE: 50% MINIMUM OPEN SPACE: 20%

CHARACTER DISTRICT CD4-L1:

MIN. LOT AREA: 3,000 S.F. NO REQUIREMENT FRONTAGE: SETBACKS: FRONT (MAX.) 15 FEET (PRIMARY) FRONT (MAX.) 12 FEET (SECONDARY) 5-20 FEET 5 FEET MAXIMUM STRUCTURE HEIGHT: 20-30 FEET MAXIMUM STRUCTURE COVERAGE: MAXIMUM BUILDING FOOTPRINT: 2,500-3,500 S.F.

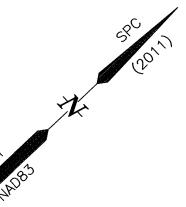
MINIMUM OPEN SPACE: 25% MAXIMUM BLOCK LENGTH: 80-100 FEET BUILDING SEPARATION: 15-30 FEET VIEW CORRIDORS: SEE ZONING ORDINANCE

NO REQUIREMENT

FRONT (MAX.) 10 FEET (PRIMARY) FRONT (MAX.) 15 FEET (SECONDARY) NO REQUIREMENT 5 FEET REAR MAXIMUM STRUCTURE HEIGHT: 45 FEET MAXIMUM STRUCTURE COVERAGE: MAXIMUM BUILDING FOOTPRINT: 15,000-20,000 S.F. MINIMUM OPEN SPACE: 15%

MINIMUM FRONT LOT LINE BUILDOUT: 50%

TRANSPORTATION CORRIDOR (TC): NO DIMENSIONAL OR USE REQUIREMENTS DEFINED IN ORDINANCE



EXISTING & PROPOSED LOT AREAS:

MAP 157 LOT 1 **EXISTING**

61,781± S.F.

1.4183± ACRES

<u>PROPOSED</u> 205,804± S.F. 4.7246± ACRES

MAP 157 LOT 2 **EXISTING**

PROPOSED 102,003 S.F. 81,645 S.F. 2.3417 ACRES 1.8743 ACRES

MAP 164 LOT 1 **EXISTING** 51,952 S.F.

1.1927 ACRES

52,289 S.F. 1.2004 ACRES

PROPOSED

119,519± S.F.

PROPOSED

EXISTING 249,771± S.F.

2.7454± ACRES 5.7340± ACRES RIGHT-OF-WAY

EXISTING 69,624± S.F.

1.5980± ACRES

MAP 164 LOT 4-2

PROPOSED 75,792± S.F. 1.1.7399± ACRES



AMBIT ENGINEERING, INC. Civil Engineers & Land Surveyors

200 Griffin Road - Unit 3 Portsmouth, N.H. 03801-7114 Tel (603) 430-9282 Fax (603) 436-2315

NOTES:

1) PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 157 LOTS 1 & 2, MAP 164 AS LOTS 1 & 4-2, AND A RIGHT-OF-WAY WITH NO ASSESSOR'S MAP DESIGNATION.

2) OWNERS OF RECORD: MAP 157 LOT 1 CLIPPER TRADERS, LLC 105 BARTLETT STRET PORTSMOUTH, NH 03801 5598/2725 & 5970/1701

> MAP 157 LOT 2 & MAP 164 LOT 1 PORTSMOUTH LUMBER & HARDWARE, LLC 105 BARTLETT STREET PORTSMOUTH, NH 03801 5372/2606, 5808/1379, 5540/2567, & 5970/1693

MAP 164 LOT 4-2 IRON HORSE PROPERTIES, LLC 105 BARTLETT STREET PORTSMOUTH, NH 03801 5970/1686 & 6012/2502

RIGHT-OF WAY CLIPPER TRADERS, LLC, PORTSMOUTH LUMBER & HARDWARE, LLC, & IRON HORSE PROPERTIES, LLC 5970/1708

3) PORTIONS OF THE SUBJECT PARCELS ARE IN A SPECIAL FLOOD HAZARD AREA ZONE AE (EL.9) AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17,

4) PARCELS ARE LOCATED IN CHARACTER DISTRICT 4W (CD4-W), CHARACTER DISTRICT 4-L1 (CD4-L1), AND OFFICE RESEARCH (OR) ZONING DISTRICTS.

5) THE PURPOSE OF THIS PLAN IS TO SHOW A LOT LINE RELOCATION BETWEEN THE SUBJECT PARCELS IN THE CITY OF PORTSMOUTH.

6) VERTICAL DATUM IS MEAN SEA LEVEL NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GPS OBSERVATIONS (±0.3')

7) HORIZONTAL DATUM AND BASIS OF BEARINGS IS THE NH STATE PLANE COORDINATE SYSTEM NAD 83 (2011). BASIS OF HORIZONTAL DATUM IS REDUNDANT RTN GPS OBSERVATIONS.

1	REVISE PROPOSED LOT LINE	1/19/21
0	ISSUED FOR COMMENT	6/22/20
NO.	DESCRIPTION	DATE
	REVISIONS	

LOT LINE RELOCATION PLAN TAX MAP 157 - LOTS 1 & 2 TAX MAP 164 - LOTS 1 & 4-2

TAX MAP 157 LOT 1:

CLIPPER TRADERS, LLC OWNER OF RECORD

TAX MAP 157 LOT 2 & TAX MAP 164 LOT 1: PORTSMOUTH LUMBER & HARDWARE, LLC

OWNER OF RECORD

TAX MAP 164 LOT 4-2: IRON HORSE PROPERTIES, LLC

OWNER OF RECORD RIGHT-OF-WAY (NO TAX MAP DESIGNATION):

IRON HORSE PROPERTIES, LLC,

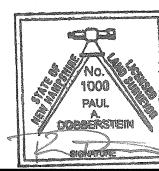
PORTSMOUTH LUMBER & HARDWARE, LLC, & CLIPPER TRADERS, LLC PROPERTY LOCATED BETWEEN:

BARTLETT STREET & MAPLEWOOD AVENUE CITY OF PORTSMOUTH COUNTY OF ROCKINGHAM STATE OF NEW HAMPSHIRE

JUNE 2020

2429

SCALE AS NOTED SHEET 1 OF 5 FB 243 PG 22

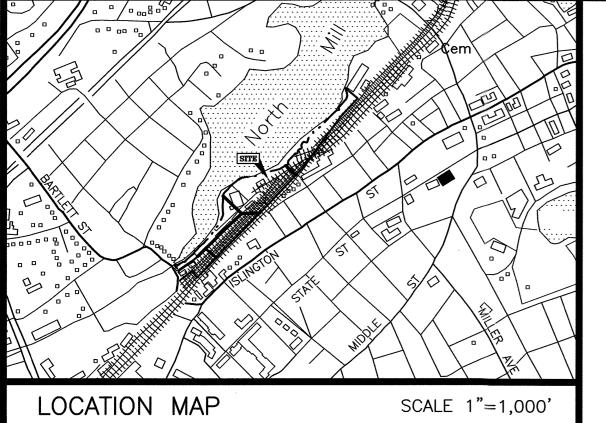


"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000."

PAUL A DOBBERSTEIN, LLS

1/20/2021 DAŤE

DATE



APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN

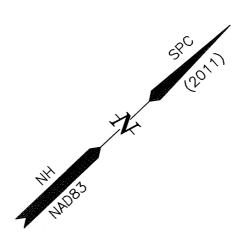
DATE

LENGTH TABLE

LINE	BEARING	DISTANCE
L3	N59°39'51"E	2'±

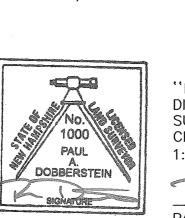
CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C5	150.00'	38.24'	38.14'	S39°30'52"W	14°36'24"
C6	200.00'	42.87	42.79'	S38°21'07"W	12°16'55"
C7	25.00'	31.80'	29.70'	S19°56'09"W	72°52'42"
C8	288.61	48.94'	48.88'	N21°21'40"W	9°42'56"
C10	288.61	80.91'	80.65'	N08°28'19"W	16°03'46"



LOCATION MAP	SCALE 1"=1,000'								
<u>LEGEND:</u>					(158) (13)				. e
N/F NOW OR FORMERLY RP RECORD OF PROBATE RCRD ROCKINGHAM COUNTY				PSNH 178/8	N/F SLATTERY & DUMONT, LLC	/			HEET
REGISTRY OF DEEDS MAP 11/LOT 21			DRILL HOLE SET 12/12/18	CONCRETE RETAINING WALL (L3 FROM R.O.W. LINE TO MHW,	66 OLD CONCORD TURNPIKE #10 BARRINGTON, NH 03825 3471/196				S S
O IR FND IRON ROD FOUND O IP FND IRON PIPE FOUND IR SET IRON ROD SET				TIE LINE TO R.O.W. LINE) RIPRAP SLOPE		NOR	TH MILL POND		INE – S
 ● DH FND DRILL HOLE FOUND ● DH SET DRILL HOLE SET △ MN FND MAG NAIL FOUND 			39.43° #.45.5° #. L A	STAIRS			(TIDAL)		ATCHLINI
MAG NAIL SET ■BND w/DH BOUND WITH DRILL HOLE ———————————————————————————————————			48 W 84	······································	PSNH 281/1 — CONCRETE HEAD — GRANITE BLOCK)WALL	(N49°42'31"E) (563.11') (TIE LINE—NOT A BOUNDARY LINE)		
PROPOSED PROP	TO BE ABANDONED PERTY LINE	3	S	STONE RETAINING	RETAINING/HEAD RIPRAP SLOPE) WALL	970'± ALONG MEAN HIGH WATER		
	M & B PROPE 54 BARTLET PORTSMOUTH,	IT STREET , NH 03801	18/ E. A.	RETAINING WALL			Ĵ	PSNH 211/281/3	`
	5794 <i>/</i> /	996 / SET 12/12	C17	\$56°22'30	"W W W W W W W W W W	SET 12/12/18 PSNH 28		OLD	
				MGC 131.26'	& 12/14/ SEE PLAN	S4.8*38'22"W	PAVED AREA AG NAIL TO PROPOSED LOT LINE (TYP.)	PSNH 281-4/3	
		PSNH 176/6			TYTYTY TYTY TYTYTY TYTY TYTYTY	102.80'	120.82' \$	45°21'33"W/ 177.37'	Ç5
				ROOF OVERHA (TYP.)	#105 2 STORY WOOD FRAME FF=11.5 ROOF PEAK=44.1		102.80' S44'10'56"W 45.82' BOUNDARY LINE TO BE ABANDONED (TYP.)	49,31'	NO PARKING
		BARTILLE	- N5-	4	ROOF PEAK=44.1	4/1 CONCRETE ENTRY	PSNH 17 VZ 85B/	<u>-</u>	1/35 📭
CATE	NETT	\$ \\ \tag{\frac{1}{2}} \\ \tag	#105 1 STORY RICK/CINDER	0"E					
STREET	318/	/858/3 BR	BLOCK N/F	1	PSNH 176/6A w/CONDUIT	PAVED AREA		PAINTED LINES (TYP.) NETT 400	,
	/	BRICK ROO RETAINING WALL	OF PEAK=23.1 HARDWARE. LI	LC TREET 03801, , ,		AREA		1 Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	
		PSNH 176/5 CONCRE PAVED AREA	GARAGE 1	34.99	CONCRETE	=	Щ	PAVEI AREA	A I
		+ DRILL HOLE IBON BOD	1 STORY METAL FRAME FF=9.9 ROOF	<i>: }'</i>	STORAGE SHED 1 STORY WOOD FRAME FF=10.2 ROOF PEAK=26.1	WOOD RETAINING WALL	WOOD SHED ROOF PEAK=25.3	PROPANE WOOD SHED TANK	E
IRON ROD w/MSC LLS 844 ID CAP FOUND, UP 3"		SET 12/12/18 SET 12/14/18	PEAK=26.6		S43°22'17"W	S46°55'09"W	——————————————————————————————————————	ROOF PEAK=30.6	
NGS PID OCO412 - V 28 1942	NETT 85/2 CO	DNCRETE BLOCK ETAINING WALL	IRON ROD SET 12/14/18 —	IRON ROD SET 12/14/18	86.86' IRON ROD SET 12/14/18	87.10' IRON ROD SET 12/14/18	S43°15'05"W S44°17'25"\ ·· 63.86' ·· 44.59' IRON ROD IRON ROD	·· 68.06' ·· 35.57'	
	ODANITE OF THE PROPERTY OF THE					<u>(1</u>	SET 12/14/18 — SET 12/14/18 —	SET 12/14/18—/	!
	GRANITE	EBLOCK NT/WINGWALL				IRON HO	I/F INE CORPORTATION ORSE PARK , MA 01862 ID REFERENCES		
	IN PARAF	OLE FOUND PET—CENTERLINE ATION STA 2969+04.87				VARIOUS DEE			
									:

GRAPHIC SCALE



"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000."

1/20/2021 PAUL A DOBBERSTEIN, LLS DATE



AMBIT ENGINEERING, INC.

Civil Engineers & Land Surveyors 200 Griffin Road - Unit 3 Portsmouth, N.H. 03801-7114 Tel (603) 430-9282 Fax (603) 436-2315

NOTES:

1) PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 157 LOTS 1 & 2, MAP 164 AS LOTS 1 & 4-2, AND A RIGHT-OF-WAY WITH NO ASSESSOR'S MAP DESIGNATION.

2) OWNERS OF RECORD: MAP 157 LOT 1 CLIPPER TRADERS, LLC 105 BARTLETT STRET PORTSMOUTH, NH 03801 5598/2725 & 5970/1701

> MAP 157 LOT 2 & MAP 164 LOT 1 PORTSMOUTH LUMBER & HARDWARE, LLC 105 BARTLETT STREET PORTSMOUTH, NH 03801 5372/2606, 5808/1379, 5540/2567, & 5970/1693

MAP 164 LOT 4-2 IRON HORSE PROPERTIES, LLC 105 BARTLETT STREET

PORTSMOUTH, NH 03801 5970/1686 & 6012/2502

RIGHT-OF WAY CLIPPER TRADERS, LLC, PORTSMOUTH LUMBER & HARDWARE, LLC, & IRON HORSE PROPERTIES, LLC 5970/1708

3) PORTIONS OF THE SUBJECT PARCELS ARE IN A SPECIAL FLOOD HAZARD AREA ZONE AE (EL.9) AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17, 2005.

4) PARCELS ARE LOCATED IN CHARACTER DISTRICT 4W (CD4-W), CHARACTER DISTRICT 4-L1 (CD4-L1), AND OFFICE RESEARCH (OR) ZONING DISTRICTS.

5) THE PURPOSE OF THIS PLAN IS TO SHOW A LOT LINE RELOCATION BETWEEN THE SUBJECT PARCELS IN THE CITY OF PORTSMOUTH.

6) VERTICAL DATUM IS MEAN SEA LEVEL NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GPS OBSERVATIONS (±0.3').

7) HORIZONTAL DATUM AND BASIS OF BEARINGS IS THE NH STATE PLANE COORDINATE SYSTEM NAD 83 (2011). BASIS OF HORIZONTAL DATUM IS REDUNDANT RTN GPS OBSERVATIONS.

8) SEE SHEET 1 OF 5 FOR OVERALL PROPERTY VIEW, EXISTING AND PROPOSED LOT AREAS, PLAN REFERENCES, AND DIMENSIONAL REQUIREMENTS.

	REVISIONS			
	NO.	DESCRIPTION	DATE	
	0	ISSUED FOR COMMENT	6/22/20	
(1	REVISE PROPOSED LOT LINE	1/19/21	
`				

TAX MAP 157 - LOTS 1 & 2 TAX MAP 164 - LOTS 1 & 4-2

LOT LINE RELOCATION PLAN

TAX MAP 157 LOT 1:

CLIPPER TRADERS, LLC OWNER OF RECORD

TAX MAP 157 LOT 2 & TAX MAP 164 LOT 1: PORTSMOUTH LUMBER & HARDWARE, LLC

OWNER OF RECORD TAX MAP 164 LOT 4-2:

IRON HORSE PROPERTIES, LLC OWNER OF RECORD

RIGHT-OF-WAY (NO TAX MAP DESIGNATION):

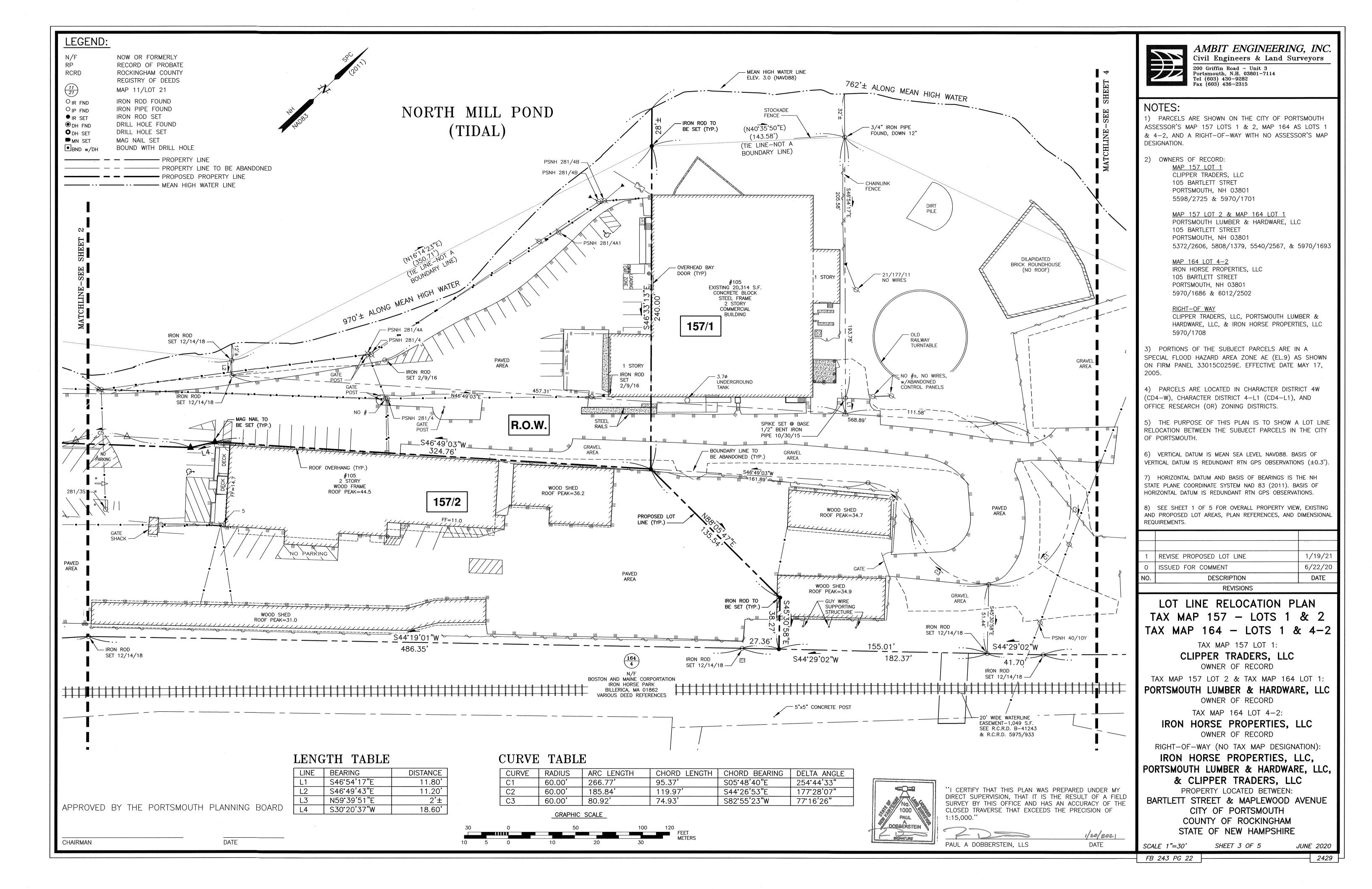
IRON HORSE PROPERTIES, LLC, PORTSMOUTH LUMBER & HARDWARE, LLC, & CLIPPER TRADERS, LLC

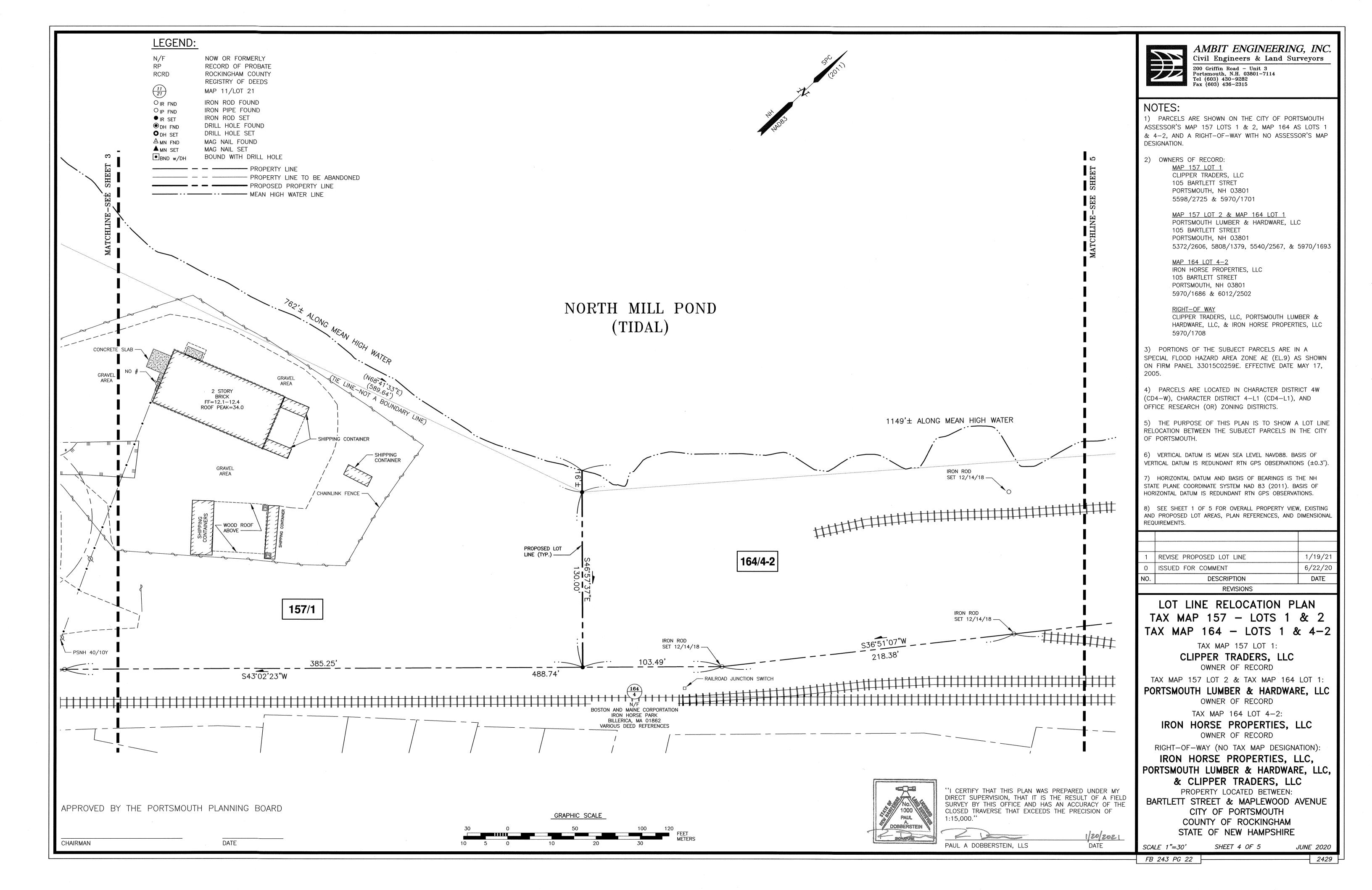
PROPERTY LOCATED BETWEEN: BARTLETT STREET & MAPLEWOOD AVENUE CITY OF PORTSMOUTH COUNTY OF ROCKINGHAM STATE OF NEW HAMPSHIRE

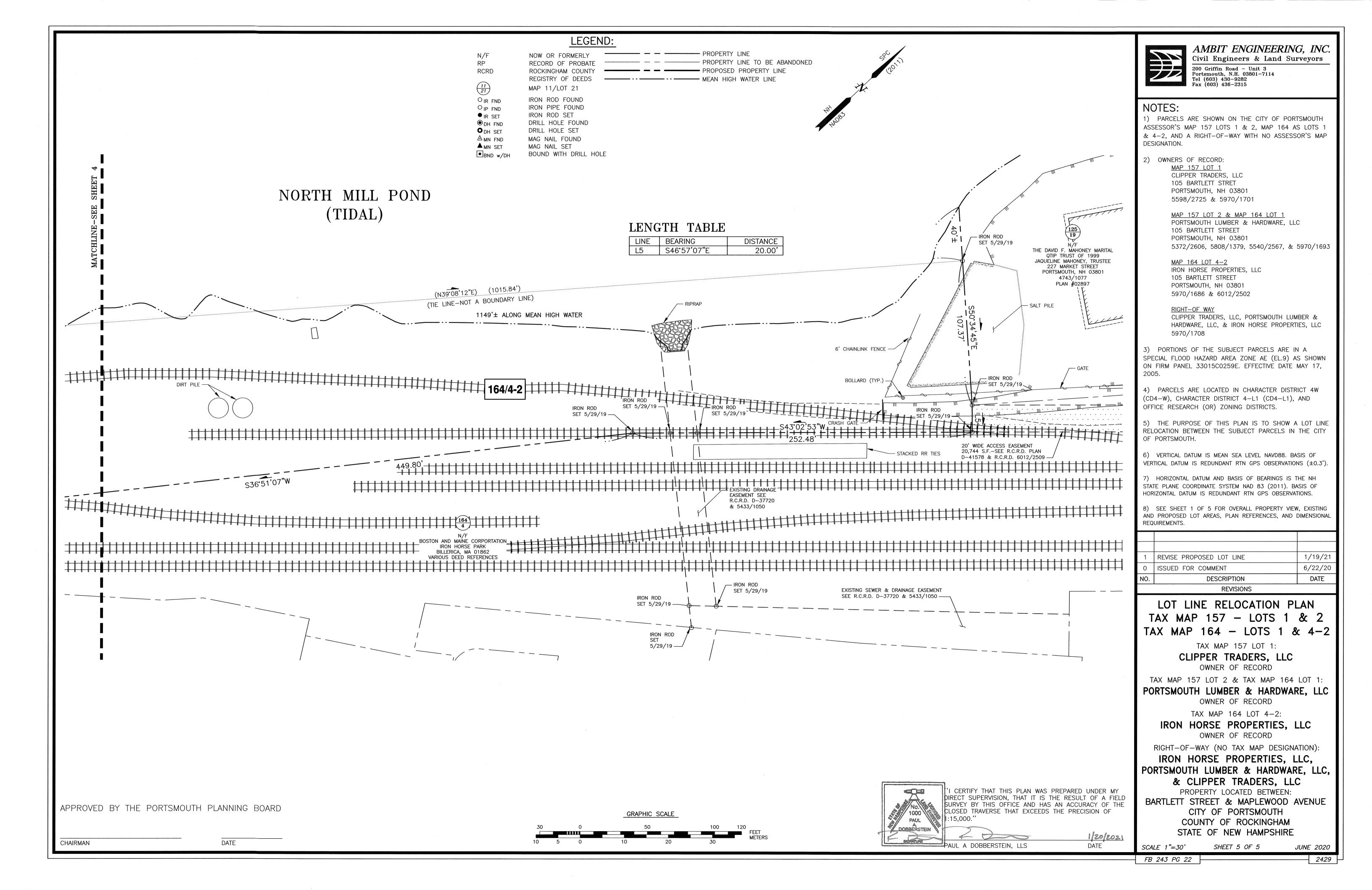
SHEET 2 OF 5 JUNE 2020 SCALE 1"=30'

FB 243 PG 22

2429





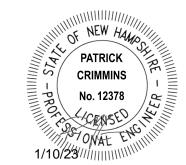


BUILDING BUILDING OVERHANG BUILDING NO. 50 BUILDING HATCH/TEXT EDGE OF PAVEMENT RETAINING WALL STONE WALL CHAIN LINK FENCE _____ X _____ X _____ FENCE LINE PAVEMENT MARKING TRAFFIC SIGN MAJOR CONTOURS — — MINOR CONTOURS STORM DRAIN LINE SANITARY SEWER LINE WATER LINE UNDERGROUND ELECTRIC LINE OVERHEAD ELECTRIC LINE UNDERGROUND GAS LINE DRAIN MANHOLE CATCH BASIN SEWER MANHOLE HYDRANT WATER GATE VALVE UTILITY POLE TELEPHONE STRUCTURE GAS GATE VALVE BOLLARD GAS SHUTOFF WATER SHUTOFF

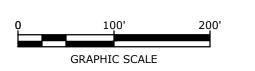
EXISTING CONDITIONS PLAN NOTES:

- EXISTING CONDITIONS ARE BASED ON A FIELD SURVEY BY AMBIT ENGINEERING, INC., DATED 3/5/2018.
 HIGHEST OBSERVABLE TIDE LINE (HOTL) DELINEATION ORIGINALLY PREFORMED BY STEVEN D. RIKER, CWS, ON 8/8/2017, AND FIELD LOCATED BY AMBIT ENGINEERING, INC. ON 8/9/2017. ON OCTOBER 29 AND DECEMBER 2, 2019, LEONARD LORD, PhD, CSS, CWS OF TIGHE & BOND REVIEWED AND ASSESSED 2,000+/- LINEAR FEET OF TIDAL WETLANDS AND BUFFERS ALONG THE NORTH MILL POND. THE WETLAND DELINEATION REVIEW WAS BASED ON CRITERIA SPECIFIED IN THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 (JANUARY 1987), AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION (JANUARY 2012). THE HIGHEST OBSERVABLE TIDE LINE WAS REVIEWED BASED ON THE DEFINITION FOUND IN NH DEPARTMENT OF ENVIRONMENTAL SERVICES WETLAND RULES, ENV-WT 101.49/ENV-WT 602.23. THE HOTL WAS DEEMED ACCURATE AND THE PREVIOUS 2017 DELINEATION WAS ACCEPTED BY TIGHE & BOND. WETLANDS WERE CLASSIFIED BASED ON CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES (COWARDIN ET AL., 1979).
- 3. FLOOD HAZARD ZONES: "AE ELEV. 9" (SPECIAL FLOOD HAZARD AREA) AND "X" (NOT A SPECIAL FLOOD HAZARD AREA), PER FIRM MAP #33015C0259E, DATED 5/17/05.

Tighe&Bond







Proposed Multi-Family Development

Iron Horse Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

K	12/28/2022	NHDES Wetland & Shoreland Submission
J	9/15/2021	Revised AoT Submission
I	3/10/2021	PB Submission
Н	1/20/2021	TAC Resubmission
G	11/18/2020	TAC Resubmission
F	10/28/2020	Wetland CUP Resubmission
E	5/20/2020	TAC Resubmission
D	4/29/2020	Wetland CUP Submission
С	4/20/2020	TAC Submission
В	2/6/2020	Design Review Submission
Α	1/2/2020	ZBA Submission
MARK	DATE	DESCRIPTION

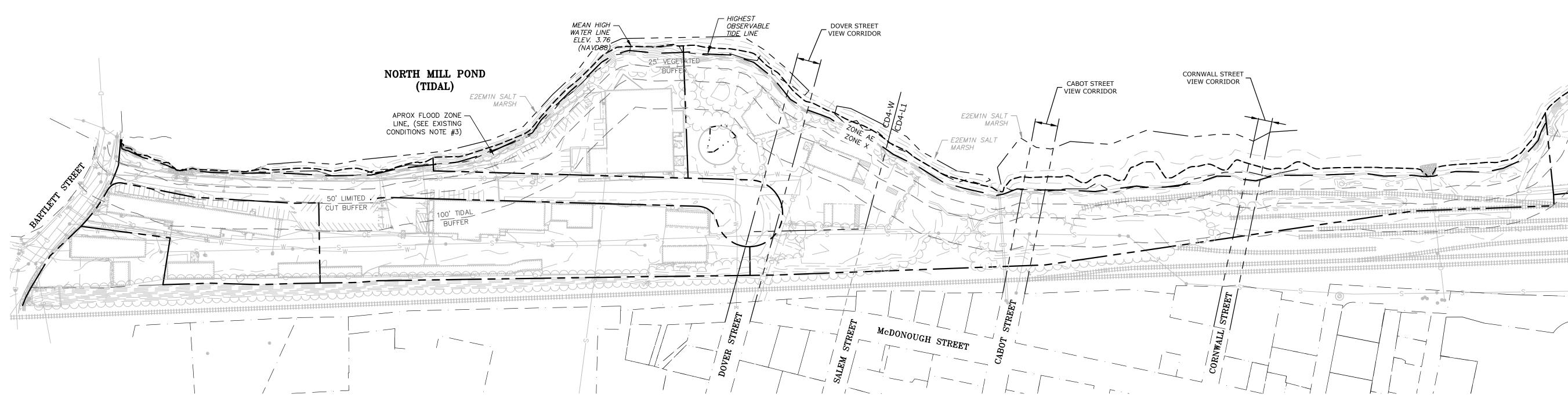
PROJECT NO:	C-0960-00
DATE:	April 20, 202
FILE:	C-0960-006_C-SITE.DW
DRAWN BY:	CJ
CHECKED:	NA
APPROVED:	PM

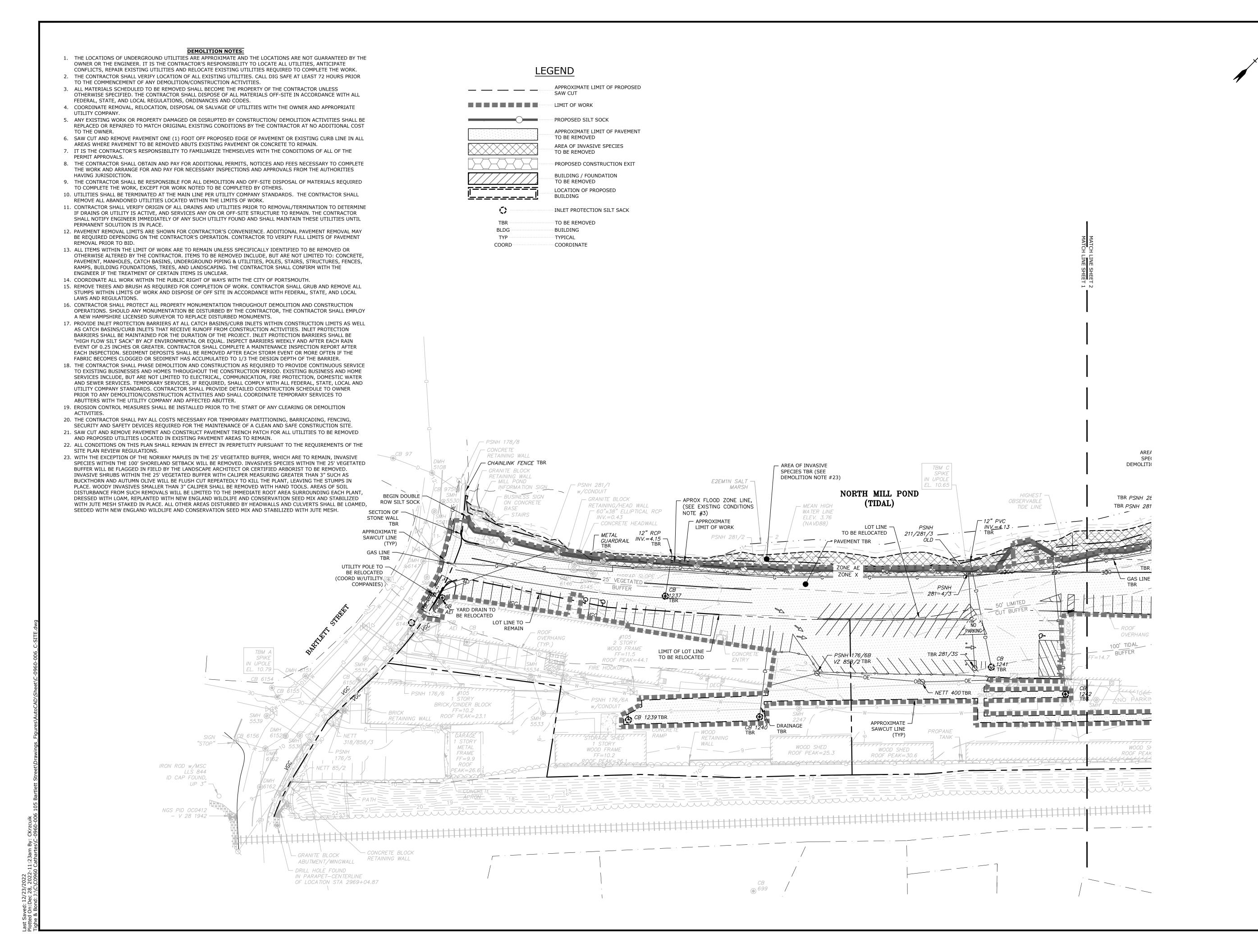
OVERALL EXISTING CONDITIONS PLAN

SCALE:

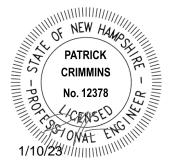
C-101

AS SHOWN

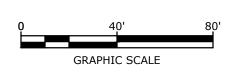












Proposed Multi-Family Development

Iron Horse Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

K	12/28/2022	NHDES Wetland & Shoreland Submission
J	9/15/2021	Revised AoT Submission
I	3/10/2021	PB Submission
Н	1/20/2021	TAC Resubmission
G	11/18/2020	TAC Resubmission
F	10/28/2020	Wetland CUP Resubmission
Е	5/20/2020	TAC Resubmission
D	4/29/2020	Wetland CUP Submission
С	4/20/2020	TAC Submission
В	2/6/2020	Design Review Submission
Α	1/2/2020	ZBA Submission
MARK	DATE	DESCRIPTION
PROJECT NO:		C-0960-006

EXISTING CONDITIONS AND DEMOLITION PLAN

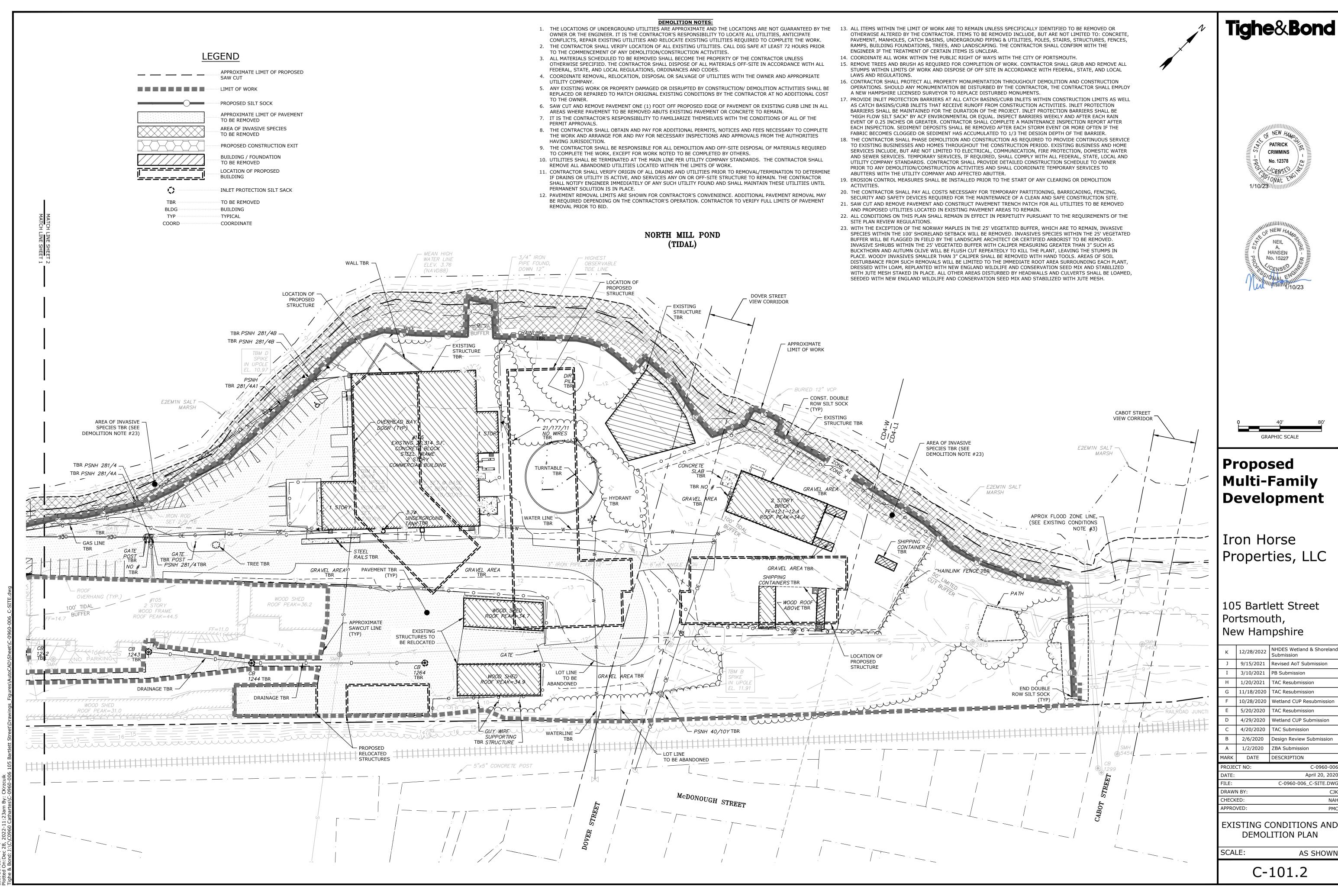
April 20, 202

C-0960-006_C-SITE.DW

SCALE: AS SHOWN

DRAWN BY: CHECKED: APPROVED:

C-101.1



		Submission
J	9/15/2021	Revised AoT Submission
Ι	3/10/2021	PB Submission
Н	1/20/2021	TAC Resubmission
G	11/18/2020	TAC Resubmission
F	10/28/2020	Wetland CUP Resubmission
Е	5/20/2020	TAC Resubmission
D	4/29/2020	Wetland CUP Submission
С	4/20/2020	TAC Submission
В	2/6/2020	Design Review Submission
Α	1/2/2020	ZBA Submission
MARK	DATE	DESCRIPTION
PROJECT NO:		C-0960-006

SITE DATA: PROJECT LOCATION: TAX MAP 157, LOT 1 TAX MAP 157, LOT 2 TAX MAP 164, LOT 1 TAX MAP 164, LOT 4-2 105 BARTLETT STREET PORTSMOUTH, NEW HAMPSHIRE SITE ZONING DISTRICT: CHARACTER DISTRICT 4 (CD4-W) CHARACTER DISTRICT 4 (CD4-L1) WEST END INCENTIVE OVERLAY DISTRICT ALLOWED USE ON SITE: PROFESSIONAL OFFICE, BUSINESS OFFICE, MULTIFAMILY DWELLING PROPOSED GROUND FLOOR USES: BUILDING A & B: RESIDENTIAL BUILDING C: RESIDENTIAL & AMENITY SPACE **DEVELOPMENT STANDARDS** MAX PRINCIPAL FRONT YARD: MINIMUM SIDE YARD: 15 FT⁽¹⁾ MINIMUM REAR YARD: 5 FT FRONT LOT LINE BUILDOUT: 50% MIN **BUILDING AND LOT OCCUPATION:** REQUIRED (CD4-W) MAXIMUM BUILDING BLOCK LENGTH: MAXIMUM FAÇADE MODULATION LENGTH: 80 FT MAXIMUM ENTRANCE SPACING: MAXIMUM BUILDING COVERAGE: MAXIMUM BUILDING FOOTPRINT: 20,000 SF⁽⁴⁾ MINIMUM LOT AREA: MINIMUM LOT AREA PER DWELLING UNIT: MINIMUM OPEN SPACE: MAXIMUM GROUND FLOOR GFA PER USE: 15,000 SF

(1) - PER 10.516.20, MINIMUM SIDE YARD SETBACK ADJOINING A RAILROAD RIGHT OF WAY SHALL BE 15FT

(2) - VARIANCE GRANTED BY ZONING BOARD OF ADJUSTMENT ON JANUARY 22, 2020 (3) - MAXIMUM BUILDING COVERAGE ALLOWED IN THE WEST END INCENTIVE OVERLAY DISTRICT FOR PROVIDING AT LEAST 20% OF THE SITE TO BE ASSIGNED

PROPOSED (CD4-W)

PROPOSED (CD4-W)

0 FT

54%

<80 FT

<50 FT

±20.9%

58.1%

19,214 SF

14,300 SF

205,804 SF

<6 FT⁽²⁾

214.54 FT

(4) - ADDITIONAL 5,000 SF OF GFA (INCREASED FROM 15,000 SF) ALLOWED FOR PROVIDING AT LEAST 20% OF THE SITE TO BE ASSIGNED AS COMMUNITY SPACE. (5) - NO MINIMUM LOT AREA PER DWELLING UNIT REQUIRED IN THE WEST END INCENTIVE OVERLAY DISTRICT FOR PROVIDING AT LEAST 20% OF THE SITE TO BE

ASSIGNED AS COMMUNITY SPACE. BUILDING FORM (PRINCIPAL BUILDING): 4 STORIES, 49'-2" MAXIMUM FINISHED FLOOR SURFACE OF GROUND FLOOR ABOVE SIDEWALK GRADE: 36 IN <36 IN MINIMUM GROUND STORY HEIGHT: 12 FT MINIMUM SECOND STORY HEIGHT: FAÇADE GLAZING: 70% MIN >70% SHOPFRONT FACADE OTHER FAÇADE TYPES: 20% TO 50% ALLOWED ROOF TYPES: FLAT, GABLE, HIP, GAMBREL, OR MANSARD FLAT ROOF PITCH, IF ANY: 6:12 - 12:12 GABLE HIP 3:12 MIN MANSARD/GAMBREL 6:12 - 30:12

APARTMENT BUILDING APARTMENT BUILDING ALLOWED BUILDING TYPES:

44,154 SF

) - MINIMUM SIDE YARD SETBACK FROM RAILROAD:

(1) - ADDITIONAL 1 STORY (INCREASED FROM 1 AND 3 RESPECTIVELY) ALLOWED FOR PROVIDING AT LEAST 20% OF THE SITE TO BE ASSIGNED AS COMMUNITY

(2) - ADDITIONAL 10' OF BUILDING HEIGHT (INCREASED FROM 20' AND 40' RESPECTIVELY) ALLOWED FOR PROVIDING AT LEAST 20% OF THE SITE TO BE ASSIGNED AS COMMUNITY SPACE.

(3) - MINIMUM GROUND STORY HEIGHT ALLOWED IN WEST END INCENTIVE OVERLAY DISTRICT FOR PROVIDING AT LEAST 20% OF THE SITE TO BE ASSIGNED AS COMMUNITY SPACE.

47,703 SF

10.516.20

COMMUNITY SPACE:

GRANTED:

OFF-STREET PARKING REQUIREMENTS:

PARKING SPACES REQUIRED:

500 SF TO 750 SF 1.0 SPACES PER UNIT BUILDING A, 16 UNITS 16 SPACES BUILDING B, 31 UNITS 31 SPACES BUILDING C, 17 UNITS TOTAL MINIMUM PARKING SPACES REQUIRED = 26.0 SPACES OVER 750 SF 1.3 SPACES PER UNIT BUILDING A, 20 UNITS BUILDING B, 39 UNITS 50.7 SPACES BUILDING C, 29 UNITS 37.7 SPACES TOTAL MINIMUM PARKING SPACES REQUIRED =

1 SPACE FOR EVERY 5 DWELLING UNITS 152 UNITS 31 SPACES TOTAL MINIMUM PARKING SPACES REQUIRED = 210 SPACES

9 SPACES

ADA SPACES PROVIDED=

MAXIMUM OF 30 SPACES

95 SPACES (SURFACE PARKING) 53 SPACES (BUILDING A, UNDERGROUND) 42 SPACES (BUILDING B, UNDERGROUND) 20 SPACES (PRIVATE ROADWAY)⁽¹⁾ 210 SPACES

ADA SPACES REQUIRED=

9 SPACES (4 SPACES INCLUDED IN SURFACE PARKING COUNT OF 95, 4 SPACES INCLUDED IN BASEMENT PARKING COUNT OF 95 1 SPACE INCLUDED IN PRIVATE ROADWAY COUNT OF 20)

(1) - CONDITIONAL USE PERMIT REQUIRED FOR SHARED PARKING ON SEPARATE LOT

PARKING STALL LAYOUT: DRIVE AISLE WIDTH: 24 FT 24 FT BIKE SPACES REQUIRED:

1 BIKE SPACE / 5 DWELLING UNITS, 30 SPACES* 30 SPACES

*INDOOR BIKE STORAGE WILL BE PROVIDED THAT MEETS OR EXCEEDS THE REQUIREMENT.

LEGEND

PROPERTY LINE PROPOSED PROPERTY LINE PROPOSED EDGE OF PAVEMENT PROPOSED CURB PROPOSED BUILDING

PROPOSED PAVEMENT SECTION

PROPOSED POROUS PAVEMENT SECTION

PROPOSED CONCRETE SIDEWALK PROPOSED BOLLARD BUILDING TYPICAL

COORD COORDINATE 30'R PROPOSED CURB RADIUS VGC PROPOSED VERTICAL GRANITE CURB PROPOSED SLOPED GRANITE CURB SGC

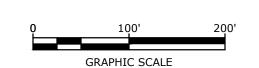
PROPOSED MOUNTABLE VERTICAL MVGC GRANITE CURB

BLDG

TYP

PATRICK CRIMMINS No. 12378





Proposed Multi-Family Development

Iron Horse Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

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ROJECT NO: C-0960-006 April 20, 2020 C-0960-006_C-SITE.DW DRAWN BY:

CHECKED: APPROVED:

OVERALL SITE PLAN

AS SHOWN

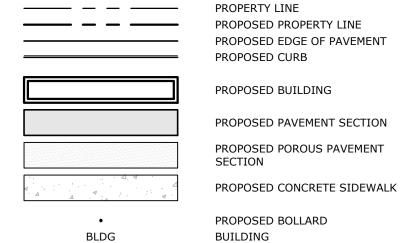
C-102

SCALE:

DOVER STREET VIEW CORRIDOR NORTH MILL POND CORNWALL STREET MAP 157 LOT 1 4.72 ACRES VIEW CORRIDOR CABOT STREET (TIDAL) VIEW CORRIDOR APROX FLOOD ZONE E2EM1N SALT LINE, (SEE EXISTING CONDITIONS NOTE #3) - E2EM1N SALT RICCI LUMBER MAP 164 LOT 4-2 2.75 ACRES MAP 157 LOT 2 MAP 164 LOT 1 1.87 ACRES 1.20 ACRES

- 1. STRIPE PARKING AREAS AS SHOWN, INCLUDING PARKING SPACES, STOP BARS, ADA SYMBOLS, PAINTED ISLANDS, CROSS WALKS, ARROWS, LEGENDS AND CENTERLINES SHALL BE THERMOPLASTIC MATERIAL. THERMOPLASTIC MATERIAL SHALL MEET THE REQUIREMENTS OF AASHTO AASHTO M249. (ALL MARKINGS EXCEPT CENTERLINE AND MEDIAN ISLANDS TO BE CONSTRUCTED USING WHITE TRAFFIC PAINT. CENTERLINE AND MEDIAN ISLANDS TO BE CONSTRUCTED USING YELLOW TRAFFIC PAINT. ALL TRAFFIC PAINT SHALL MEET THE REQUIREMENTS OF AASHTO M248
- 2. ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS, LATEST EDITIONS.
- 3. SEE DETAILS FOR PARKING STALL MARKINGS, ADA SYMBOLS, SIGNS AND SIGN POSTS.
- 4. CENTERLINES SHALL BE FOUR (4) INCH WIDE YELLOW LINES. STOP BARS SHALL BE EIGHTEEN (18) INCHES WIDE. 5. PAINTED ISLANDS SHALL BE FOUR (4) INCH WIDE DIAGONAL LINES AT 3'-0" O.C. BORDERED BY FOUR (4) INCH WIDE
- 6. THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED LAND SURVEYOR TO DETERMINE ALL LINES AND
- 7. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAW CUT LINE WITH RS-1 EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
- 8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES &
- 9. COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAY WITH THE CITY OF PORTSMOUTH.
- 10. CONTRACTOR TO SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR.
- 11. SEE BUILDING DRAWINGS FOR ALL CONCRETE PADS & SIDEWALKS ADJACENT TO BUILDING. 12. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD
- 13. CONTRACTOR TO PROVIDE BACKFILL AND COMPACTION AT CURB LINE AFTER CONCRETE FORMS FOR SIDEWALKS AND PADS HAVE BEEN STRIPPED. COORDINATE WITH BUILDING CONTRACTOR.
- 14. COORDINATE ALL WORK ADJACENT TO BUILDING WITH BUILDING CONTRACTOR. 15. THE PROPERTY MANAGER WILL BE RESPONSIBLE FOR TIMELY SNOW REMOVAL FROM ALL PRIVATE SIDEWALKS,
- DRIVEWAYS, AND PARKING AREAS. SNOW REMOVAL WILL BE HAULED OFF-SITE AND LEGALLY DISPOSED OF WHEN SNOW BANKS EXCEED 3 FEET IN HEIGHT.
- 16. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- 17. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
- 18. THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.
- 19. THE APPLICANT SHALL HAVE A SITE SURVEY CONDUCTED BY A RADIO COMMUNICATIONS CARRIER APPROVED BY THE CITY'S COMMUNICATIONS DIVISION. THE RADIO COMMUNICATIONS CARRIER MUST BE FAMILIAR AND CONVERSANT WITH THE POLICE AND RADIO CONFIGURATION. IF THE SITE SURVEY INDICATES THAT IT IS NECESSARY TO INSTALL A SIGNAL REPEATER EITHER ON OR NEAR THE PROPOSED PROJECT, THOSE COSTS SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE OWNER SHALL COORDINATE WITH THE SUPERVISOR OF RADIO COMMUNICATIONS FOR
- 20. ALL TREES TO BE PLANTED ARE TO BE INSTALLED UNDER THE SUPERVISION OF THE CITY OF PORTSMOUTH DPW USING STANDARD INSTALLATION METHODS.
- 21. THE APPLICATION SHALL PREPARE A CONSTRUCTION MITIGATION AND MANAGEMENT PLAN (CMMP) FOR REVIEW AND APPROVAL BY THE CITY'S LEGAL AND PLANNING DEPARTMENTS.

LEGEND



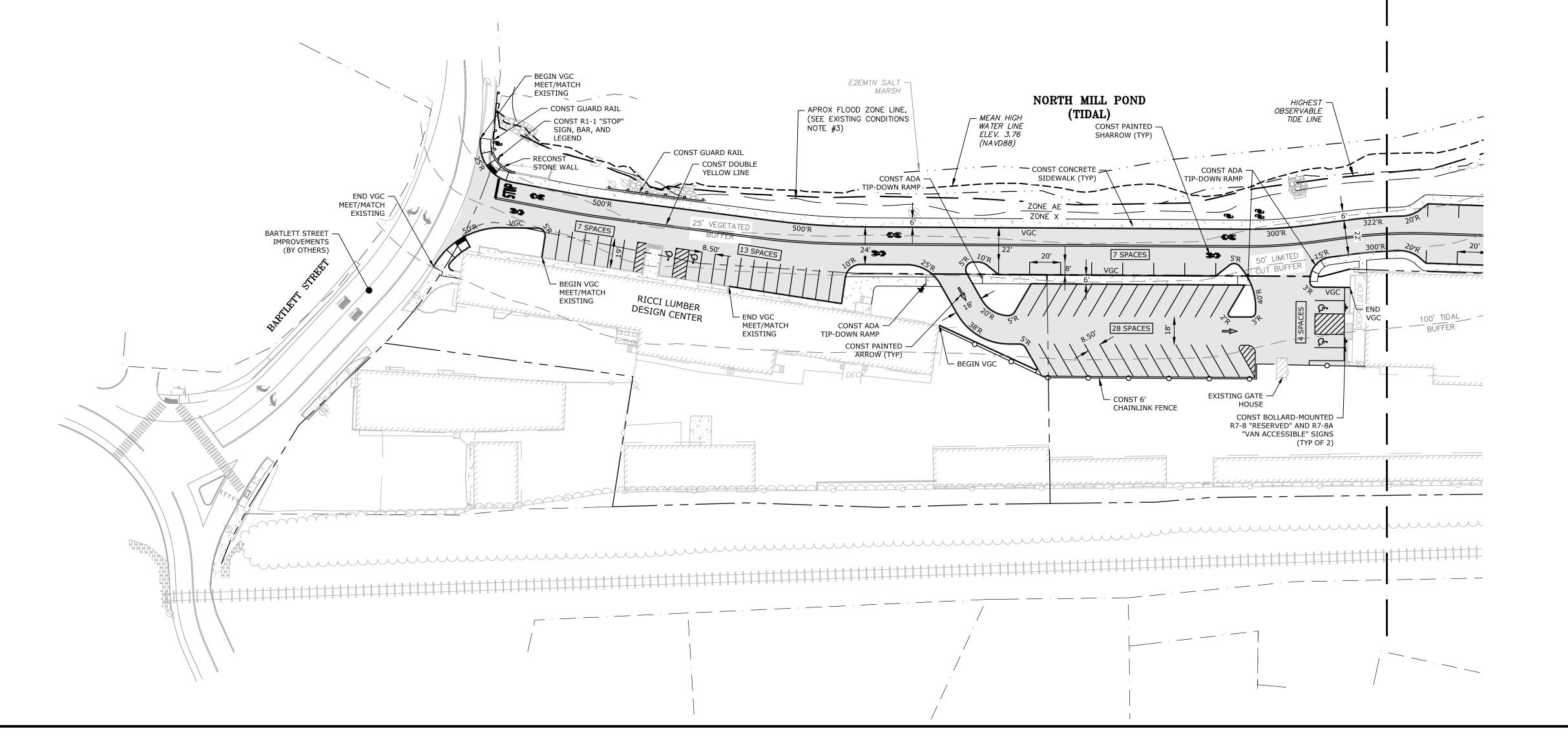
30'R

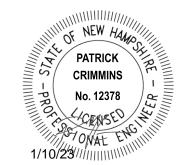
VGC

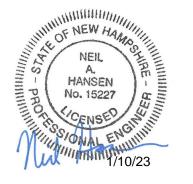
SGC

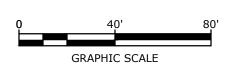
COORD COORDINATE PROPOSED CURB RADIUS PROPOSED VERTICAL GRANITE CURB PROPOSED SLOPED GRANITE CURB PROPOSED MOUNTABLE VERTICAL MVGC GRANITE CURB

TYPICAL









Proposed **Multi-Family** Development

Iron Horse Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

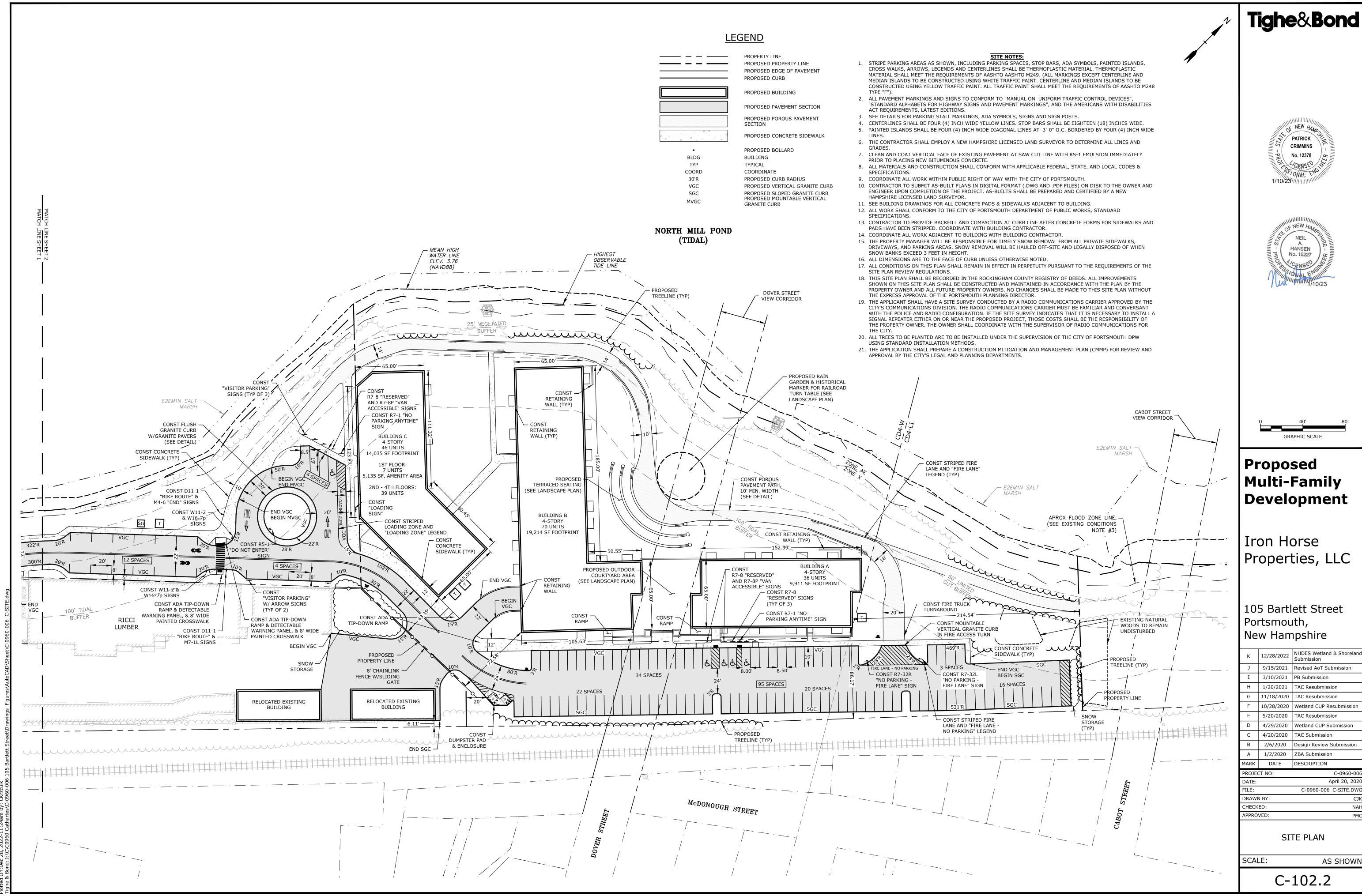
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April 20, 2020 C-0960-006_C-SITE.DWG DRAWN BY: CHECKED: APPROVED:

SITE PLAN

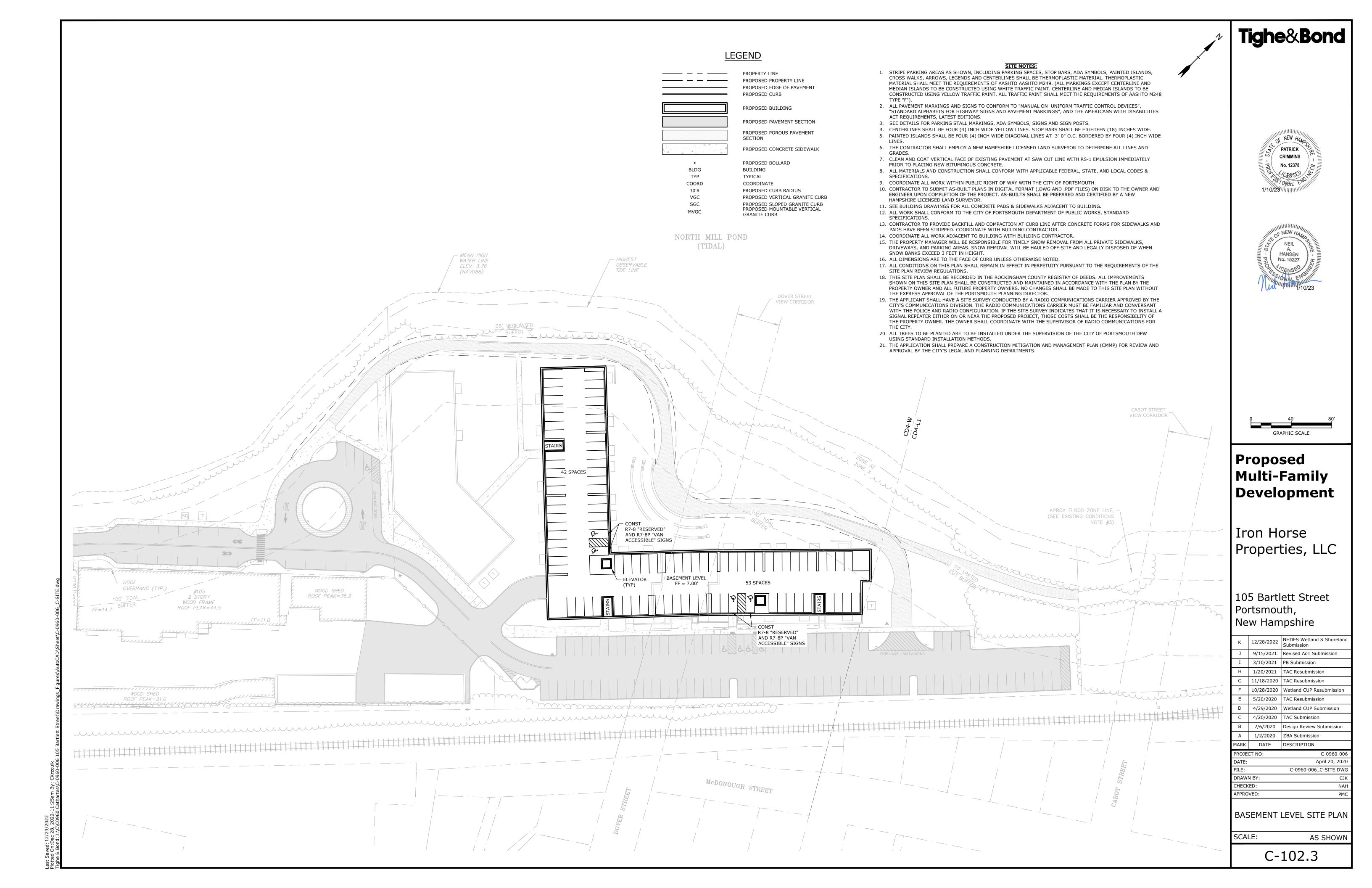
SCALE: AS SHOWN

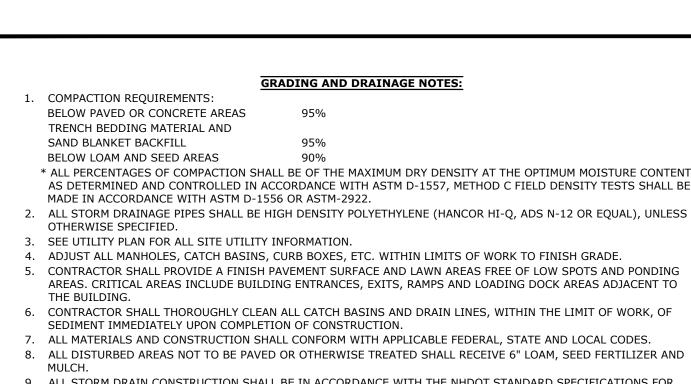
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		Submission
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AKK	DATE	DESCRIPTION
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ATE:		April 20, 2020
ILE:		C-0960-006_C-SITE.DW0
RAWN BY:		CJł
HECKED:		NAF





* ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT

AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE 2. ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR EQUAL), UNLESS

5. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCES, EXITS, RAMPS AND LOADING DOCK AREAS ADJACENT TO

7. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.

9. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NHDOT STANDARD SPECIFICATIONS FOR

HIGHWAYS AND BRIDGES, LATEST EDITION. 10. ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH OIL/GAS SEPARATOR HOODS AND 4' SUMPS.

11. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.

12. CONTRACTOR TO SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR.

13. SEE EXISTING CONDITIONS PLAN FOR BENCH MARK INFORMATION.

14. AREAS DISTURBED WITHIN THE 25' VEGETATED BUFFER BY HEADWALLS AND CULVERT CONSTRUCTION SHALL BE LOAMED, SEEDED WITH NEW ENGLAND WILDLIFE AND CONSERVATION SEED MIX AND STABILIZED WITH JUTE MESH.

EROSION CONTROL NOTES:

1. INSTALL EROSION CONTROL BARRIERS AS SHOWN AS FIRST ORDER OF WORK.

2. SEE GENERAL EROSION CONTROL NOTES ON "EROSION CONTROL NOTES & DETAILS SHEET" 3. PROVIDE INLET PROTECTION AROUND ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AS WELL AS CATCH BASINS/CURB INLETS THAT RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. MAINTAIN FOR THE DURATION OF THE PROJECT.

4. INSTALL STABILIZED CONSTRUCTION EXIT(S).

5. INSPECT INLET PROTECTION AND PERIMETER EROSION CONTROL MEASURES DAILY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.

6. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER AND

7. CONSTRUCT EROSION CONTROL BLANKET ON ALL SLOPES STEEPER THAN 3:1.

8. PRIOR TO ANY WORK OR SOIL DISTURBANCE COMMENCING ON THE SUBJECT PROPERTY, INCLUDING MOVING OF EARTH, THE APPLICANT SHALL INSTALL ALL EROSION AND SILTATION MITIGATION AND CONTROL MEASURES AS

REQUIRED BY STATE AND LOCAL PERMITS AND APPROVALS. 9. CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, SPRINKLING WATER ON UNSTABLE SOILS SUBJECT TO ARID CONDITIONS.

10. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.

11. ALL CATCH BASIN SUMPS AND PIPING SHALL BE THOROUGHLY CLEANED TO REMOVE ALL SEDIMENT AND DEBRIS AFTER THE PROJECT HAS BEEN FULLY PAVED.

12. TEMPORARY SOIL STOCKPILE SHALL BE SURROUNDED WITH PERIMETER CONTROLS AND SHALL BE STABILIZED BY TEMPORARY EROSION CONTROL SEEDING. STOCKPILE AREAS TO BE LOCATED AS FAR AS POSSIBLE FROM THE DELINEATED EDGE OF WETLANDS.

13. SAFETY FENCING SHALL BE PROVIDED AROUND STOCKPILES OVER 10 FT.

14. CONCRETE TRUCKS WILL BE REQUIRED TO WASH OUT (IF NECESSARY) SHOOTS ONLY WITHIN AREAS WHERE CONCRETE HAS BEEN PLACED. NO OTHER WASH OUT WILL BE ALLOWED.

15. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE

DRAINAGE STRUCTURE TABLE

RIM = 13.75

PCB5

RIM=9.60

INV.IN=4.50 SE

INV.OUT=4.50 NW

PROPOSED MAJOR CONTOUR LINE PROPOSED MINOR CONTOUR LINE PROPOSED DRAIN LINE (TYP) INLET PROTECTION SILT SACK

LEGEND

PROPOSED UNDERDRAIN

PROPOSED SILT SOCK

PROPOSED CATCHBASIN

CATCHBASIN

BUILDING

COORDINATE

TOP OF CURB

HEADWALL

BOTTOM OF CURB

TYPICAL

BLDG

COORD

PROPOSED DOUBLE GRATE

PROPOSED DRAIN MANHOLE

PROPOSED YARD DRAIN

INV.OUT=5.80 SW CB1243 RIM=9.55INV.IN=6.65 NW INV.OUT=6.55 SE RIM=10.00 INV.OUT=6.85 SW CB1264

CB1242

RIM=9.30

RIM = 9.50

RIM=10.65

CDS1

CDS2

RIM = 9.85

INV.OUT=6.50 NE

INV.IN=4.30 SE

INV.IN=4.30 SW

INV.OUT=4.20 NE

INV.IN=6.00 NE

INV.IN=6.00 SE

INV.OUT=5.90 SW

RIM=8.50 INV.OUT=7.00 NE INV.OUT=5.30 E RIM=10.75 RIM=8.45 INV.OUT=7.50 NW INV.OUT=5.30 N PCB3 RIM=12.65 RIM = 8.40INV.OUT=8.65 NW INV.OUT=5.50 NW RIM = 12.15RIM=8.55 INV.OUT=5.10 NW

INV.OUT=8.60 NW RIM=8.60 INV.OUT=5.80 NE INV.OUT=6.10 NW

RIM = 9.80

RIM=10.00

INV.OUT=6.30 SW

RIM=11.35 INV.OUT=5.45 S INV.IN=6.25 NW INV.IN=6.25 SE INV.IN=6.10 SW INV.OUT=6.00 NE INV.IN=5.20 W INV.IN=5.20 S RIM=14.05 INV.IN=5.20 SE INV.OUT=5.10 NE INV.IN=4.60 SE PDMH10 INV.IN=5.00 SW

PCB12

RIM = 8.60

RIM=8.75

RIM=8.90

RIM=11.70

RIM=11.30

RIM=11.95

INV.IN=6.60 NW

INV.IN=6.60 SW

INV.IN=6.60 W

PDMH7

RIM=11.72 INV.IN=5.00 SE INV.IN=5.00 E INV.IN=5.00 W INV.OUT=4.90 NE INV.OUT=4.90 N INV.IN=3.45 SW RIM = 13.35INV.IN=4.30 NE INV.IN=6.10 E INV.OUT=3.35 NW INV.IN=3.80 SE INV.OUT=7.05 W PDMH12 RIM=8.75 INV.IN=5.05 NE

INV.OUT=4.95 SW INV.IN=5.35 SW INV.IN=5.35 N INV.OUT=5.35 NE RIM = 9.60INV.IN=5.40 SE INV.OUT=6.50 SE INV.IN=5.40 NE INV.IN=4.70 SW INV.OUT=4.65 NW

INV.IN=6.45 NW INV.OUT=6.35 SW PDMH15 RIM=13.50 INV.IN=10.50 SW INV.IN=10.50 NW INV.OUT=4.60 NW INV.OUT=10.40 NE PDMH16 RIM=9.70 INV.IN=5.60 NE INV.OUT=5.50 NW RIM=15.50

INV.IN=10.10 SW

INV.IN=11.50 NE

INV.OUT=10.00 NW

RIM=10.00

INV.IN=6.45 NE

PDMH20

RIM=11.90

RIM=10.50

RIM=12.50

RIM=12.30

RIM=11.00

RIM=13.00

INV.IN=7.10 SW

INV.IN=8.00 NW

INV.OUT=7.00 NE

INV.OUT=10.70 SE

INV.IN=7.50 S

INV.OUT=7.40 NE

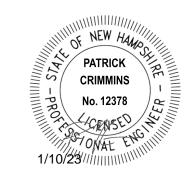
INV.OUT=8.88 N

INV.OUT=7.15 E

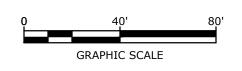
INV.OUT=7.70 N

RIM=15.30 INV.IN=9.00 SE INV.IN=6.00 SW PDMH19 RIM=11.80

INV.OUT=5.80 NW INV.OUT=8.88 SE







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DRAWN BY: CHECKED: APPROVED: GRADING, DRAINAGE, AND

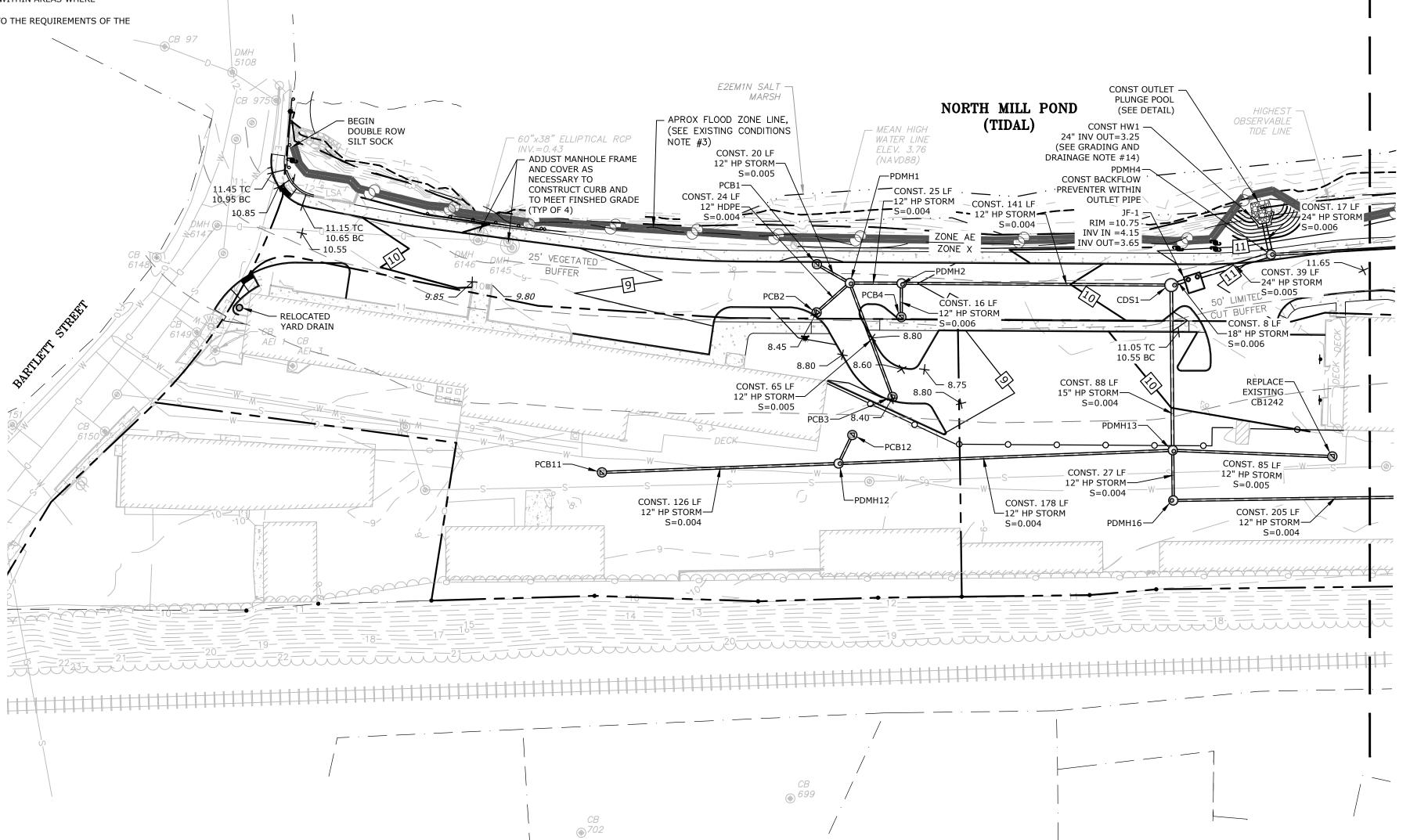
EROSION CONTROL PLAN

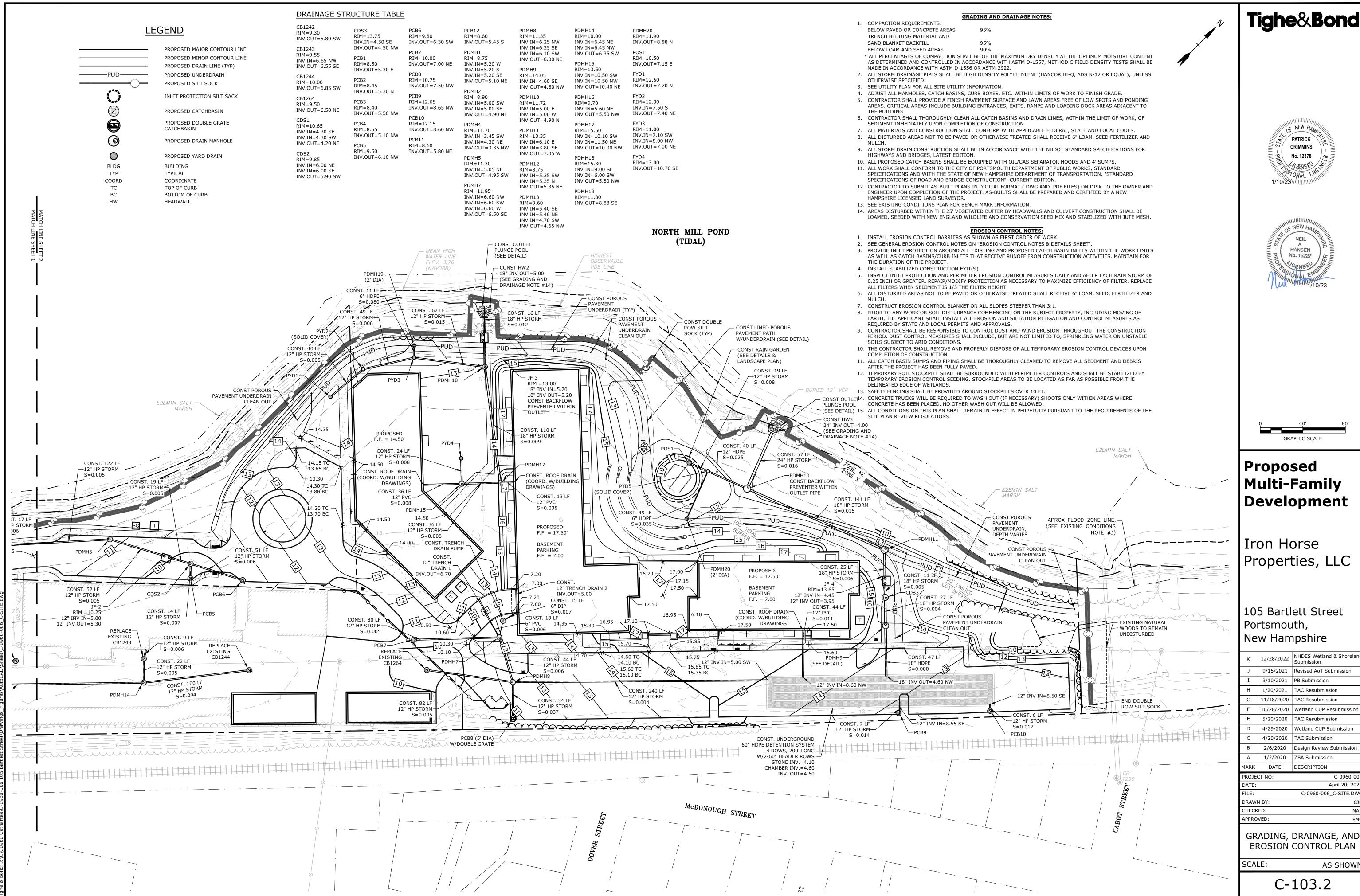
April 20, 202

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SCALE: AS SHOWN

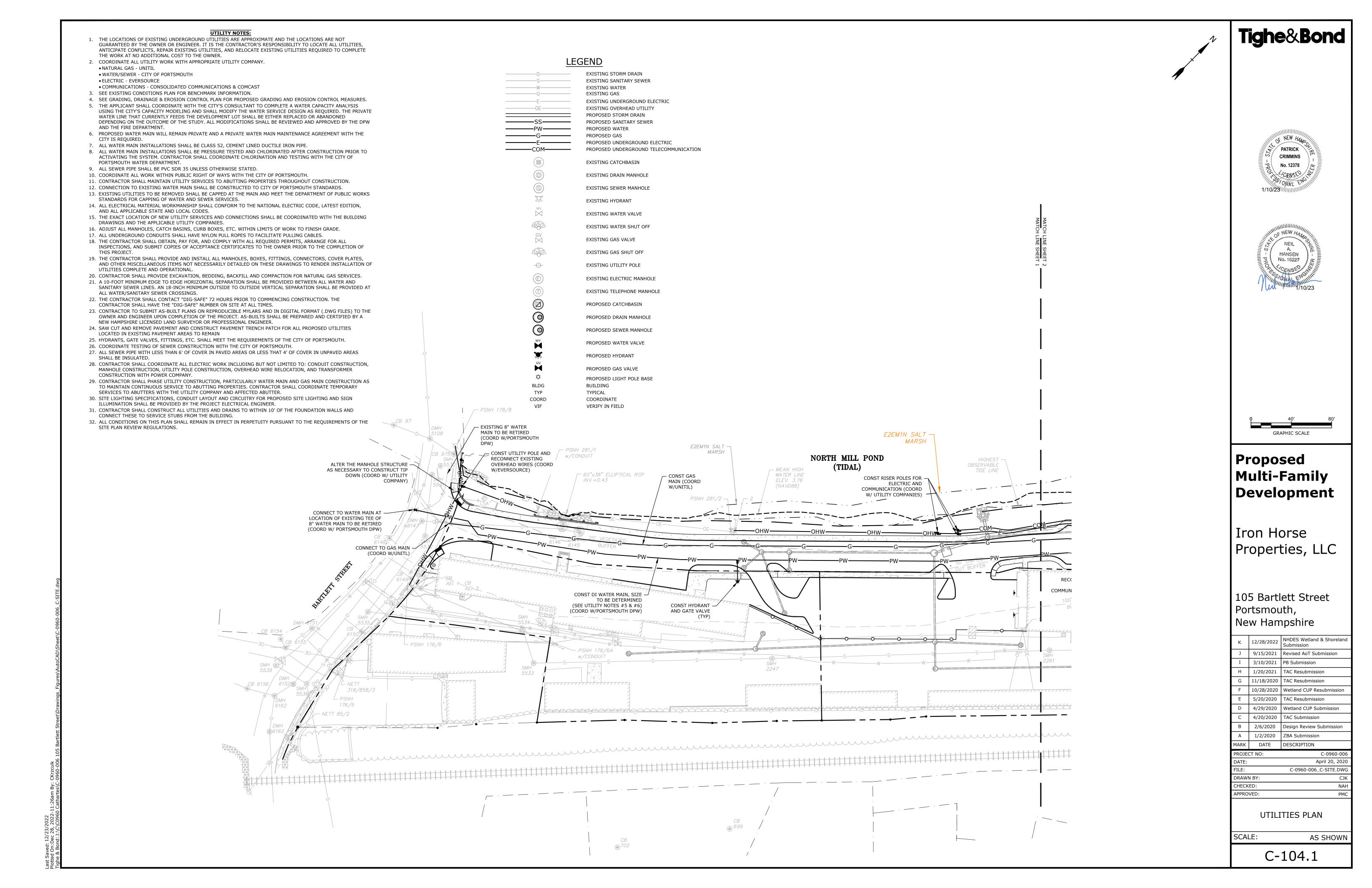
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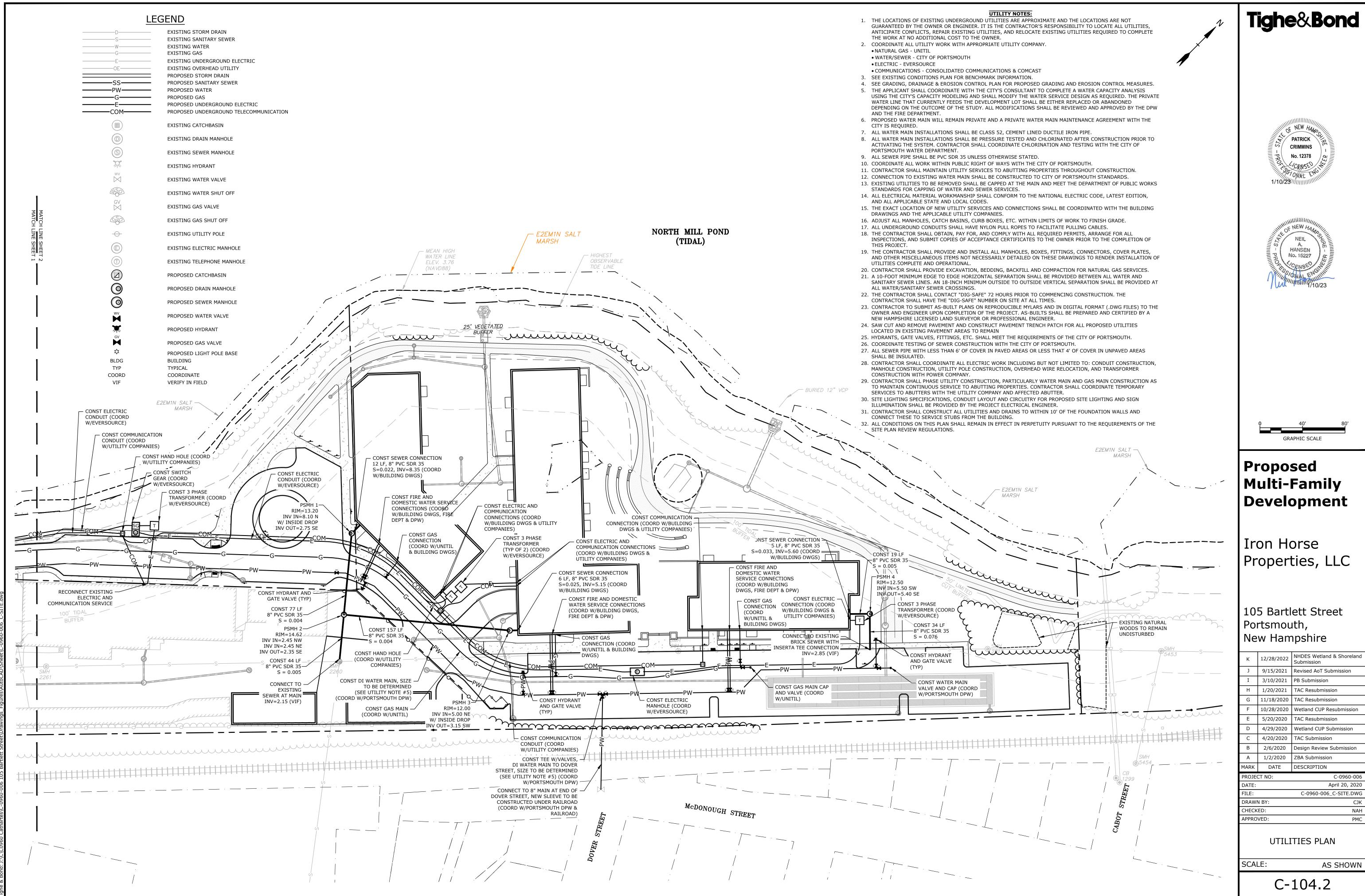


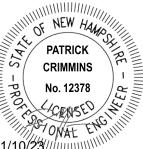


K	12/28/2022	Submission
J	9/15/2021	Revised AoT Submission
Ι	3/10/2021	PB Submission
Н	1/20/2021	TAC Resubmission
G	11/18/2020	TAC Resubmission
F	10/28/2020	Wetland CUP Resubmission
Е	5/20/2020	TAC Resubmission
D	4/29/2020	Wetland CUP Submission
С	4/20/2020	TAC Submission
В	2/6/2020	Design Review Submission
Α	1/2/2020	ZBA Submission
MARK	DATE	DESCRIPTION
	CT NO.	C 0060 006

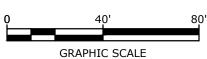
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Proposed Multi-Family Development

Properties, LLC

105 Bartlett Street New Hampshire

•	12/28/2022	Submission		
	9/15/2021	Revised AoT Submission		
	3/10/2021	PB Submission		
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, ,	4/20/2020	TAC Submission		
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PROPOSED MULTI-FAMILY DEVELOPMENT

PROJECT ADDRESS: 105 BARTLETT STREET PORTSMOUTH, NH 03801 PROJECT LATITUDE/LONGITUDE: 43°-04'-20" N / 70°-46'-15" W

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF CONSTRUCTING THREE (3) MULTI-FAMILY APARTMENT BUILDINGS WITH TWO (2) OF THE BUILDINGS CONTAINING BASEMENT LEVEL PARKING.

PROJECT NAME:

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 6.5 ACRES.

BASED ON THE SITE SPECIFIC SOIL SURVEY CONDUCTED BY LEONARD LORD, PHD, CSS, CSW ON OCTOBER 29 AND DECEMBER 2, 2019, THE SOILS ON SITE CONSIST OF URBAN FILLS WITH A HYDROLOGIC SOIL GROUP RATING OF A TO D.

NAME OF RECEIVING WATERS

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA SUBSURFACE DRAINAGE WHICH $\,\,$ $\,$ $^{1}\cdot$ ULTIMATELY FLOWS TO NORTH MILL POND.

CONSTRUCTION SEQUENCE OF MAJOR ACTIVITIES:

CUT AND CLEAR TREES.

- CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:
- NEW CONSTRUCTION CONTROL OF DUST
- NEARNESS OF CONSTRUCTION SITE TO RECEIVING WATERS CONSTRUCTION DURING LATE WINTER AND EARLY SPRING
- ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPS PRIOR TO DIRECTING RUNOFF
- CLEAR AND DISPOSE OF DEBRIS.
- CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED
- GRADE AND GRAVEL ROADWAYS AND PARKING AREAS ALL ROADS AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
- SEDIMENT TRAPS AND/OR BASINS SHALL BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.
- FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
- COMPLETE PERMANENT SEEDING AND LANDSCAPING
- l3. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

SPECIAL CONSTRUCTION NOTES:

- THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE
- THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

EROSION CONTROL NOTES:

ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE <u>STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION"</u> PREPARED BY THE NHDES

PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR

- EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALES,
- SILT FENCES, MULCH BERMS, SILT SACKS AND SILT SOCKS AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK. SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH
- BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE
- PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
- THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION
- CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND
- INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN
- STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

STABILIZATION:

- AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
- BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN
- INSTALLED; D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.:
- IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM
- 304.2 HAVE BEEN INSTALLED. WINTER STABILIZATION PRACTICES:
- A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;
- AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;
- STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE: A. TEMPORARY SEEDING;
- B. MULCHING. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALE BARRIERS AND ANY
- EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT FENCES, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION
- 2. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY
- 3. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

MAP 164 / LOT 1

MAP 164 / LOT 4-2

- 1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
- 2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES
- PRIOR TO THE ONSET OF PRECIPITATION. 3. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO

ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE

INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY. 4. PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY **EXCAVATION ACTIVITIES**

- TEMPORARY GRASS COVER:
- A. SEEDBED PREPARATION: a. SEE LANDSCAPE PLAN FOR SEEDBED PREPARATION REQUIREMENTS;
- B. SEEDING: a. SEE LANDSCAPE PLAN FOR SEEDING REQUIREMENTS;
- C. MAINTENANCE:
- a. TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).
- A. SEE LANDSCAPE PLAN FOR PERMANENT MEASURES AND PLANTINGS
- THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED; b. IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED
- SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.
- 3. DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL):
- A. FOLLOW PERMANENT MEASURES REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

CONCRETE WASHOUT AREA:

- THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER
- NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE: A. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY;
- B. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
- C. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM
- DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS;
- D. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES:

- FIRE-FIGHTING ACTIVITIES;
- FIRE HYDRANT FLUSHING; WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
- WATER USED TO CONTROL DUST;
- POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING
- ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
- PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED: UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
- UNCONTAMINATED GROUND WATER OR SPRING WATER; 10. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
- 11. UNCONTAMINATED EXCAVATION DEWATERING;
- 12. LANDSCAPE IRRIGATION.

WASTE MATERIAL

- A. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED
- NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
- C. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT. HAZARDOUS WASTE:
- LOCAL OR STATE REGULATION OR BY THE MANUFACTURER; B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT. 3. SANITARY WASTE

A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY

A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

- 1. CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW
- 2. THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
 - A. GOOD HOUSEKEEPING THE FOLLOWING GOOD HOUSEKEEPING PRACTICE SHALL BE FOLLOWED ON SITE DURING CONSTRUCTION:
 - a. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE; b. ALL REGULATED MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE, ON AN IMPERVIOUS SURFACE;
 - c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED;
 - d. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS;
 - e. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER; f. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE
 - CONTAINER. g. THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF
 - REGULATED SUBSTANCES. B. HAZARDOUS PRODUCTS - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
 - a. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE; b. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT
- c. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE

- CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS
- SECURE FUEL STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
- iv. INSPECT FUEL STORAGE AREAS WEEKLY; v. WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE
 - WELLS, AND 400 FEET FROM PUBLIC WELLS;
- vi. COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS; vii. SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR
- ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE REGULATED. viii. THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE: (1) EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES
 - CLOSED AND SEALED; (2) PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;
 - (3) HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL
 - (4) USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES;
- (5) PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS ix. FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION
- RELATED EQUIPMENT SHALL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES THESE REQUIREMENTS ARE SUMMARIZED IN WD-DWGB-22-6 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT, OR ITS SUCCESSOR DOCUMENT.
- FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS;
- ii. ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO
- iii. STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
- i. ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR
- ii. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM; iii. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S
- INSTRUCTIONS OR STATE AND LOCAL REGULATIONS D. SPILL CONTROL PRACTICES - IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL
- MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP: a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE
- LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES; b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR
- ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;
- d. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE;
- e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED;
- f. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
- a. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY; b. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS
- CLEAN AND DRY; c. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED

E. VEHICLE FUELING AND MAINTENANCE PRACTICE:

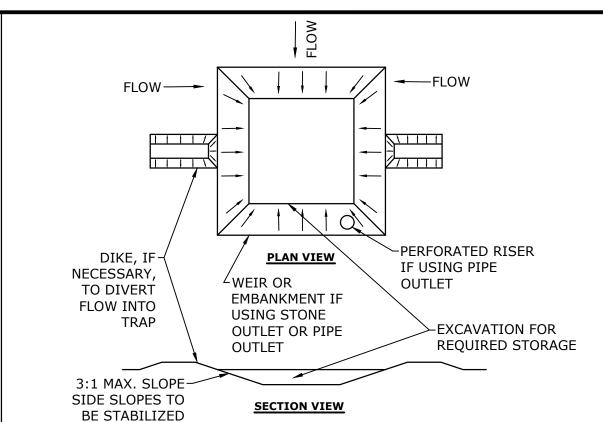
- d. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA;
- e. CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE; f. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES

- THIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ONSITE AT ALL TIMES.
- 2. THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT: A. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE
- CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER: B. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR;
- C. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES; D. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.
 - 2"-5" OVERLAY

- . EROSION CONTROL BLANKET SHALL BE AN ALL NATURAL PRODUCT WITH NO PHOTO DEGRADABLE
- COMPONENTS, NORTH AMERICAN GREEN SC150BN OR APPROVED EQUAL 2. STAKES SHALL BE BIODEGRADABLE BIOSTAKES OR ALL NATURAL WOOD ECOSTAKES OR APPROVED EQUAL. THE LENGTH OF STAKES SHALL BE BASED OFF OF THE MANUFACTURERS
- RECOMMENDATION. 3. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, COMPOST AND SEED.
- 4. BEGIN AT THE TOP OF THE SLOPE, 36" OVER THE GRADE BREAK, BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UPSLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAKES IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAKES ACROSS THE WIDTH OF THE BLANKET.
- 5. ROLL THE BLANKETS DOWN THE SLOPE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAKES IN APPROPRIATE LOCATIONS AS SHOWN ON THE MANUFACTURERS PATTERN GUIDE.

EROSION CONTROL BLANKET NO SCALE



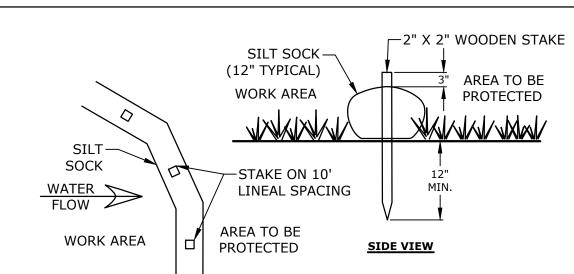
THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE THE MAXIMUM CONTRIBUTING AREA TO A SINGLE TRAP SHALL BE LESS THAN 5

- THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.
- TRAP OUTLET SHALL BE MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAF TRAP SHALL DISCHARGE TO A STABILIZED AREA. TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS

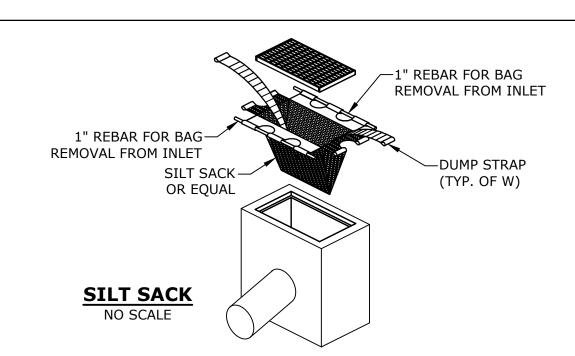
ARE STABILIZED.

- MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND
 - SEDIMENT TRAPS MUST BE USED AS NEEDED TO CONTAIN RUNOFF UNTIL SOILS **SEDIMENT TRAP**

NO SCALE



SILT SOCK SHALL BE SILT SOXX BY FILTREXX OR APPROVED EQUAL



75' (MIN) (W/O BERM) 50' (MIN) WITH 3"-6" DIVERSION BERM PROVIDED DRIVE WIDTH SLOPE PAVFMFNT GROUND > 🎾 (10' MIN) 🖇 **PLAN VIEW** DIVERSION BERM-(OPTIONAL) 75' (MIN) (W/O BERM) 50' (MIN) WITH 3"-6" 3" CRUSHED DIVERSION BERM PROVIDED STONE-(MIN) PAVEMENT **EXISTING** - MIRAFI FW-700 SIDE VIEW OR EQUAL

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT FROM THE SITE. WHEN WASHING IS REQUIRED, IT SHALL BE DONE SO RUNOFF DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS

STABILIZED CONSTRUCTION EXIT

Proposed

12/28/2022 NHDES Wetland & Shoreland J 9/15/2021 Revised AoT Submission I 3/10/2021 PB Submission 1/20/2021 TAC Resubmission G 11/18/2020 TAC Resubmission F 10/28/2020 Wetland CUP Resubmission 5/20/2020 TAC Resubmission D 4/29/2020 Wetland CUP Submission C 4/20/2020 TAC Submission 2/6/2020 Design Review Submission 1/2/2020 ZBA Submission MARK DATE DESCRIPTION ROJECT NO: C-0960-00 April 20, 202 DATE:

C-0960-006_C-DTLS.DW

AS SHOWN

CENSE ON AL EN 1/10/23//// NEIL HANSEN

No. 15227

NEW HAN"

PATRICK

CRIMMINS

No. 12378

Tighe&Bond

Multi-Family Development Iron Horse

Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

DETAILS SHEET

DRAWN BY

CHECKED:

SCALE:

PPROVED:

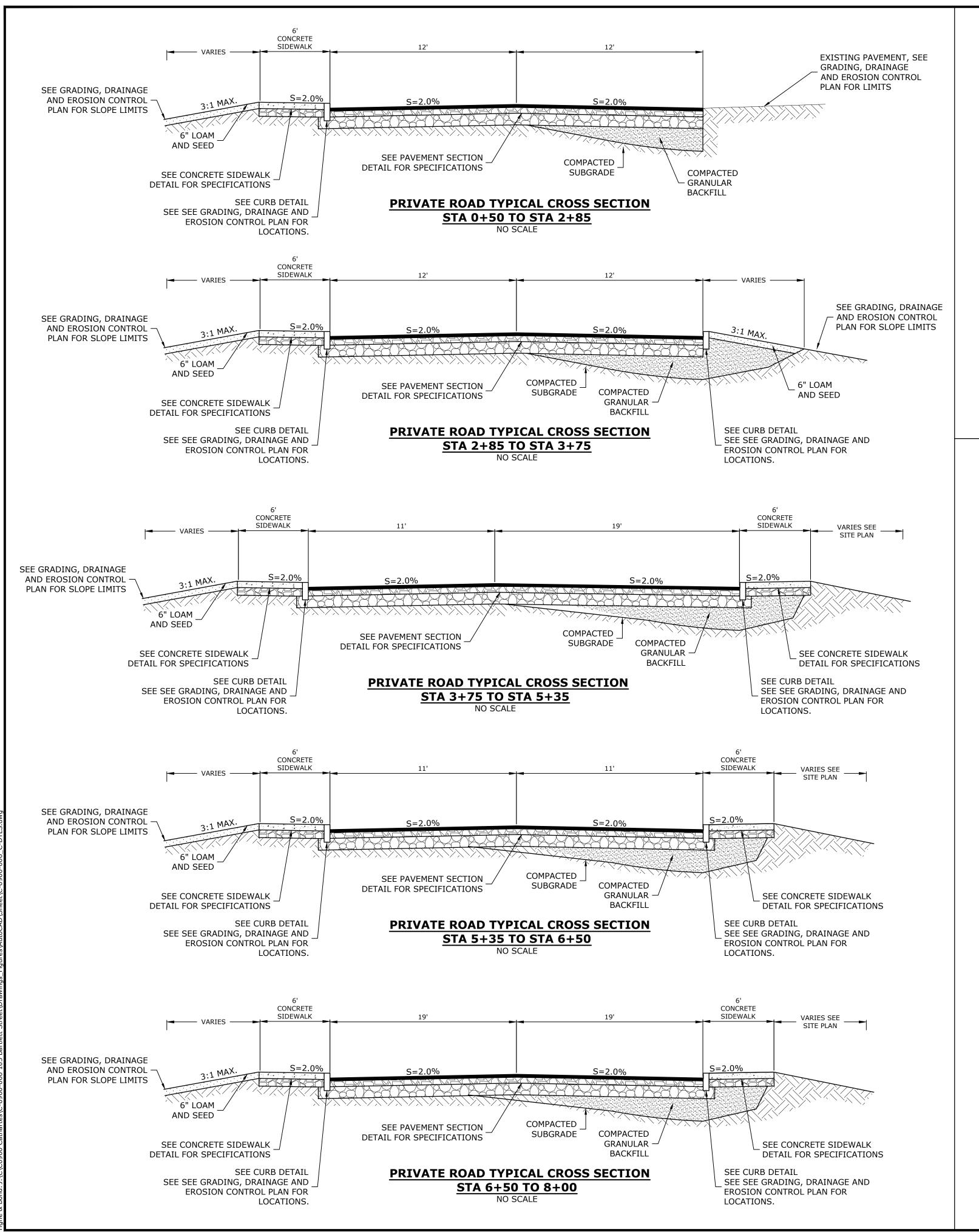
C-501

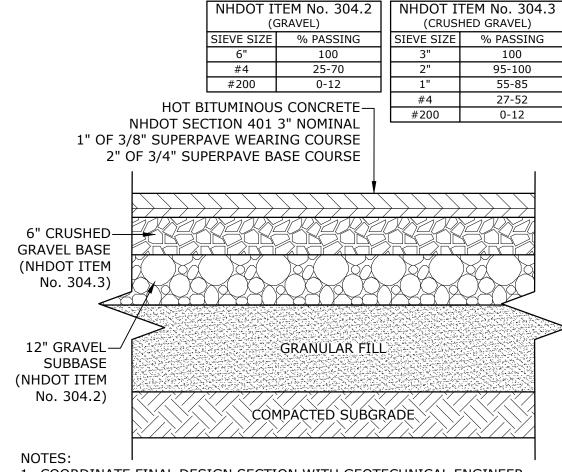
a. PETROLEUM PRODUCTS: ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE; RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY OCTOBER 15. ii. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE

PRODUCT INFORMATION;

FOLLOWED ON SITE

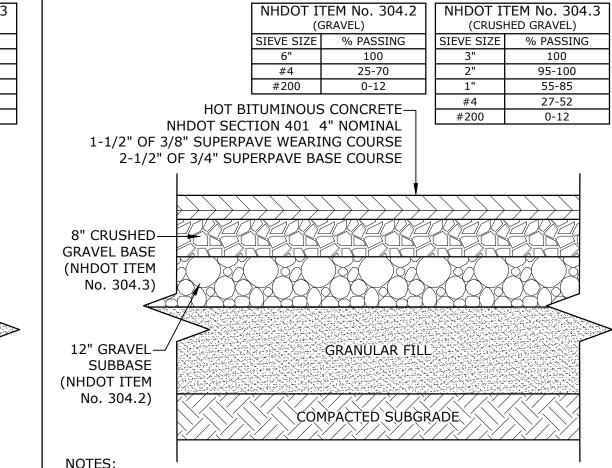
PLAN VIEW 2. INSTALL SILT SOCK IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS SILT SOCK NO SCALE





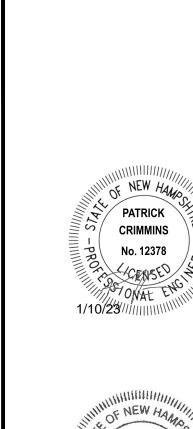
- 1. COORDINATE FINAL DESIGN SECTION WITH GEOTECHNICAL ENGINEER.
- 2. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION
- 3. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
- 4. A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING COURSE.
- 5. REFER TO CITY SPECIFICATIONS FOR ASPHALT MIX DESIGN.

PARKING LOT PAVEMENT SECTION NO SCALE



- 1. COORDINATE FINAL DESIGN SECTION WITH GEOTECHNICAL ENGINEER.
- 2. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
- 3. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
- 4. A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING COURSE.
- 5. REFER TO CITY SPECIFICATIONS FOR ASPHALT MIX DESIGN.

ROADWAY PAVEMENT SECTION NO SCALE



HANSEN

No. 15227

Tighe&Bond



Iron Horse Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

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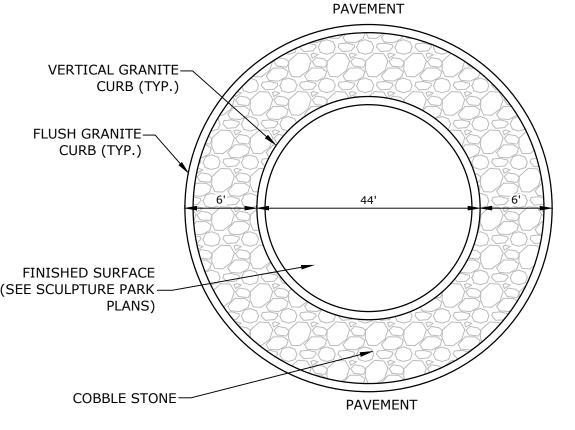
April 20, 202 C-0960-006_C-DTLS.DW DRAWN BY: CHECKED:

DETAILS SHEET

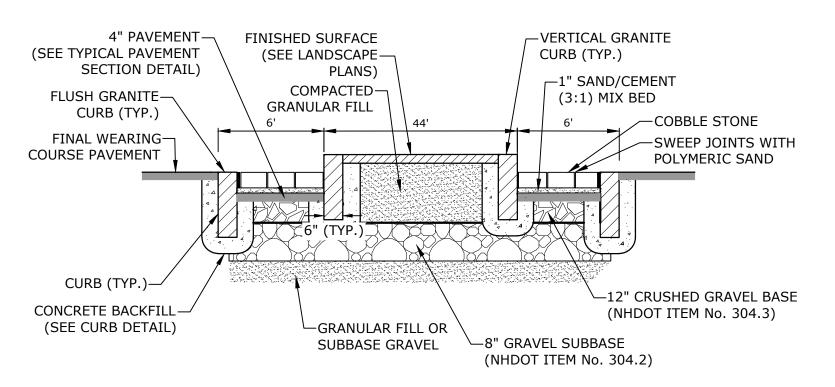
SCALE: AS SHOWN

APPROVED:

C-502



ROUNDABOUT CENTER PLAN VIEW



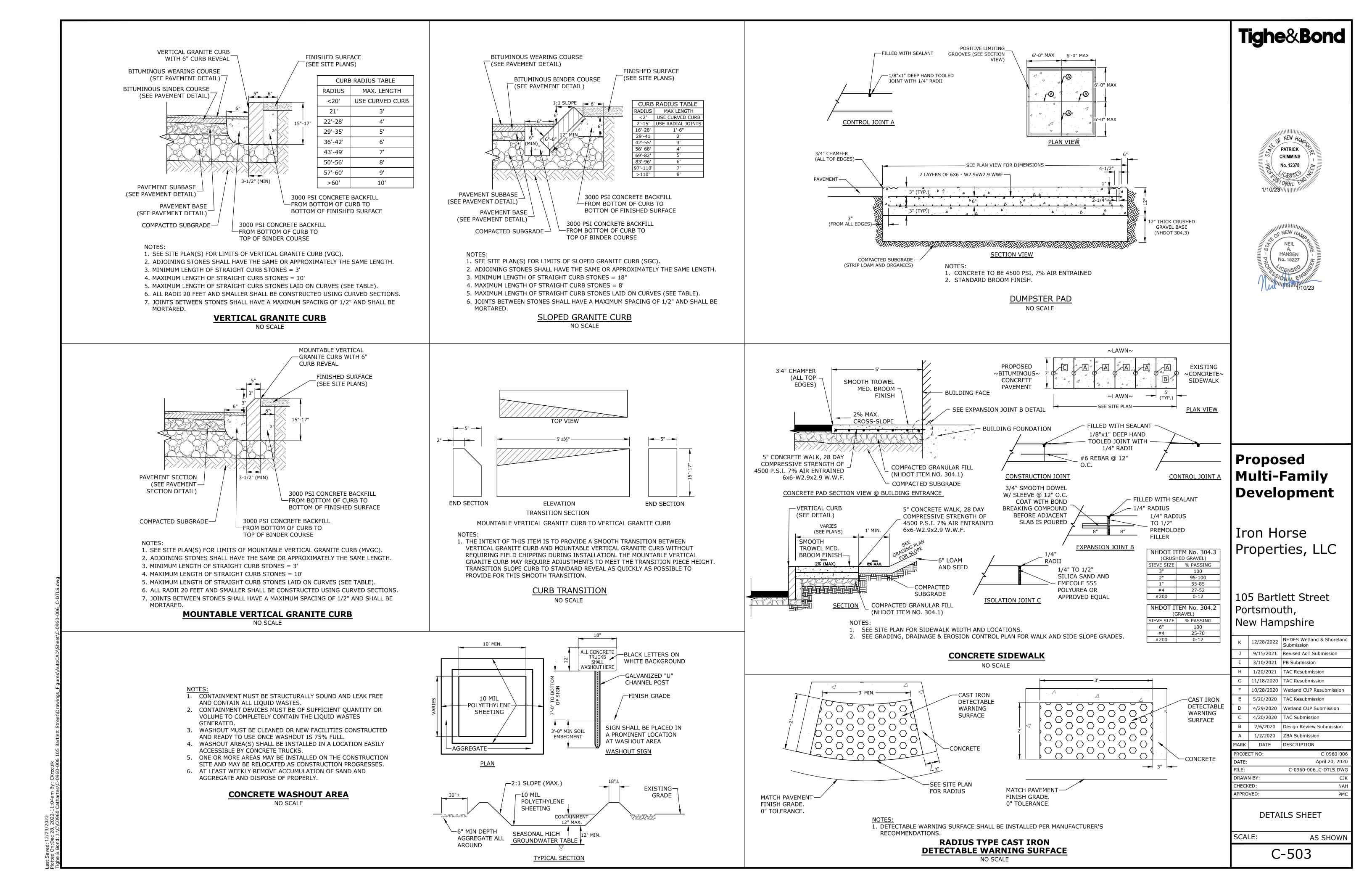
ROUNDABOUT CENTER SECTION

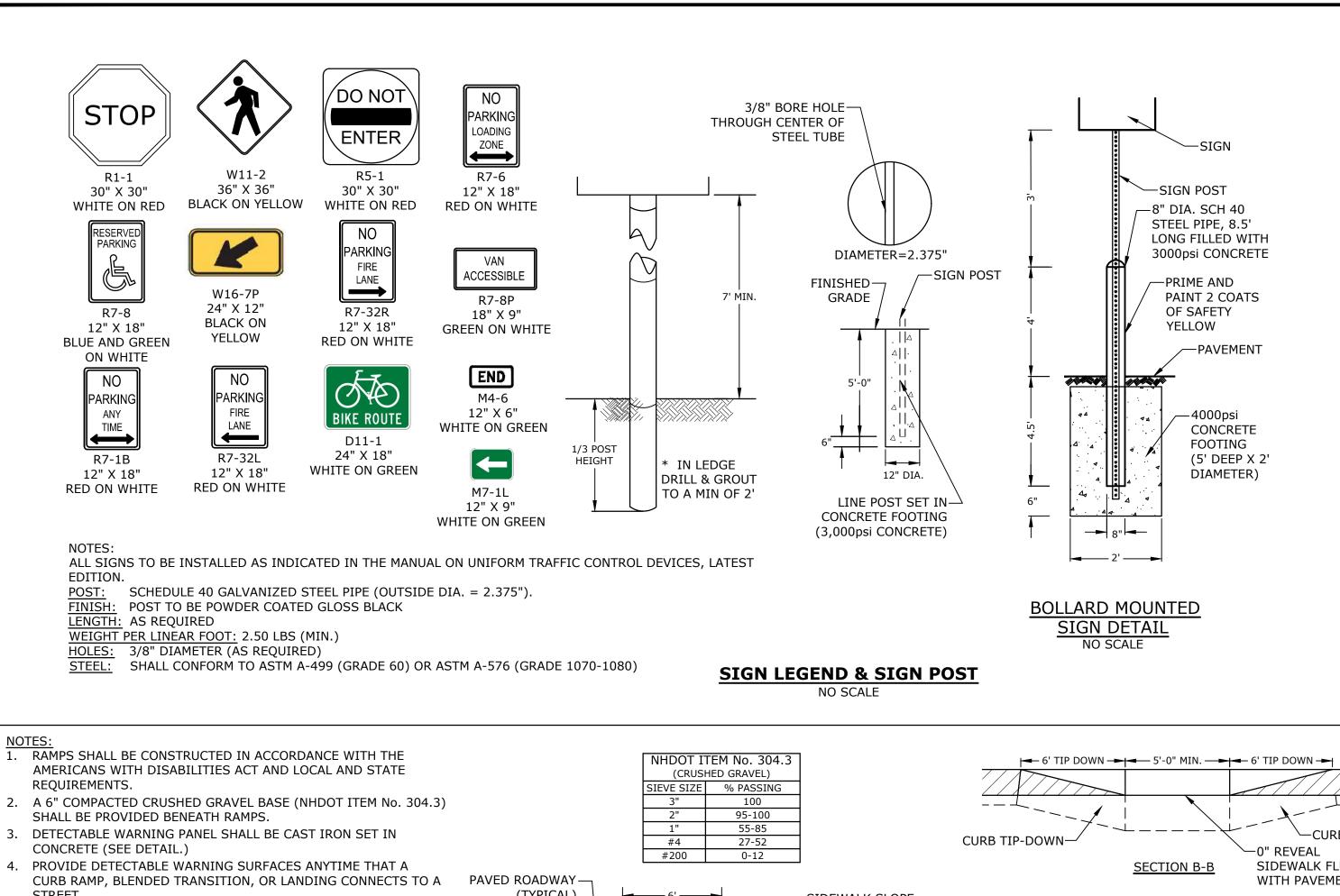
1. BEDDING MATERIAL SHALL BE A SAND/CEMENT MIX THAT IS 3 PARTS SAND AND 1 PART CEMENT.

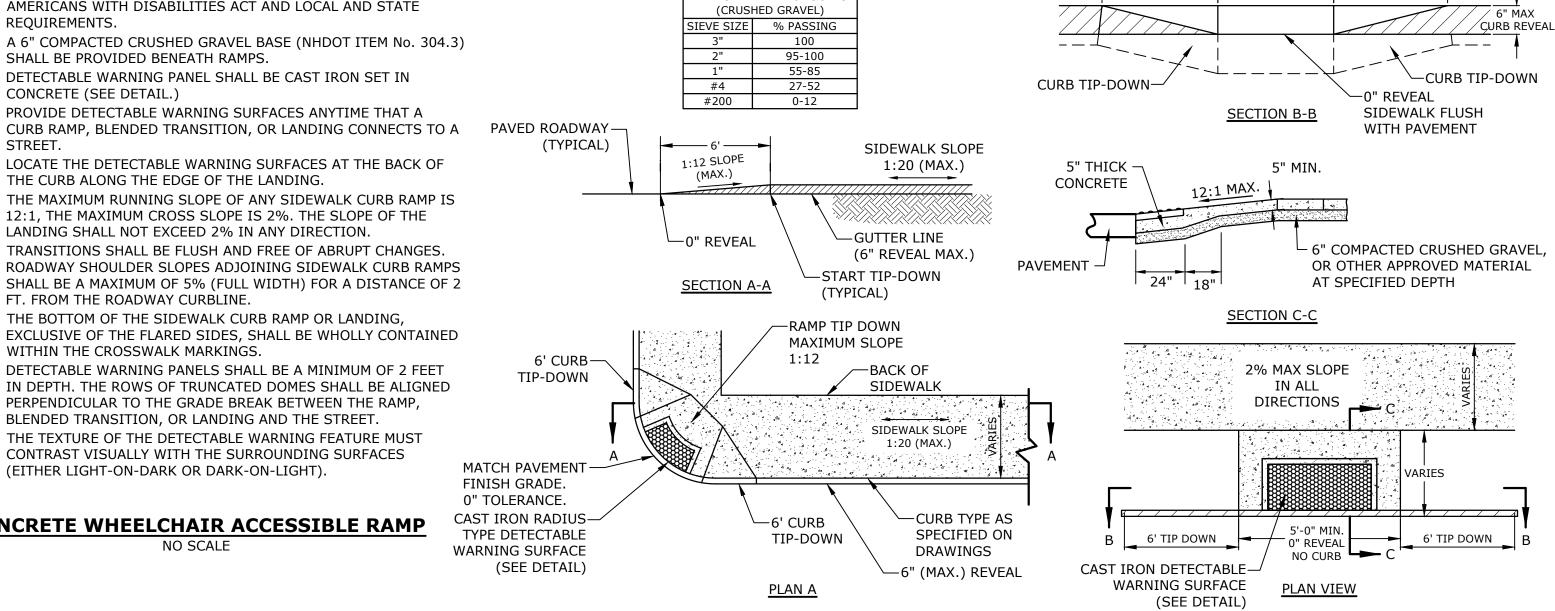
ROUNDABOUT CENTER

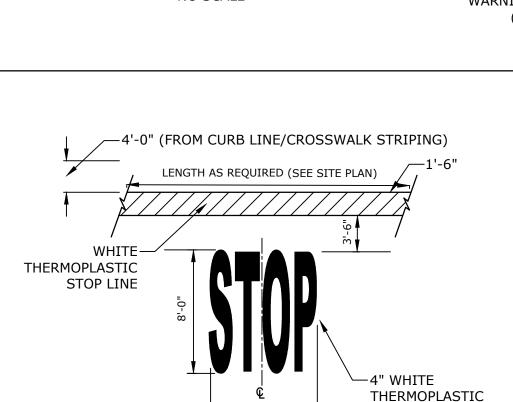
NO SCALE

SAND SHALL CONFORM WITH ASTM C33 AND CEMENT SHALL BE PORTLAND CEMENT TYPE I/TYPE II









5. LOCATE THE DETECTABLE WARNING SURFACES AT THE BACK OF

6. THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB RAMP IS 12:1, THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE

7. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.

9. DETECTABLE WARNING PANELS SHALL BE A MINIMUM OF 2 FEET

PERPENDICULAR TO THE GRADE BREAK BETWEEN THE RAMP,

IN DEPTH. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED

THE CURB ALONG THE EDGE OF THE LANDING.

FT. FROM THE ROADWAY CURBLINE.

WITHIN THE CROSSWALK MARKINGS.

LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION

8. THE BOTTOM OF THE SIDEWALK CURB RAMP OR LANDING,

BLENDED TRANSITION, OR LANDING AND THE STREET.

(EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT).

10. THE TEXTURE OF THE DETECTABLE WARNING FEATURE MUST

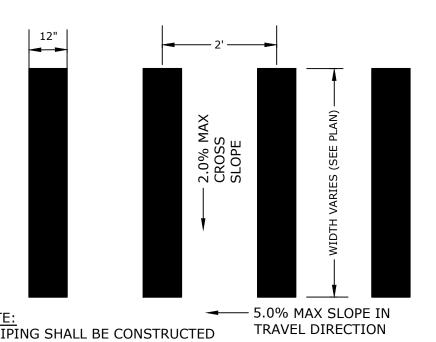
CONCRETE WHEELCHAIR ACCESSIBLE RAMP

CONTRAST VISUALLY WITH THE SURROUNDING SURFACES

PAVEMENT MARKINGS TO BE INSTALLED IN LOCATIONS AS SHOWN ON SITE PLAN.

2. STRIPING SHALL BE CONSTRUCTED USING WHITE THERMO PLASTIC, REFLECTERIZED PAVEMENT MARKING MATERIAL MEETING THE REQUIREMENTS OF ASTM D 4505

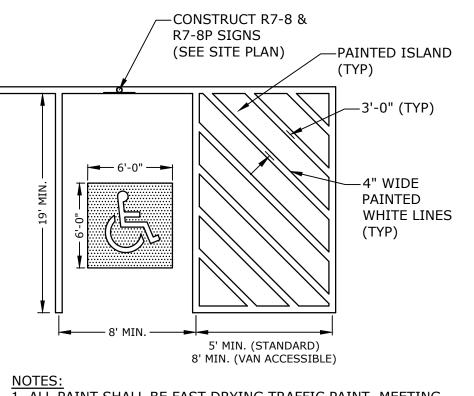
> **STOP BAR AND LEGEND** NO SCALE



STRIPING SHALL BE CONSTRUCTED USING WHITE THERMO PLASTIC, REFLECTERIZED PAVEMENT MARKING MATERIAL MEETING THE REQUIREMENTS OF ASTM D 4505

CROSSWALK STRIPING

NO SCALE



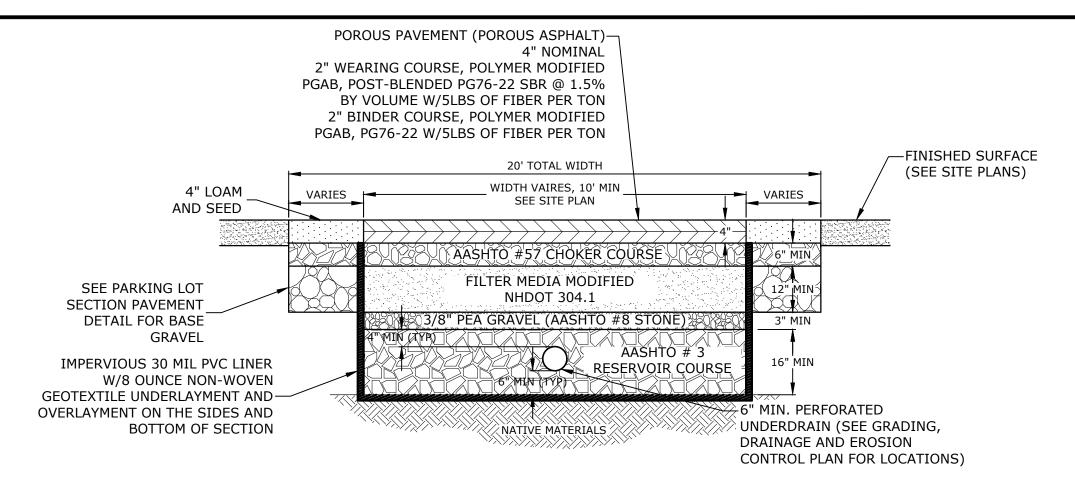
1. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT

SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.

2. SYMBOLS & PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN W/DISABILITIES ACT.

ACCESSIBLE PARKING STALL NO SCALE

NO SCALE



AASHTO	#57 STONE	
(CHOKE	R COURSE)	
	% PASSING	
1- <u>1</u> "	100	
1"	95-100	
<u>1</u> "	25-60	
#4	0-10	
#8	0-5	

POROUS ASPHALT.

	ED NHDOT 04.1		
6"	100		
#4	70-100		
#200			
PREFERABLY <4%			

SEE GRADING, DRAINAGE, UTILITIES AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.

POROUS ASPHALT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS FROM THE UNH STORMWATER CENTER FOR

INSTALL FILTER COURSE AGGREGATE IN 8-INCH MAXIMUM LIFTS TO A MAXIMUM OF 95% STANDARD PROCTOR COMPACTION (ASTM D698 /

INSTALL CHOKER, GRAVEL, AND STONE BASE COURSE AGGREGATE TO A MAXIMUM OF 95% COMPACTION STANDARD PROCTOR (ASTM D698 / AASHTO T99). CHOKER SHOULD BE PLACED EVENLY OVER SURFACE OF FILTER COURSE BED, SUFFICIENT TO ALLOW PLACEMENT OF PAVEMENT, AND NOTIFY ENGINEER FOR APPROVAL. CHOKER BASE COURSE THICKNESS SHALL BE SUFFICIENT TO ALLOW FOR EVEN

THE DENSITY OF SUBBASE COURSES SHALL BE DETERMINED BY AASHTO T 191 (SAND-CONE METHOD), AASHTO T 204 (DRIVE CYLINDER

METHOD), OR AASHTO T 238 (NUCLEAR METHODS), OR OTHER APPROVED METHODS AT THE DISCRETION OF THE SUPERVISING ENGINEER.

POROUS ASPHALT SECTION

POROUS ASPHALT MIX SPECIFIED IS RECOMMENDED BY THE UNH STORMWATER CENTER FOR SITES ANTICIPATING H-20 LOADING

AAS	AASHTO #8 STONE				
((PEA GRAVEL)				
	% PASSING				
1/2	½" 100				
<u>3</u> 1	'	85-100			
#4	4	10-30			
#8	3	0-10			
#1	6	0-5			

AASHTC	#3 STONE				
(RESERVO	OIR COURSE)				
% PASSING					
2 -1 100					
2" 90-100					
1-½" 35-70					
1" 0-15					
1 '' 0-5					



Tighe&Bond

NEW HAN

PATRICK

CRIMMINS

No. 12378

CANSED

NO SCALE

FILTER COURSE TO BE INCREASED AS NECESSARY TO MEET PROPOSED GRADES.

AASHTO T99). INSTALL AGGREGATE TO GRADES INDICATED ON THE DRAWINGS

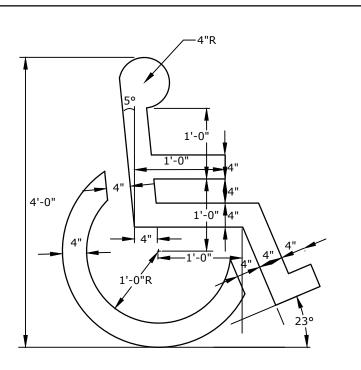
PLACEMENT OF THE POROUS ASPHALT BUT NO LESS THAN 6-INCHES IN DEPTH

THROUGH (STRAIGHT) ARROW ONLY LEGEND

I. ALL WORDS AND SYMBOLS SHALL BE RETROREFLECTIVE WHITE AND SHALL CONFORM TO THE LATEST VERSION OF THE MUTCD.

2. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.

DIRECTIONAL PAVEMENT MARKING DETAILS NO SCALE



1. SYMBOL SHALL BE CONSTRUCTED IN ALL ACCESSIBLE SPACES USING WHITE THERMOPLASTIC, REFLECTORIZED PAVEMENT PARKING

MATERAL MEETING THE REQUIREMENTS OF ASTM D 4505.

2. SYMBOL SHALL BE CONSTRUCTED TO THE LATEST ADA, STATE AND LOCAL REQUIREMENTS.

ACCESSIBLE SYMBOL

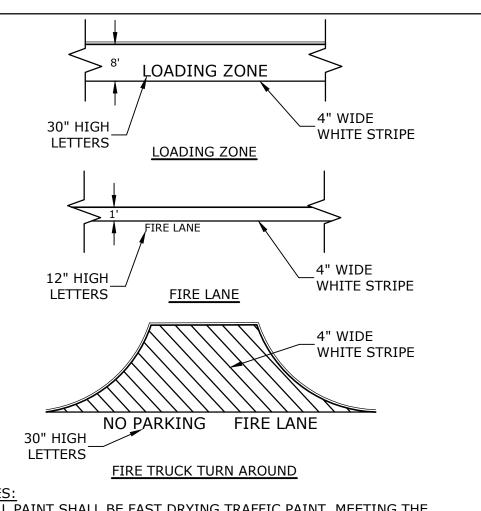
Proposed **Multi-Family Development** 40"

PAVEMENT MARKINGS TO BE INSTALLED IN LOCATIONS AS SHOWN ON SITE PLAN.

MARKINGS SHALL BE CONSTRUCTED USING WHITE THERMO PLASTIC, REFLECTERIZED PAVEMENT MARKING MATERIAL MEETING THE REQUIREMENTS OF ASTM D 4505

"SHARROW" SHARED LANE MARKING

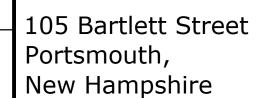
NO SCALE



1. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.

PAVEMENT MARKING DETAILS

Iron Horse Properties, LLC



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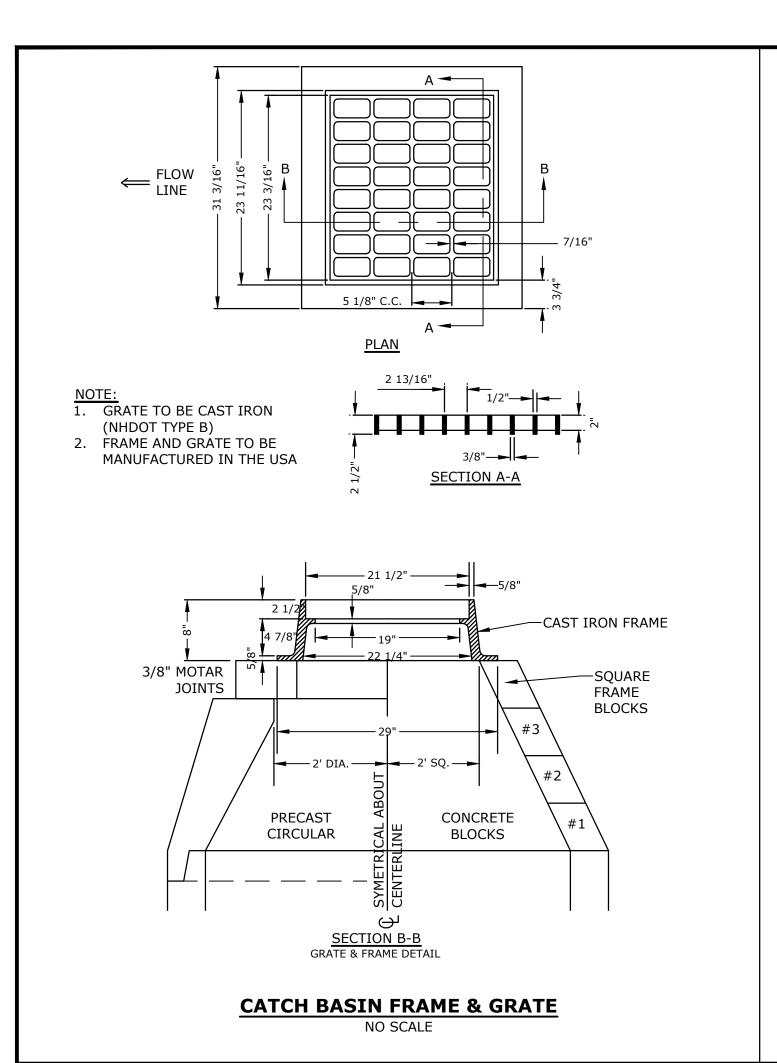
April 20, 202 C-0960-006_C-DTLS.DW DRAWN BY: CHECKED: APPROVED:

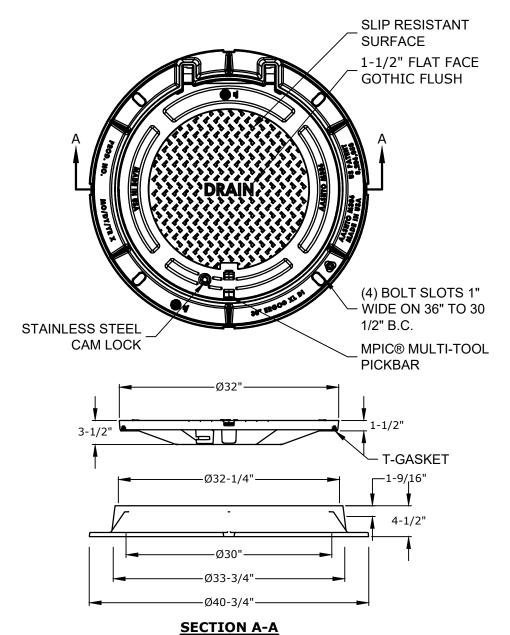
DETAILS SHEET

SCALE: AS SHOWN

C-504

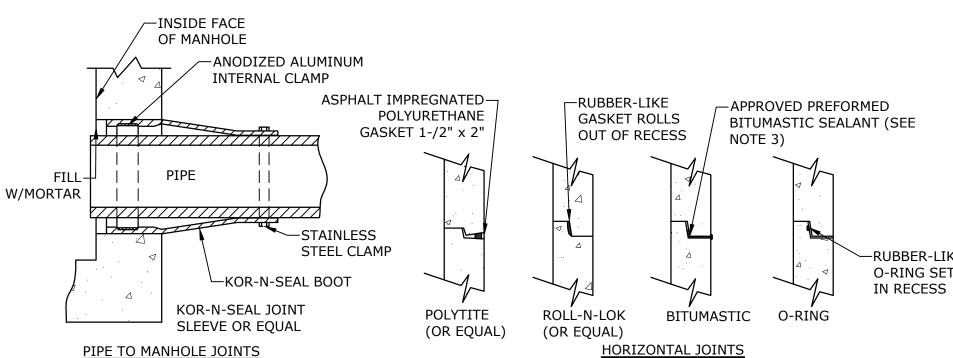
NO SCALE





- 1. MANHOLE FRAME AND COVER SHALL BE 32" HINGED ERGO XL BY EJ CO.
- 2. ALL DIMENSIONS ARE NOMINAL. 3. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
- A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING. B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
- C. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
- 4. LABEL TYPE OF MANHOLE WITH 3" HIGH LETTERS IN HE CENTER OF THE COVER.

DRAIN MANHOLE FRAME & COVER NO SCALE



 CAST IORN FRAME AND COVER NEENAH R-1975, OR EQUAL.

-NYLOPLAST N12 END

-6" MIN CONCRETE

-6" PERFORATED

UNDERDARIN

DRAIN CAST IN COVER

CAP OR EQUAL

-45° ELBOW

DRAIN CLEAN-OUT

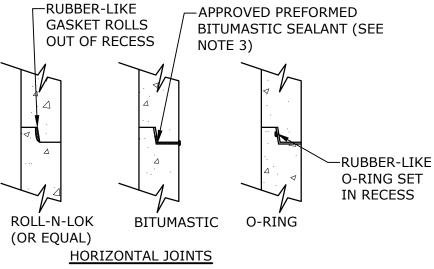
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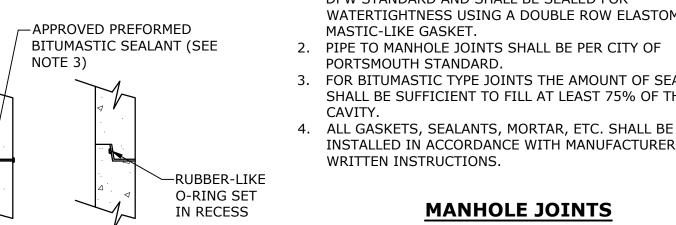
FINISH GRADE -

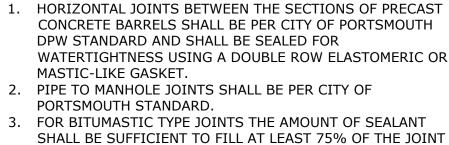
6" PVC DRAINLINE—

THREADED —

END CAP

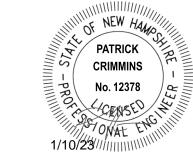






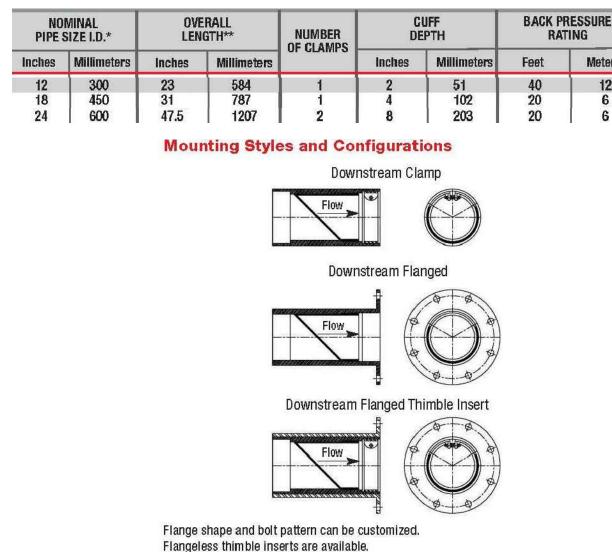
INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.

MANHOLE JOINTS



Tighe&Bond

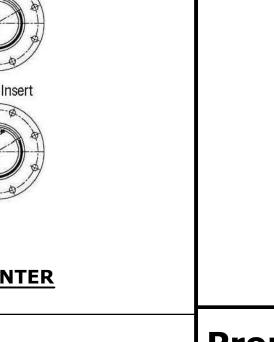


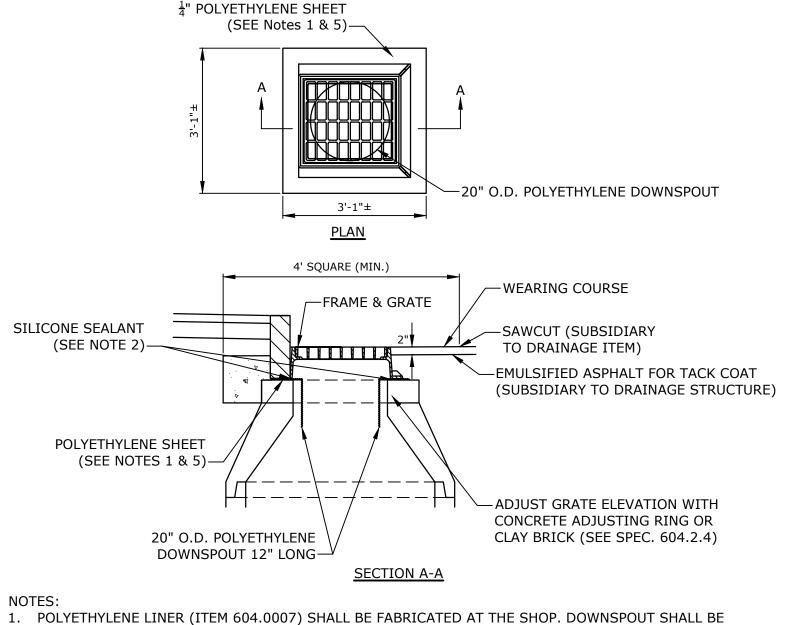


NOTES:

TYPICAL BACK FLOW PREVENTER

NO SCALE





EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.

2. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT (SUBSIDIARY TO ITEM 604.0007) BETWEEN FRAME AND POLYETHYLENE SHEET. 3. PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF THE GRATE ELEVATION (SUBSIDIARY TO DRAINAGE

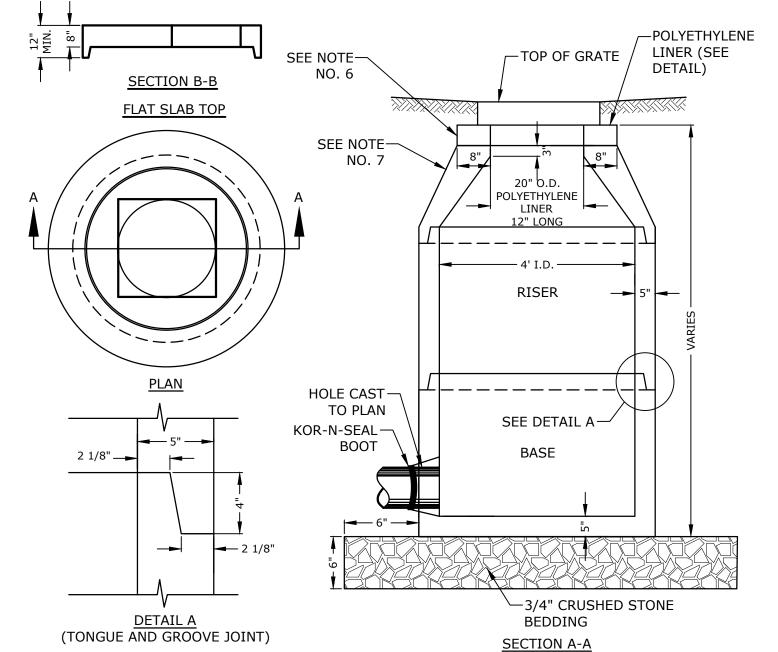
STRUCTURE). 4. USE ON DRAINAGE STRUCTURES 4' MIN. DIAMETER ONLY. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH 3-FLANGE FRAME AND CURB).

THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 6" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.

PLACED ONLY IN DRAINAGE STRUCTURES IN PAVEMENT. SEE NHDOT DR-04, "DI-DB, UNDERDRAIN FLUSHING BASIN AND POLYETHYLENE LINER DETAILS", FOR

CATCHBASINS WITHIN CITY RIGHT OF WAY SHALL HAVE A POLYETHYLENE LINER

POLYETHYLENE LINER



<u>DETAIL A</u> (TONGUE AND GROOVE JOINT) NOTES: 1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi)

2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.

3. THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.

4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH

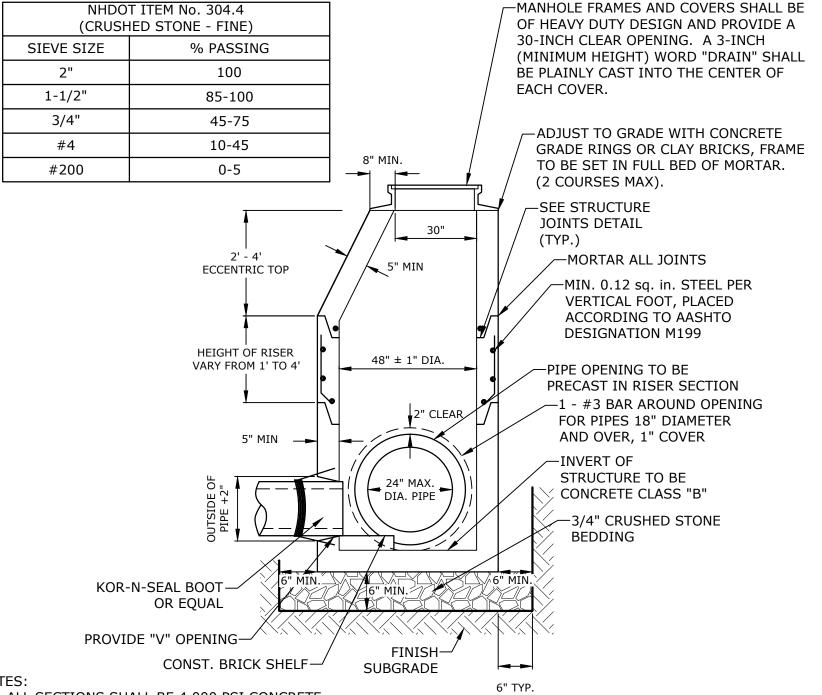
5. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING 6. FITTING FRAME TO GRADE MAY BE DONE WITH PREFABRICATED ADJUSTMENT RINGS OR CLAY BRICKS (2 COURSES MAX.). CONE SECTIONS MAY BE EITHER CONCENTRIC OR ECCENTRIC, OR FLAT SLAB TOPS MAY BE USED WHERE PIPE WOULD

OTHERWISE ENTER INTO THE CONE SECTION OF THE STRUCTURE AND WHERE PERMITTED. 8. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.

9. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE. 10. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF

THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS. 11. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

> 4' DIAMETER CATCHBASIN NO SCALE



ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.

2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.

3. THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12

SQUARE INCHES PER LINEAR FOOT.

4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING. 5. CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS)

6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.

8. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE. 9. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.

10. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZNTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.

4' DIAMETER DRAIN MANHOLE NO SCALE

Proposed **Multi-Family Development**

Iron Horse Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

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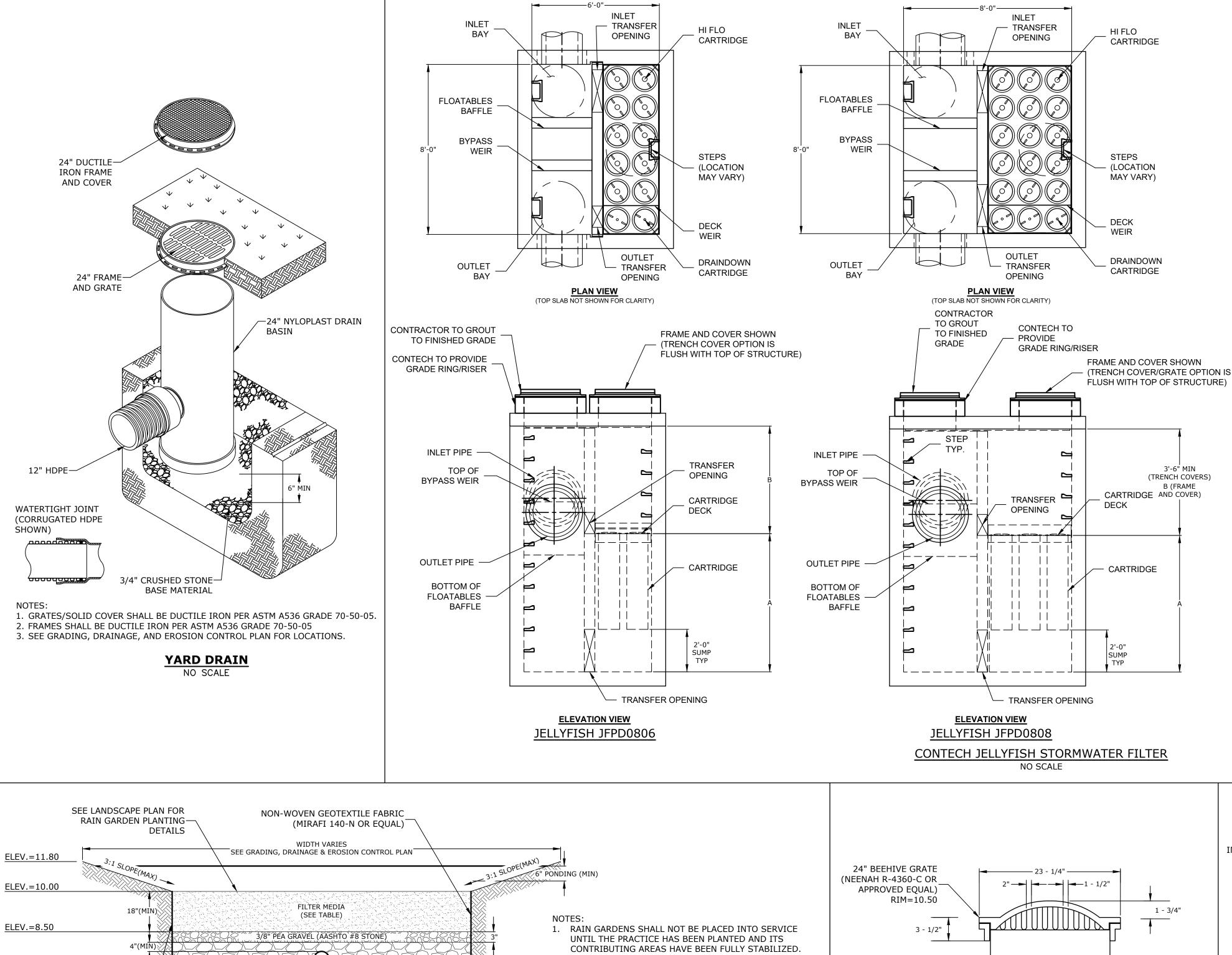
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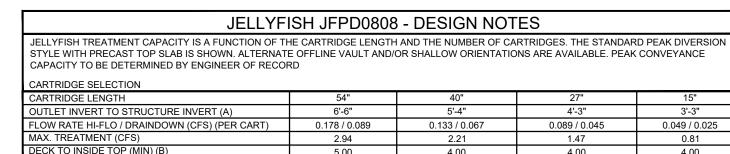
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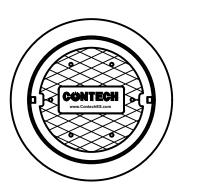
SCALE:

C-505





JELLYF	ISH JFPD0806	- DESIGN NOT	ES			
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT AND/OR SHALLOW ORIENTATIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD CARTRIDGE SELECTION						
CARTRIDGE LENGTH 54" 40" 27" 15"						
OUTLET INVERT TO STRUCTURE INVERT (A) 6'-6" 5'-4" 4'-3" 3'-3"						
OW RATE HI-FLO / DRAINDOWN (CFS) (PER CART) 0.178 / 0.089 0.133 / 0.067 0.089 / 0.045 0.049 / 0.025						



MAX. TREATMENT (CFS) DECK TO INSIDE TOP (MIN) (E

SITE SPECIFIC DATA REQUIREMENTS				
STRUCTURE ID	JF-1	JF-2	JF-3	JF-4
MODEL SIZE	JFPD0808	JFPD0806	JFPD0806	JFPD0806
WATER QUALITY FLOW RATE (cfs)	2.85	0.63	0.89	1.48
PEAK FLOW RATE (cfs)	26.54	5.13	7.62	8.19
RETURN PERIOD OF PEAK FLOW (yrs)	25	25	25	25
# OF CARTRIDGES REQUIRED (HF / DD)	15/3	5/1	5/1	8/2
CARTRIDGE SIZE	54"	40"	54"	54"

<u>GENERAL NOTES:</u> I. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.

- 2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS
- REPRESENTATIVE. www.ContechES.com 3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT. 4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 3', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL
- GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO. 5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD. 6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
- 7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE. 8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF

INSTALLATION NOTES A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY

- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED)
- C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT) D. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
- E. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (866) 740-3318.

Jellyfish Filter THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENT NO. 8,287,726, 8,221,618 & US 8,123,935; OTHER INTERNATIONAL PATENTS PENDING

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

Proposed Multi-Family Development

Iron Horse Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

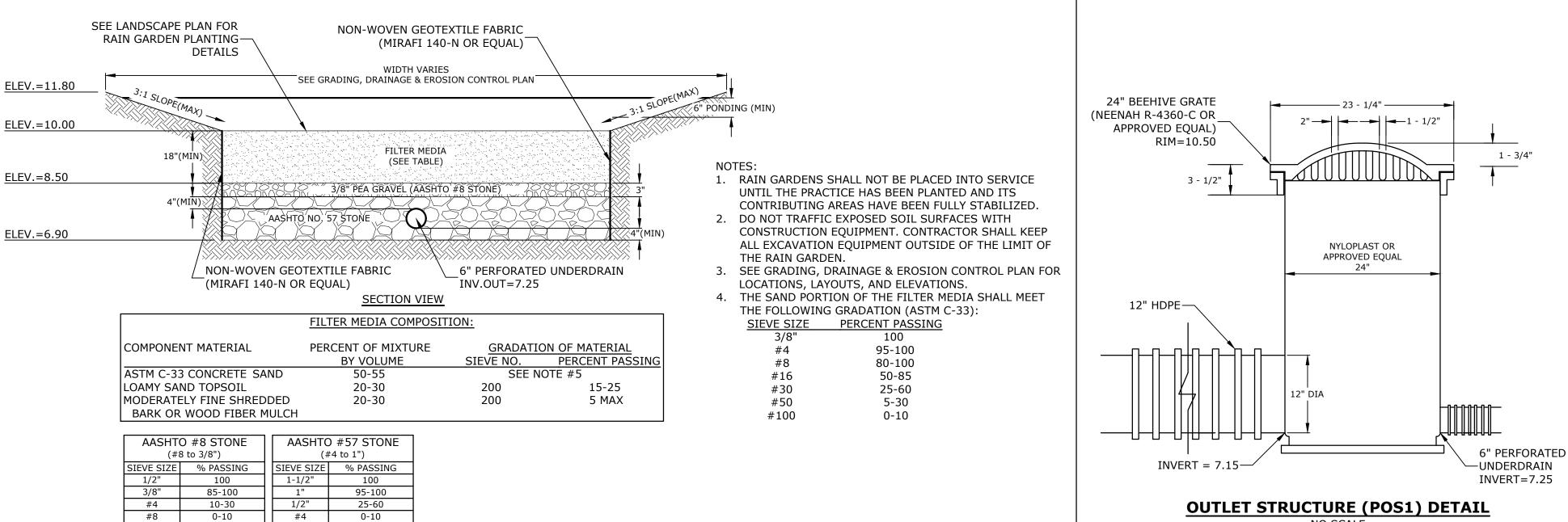
K	12/28/2022	NHDES Wetland & Shoreland Submission
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Α	1/2/2020	ZBA Submission
MARK	DATE	DESCRIPTION
PROJEC	CT NO:	C-0960-006

April 20, 202 C-0960-006_C-DTLS.DWG DRAWN BY:

DETAILS SHEET

SCALE: AS SHOWN

C-506



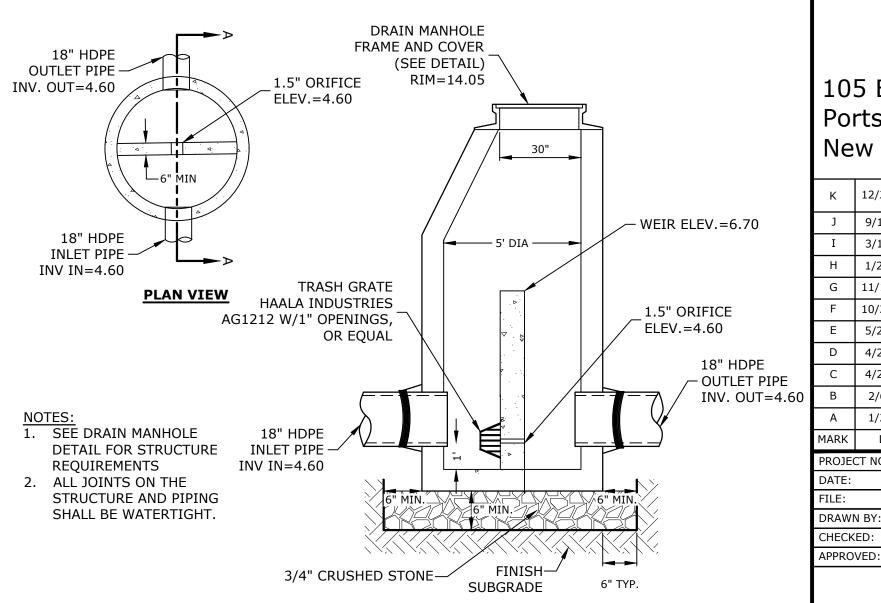
0-5

#8 0-5

RAIN GARDEN

NO SCALE

#16



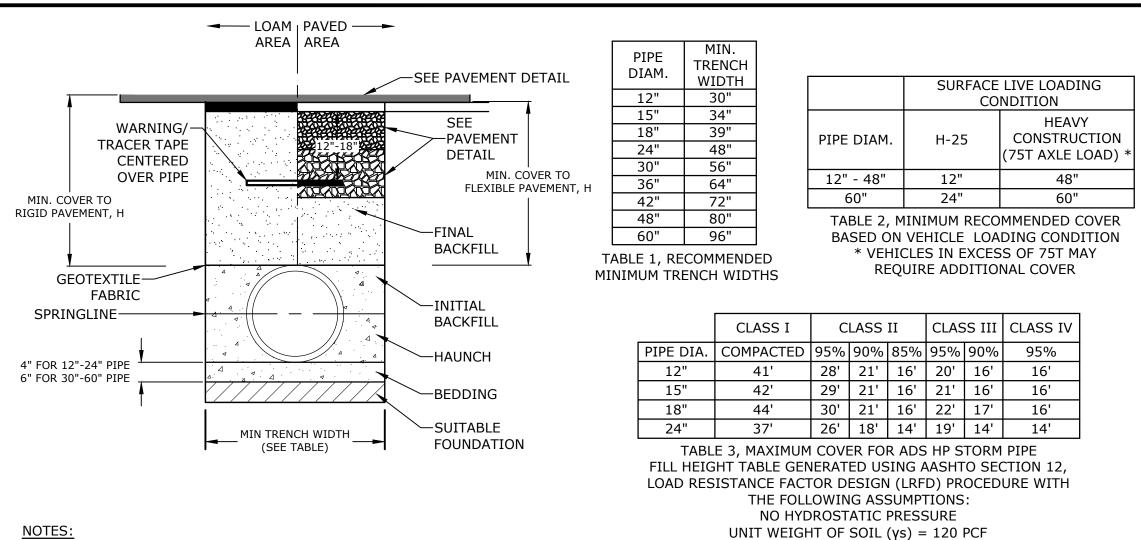
PDMH9 (5' DIA)

NO SCALE



Tighe&Bond

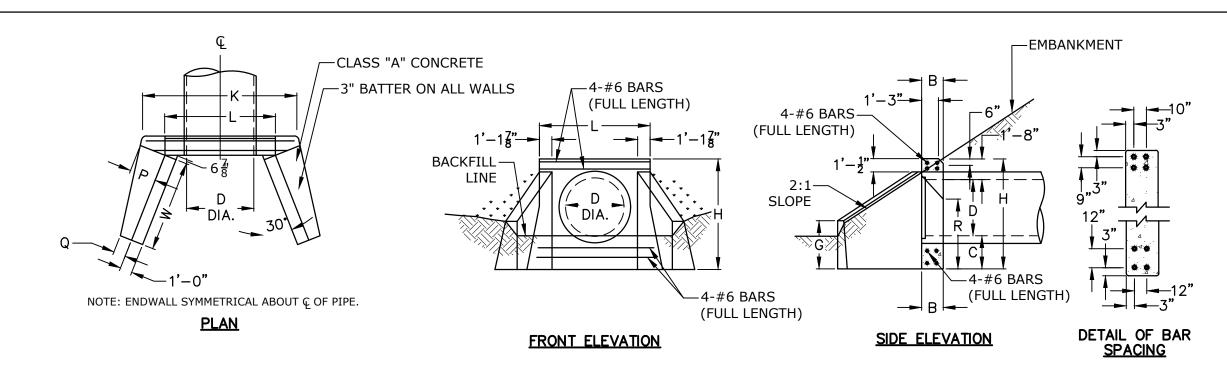
PATRICK CRIMMINS No. 12378



NOTES:

- 1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION, WITH THE EXCEPTION THAT THE INITIAL BACKFILL MAY EXTEND TO THE CROWN OF THE PIPE. SOIL CLASSIFICATIONS ARE PER THE LATEST VERSION OF ASTM D2321. CLASS IVB MATERIALS (MH, CH) AS DEFINED IN PREVIOUS VERSIONS OF ASTM D2321 ARE NOT APPROPRIATE BACKFILL MATERIALS.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE AS JUDGED BY THE ENGINEER, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL. REFER TO SPECIFICATION 310000 EARTHWORK - SITE.
- BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II, III, OR IV. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 12"-24" (300mm-600mm) DIAMETER PIPE; 6" (150mm) FOR 30"-60" (750mm-1500mm) DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF THE GEOTECHNICAL ENGINEER
- INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II, III, OR IV IN THE PIPE ZONE EXTENDING TO THE CROWN OF THE PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF THE GEOTECHNICAL ENGINEER.
- MINIMUM COVER: FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" (300mm) UP TO 48" (1200mm) DIAMETER PIPE AND 24" (600mm) OF COVER FOR
- $\overline{60}$ " (1500mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. 7. FOR ADDITIONAL INFORMATION SEE TECHNICAL NOTE 2.04.

HP STORM TRENCH INSTALLATION DETAIL

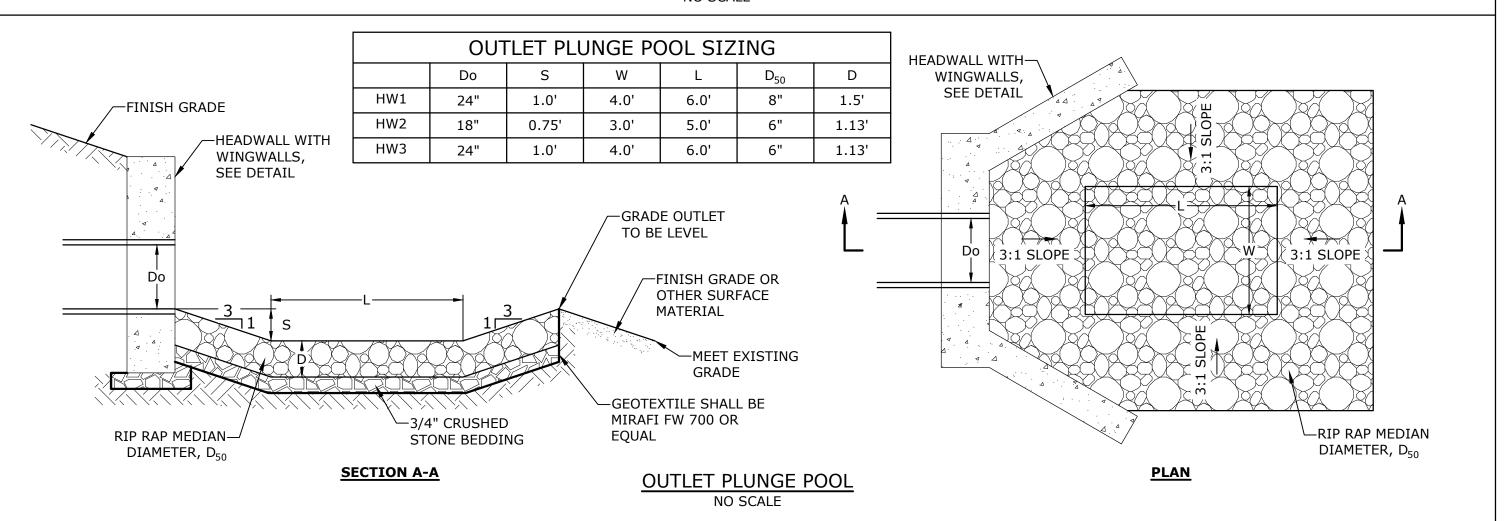


	DIMENSIONS AND QUANTITIES FOR ONE WING TYPE ENDWALL											
[D	В	C	G	Н	K	L	Р	Q	R	W	VOL.
	IN.*	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	CY
[24	1'-6"	2'-0"	3'-3"	6'-9"	9'-1 ¹ / ₂ '	7'-3 3 "	1'-4 7 "	0'-9 3 "	3'-4 7 "	5'-5 3 "	5.87
	36	1'-6"	2'-0"	3'-3"	6'-8"	9'-1 ½	7'-3 3 '	1'-4 Z "	0'-9 <u>3</u> "	3'-4 Z "	5'-5 3 "	5.87
[42	1'-6"	2'-0"	3'-3"	7'-2"	9'-10 ½	7'-9 3 "	1'-6 3 "	0'-9 3 "	3'-10 1 "	6'-7 3 "	6.67

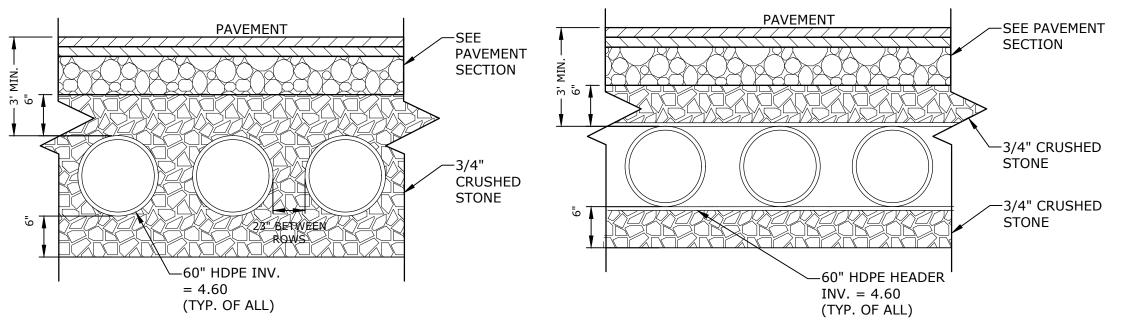
* FOR D<36" USE DIMENSIONS LISTED FOR D=36"

HEADWALL WITH WINGWALLS

NO SCALE



Tighe&Bond



UNDERGROUND DETENTION AREA

LOAM PAVED

AREA | AREA

→

 $A \cap O \circ \sigma$

8" MIN. \ 3" MIN.

2" MIN.

6" COMPACTED-

LOAM AND SEED

COMPACTED-

GRANULAR

3" (MIN.)

BURIED CABLE

SAFETY RIBBON

9 - 5" ELECTRICAL

UNDISTURBED SOIL

CONDUITS

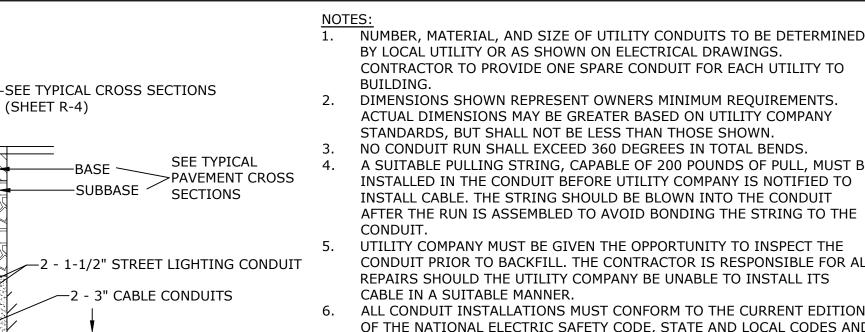
FILL

HEADER ROW

- 1. UNDERGROUND DETENTION SYSTEM TO BE 60" HDPE PIPE DESIGNED FOR H-20 LOADING. CONTRACTOR TO SUBMIT PIPE SPECIFICATIONS AND FINAL MANUFACTURES DESIGN TO ENGINEER FOR APPROVAL
- 2. MANUFACTURER TO SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW
- 3. THE DESIGN ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED PER THE APPROVED DESIGN PLAN
- 4. REFER TO STANDARD DUTY PAVEMENT SECTION DETAIL FOR PAVEMENT SECTION.

UNDERGROUND DETENTION SYSYTEM DETAIL

NO SCALE

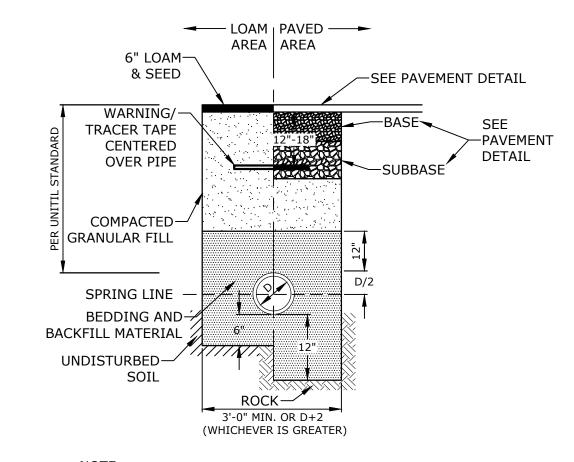


- BY LOCAL UTILITY OR AS SHOWN ON ELECTRICAL DRAWINGS. CONTRACTOR TO PROVIDE ONE SPARE CONDUIT FOR EACH UTILITY TO DIMENSIONS SHOWN REPRESENT OWNERS MINIMUM REQUIREMENTS
- ACTUAL DIMENSIONS MAY BE GREATER BASED ON UTILITY COMPANY STANDARDS, BUT SHALL NOT BE LESS THAN THOSE SHOWN
- A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE UTILITY COMPANY IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE
- UTILITY COMPANY MUST BE GIVEN THE OPPORTUNITY TO INSPECT THE CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR AL REPAIRS SHOULD THE UTILITY COMPANY BE UNABLE TO INSTALL ITS
- ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND
- ORDINANCES, AND, WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE. ALL 90° SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL. SWEEPS WITH A 36 TO 48 INCH RADIUS.
- SAND BEDDING TO BE REPLACED WITH CONCRETE ENCASEMENT WHERE COVER IS LESS THAN 3 FEET, WHEN LOCATED BELOW PAVEMENT, OR WHERE SHOWN ON THE UTILITIES PLAN.

ELECTRICAL AND COMMUNICATION CONDUIT

—2 - 3" TELEPHONE CONDUITS

-SAND BEDDING (SEE NOTE 8)

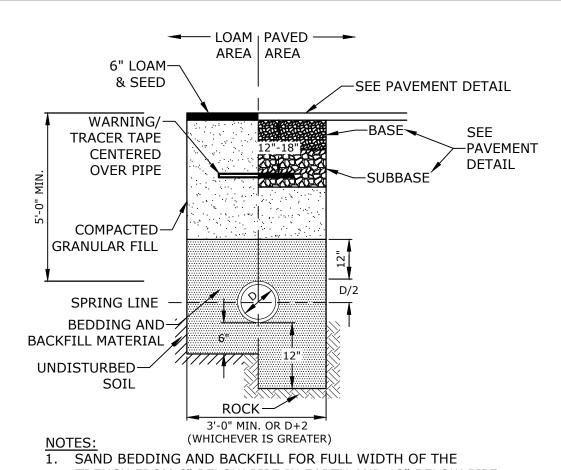


SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE. 2. GAS SHALL BE INSTALLED PER UNITIL STANDARDS COORDINATE ALL INSTALLATIONS WITH UNITIL AND THE

NO SCALE

GAS TRENCH

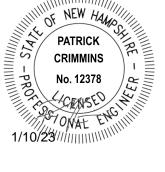
CITY OF PORTSMOUTH.



- TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE
- 2. WATER MAIN SHALL BE INSTALLED PER CITY OF PORTSMOUTH STANDARDS. COORDINATE ALL INSTALLATIONS WITH THE CITY OF PORTSMOUTH.
- 3. WATER MAIN TO BE PLACED IN A PROTECTIVE POLYWRAP AND INSTALLED WITH 3 CONTINUITY WEDGES PER JOINT.

WATER TRENCH

NO SCALE





Proposed Multi-Family Development

Iron Horse Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

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MARK	DATE	DESCRIPTION
PROJECT NO:		C-0960-006

DETAILS SHEET

April 20, 202

C-0960-006_C-DTLS.DW

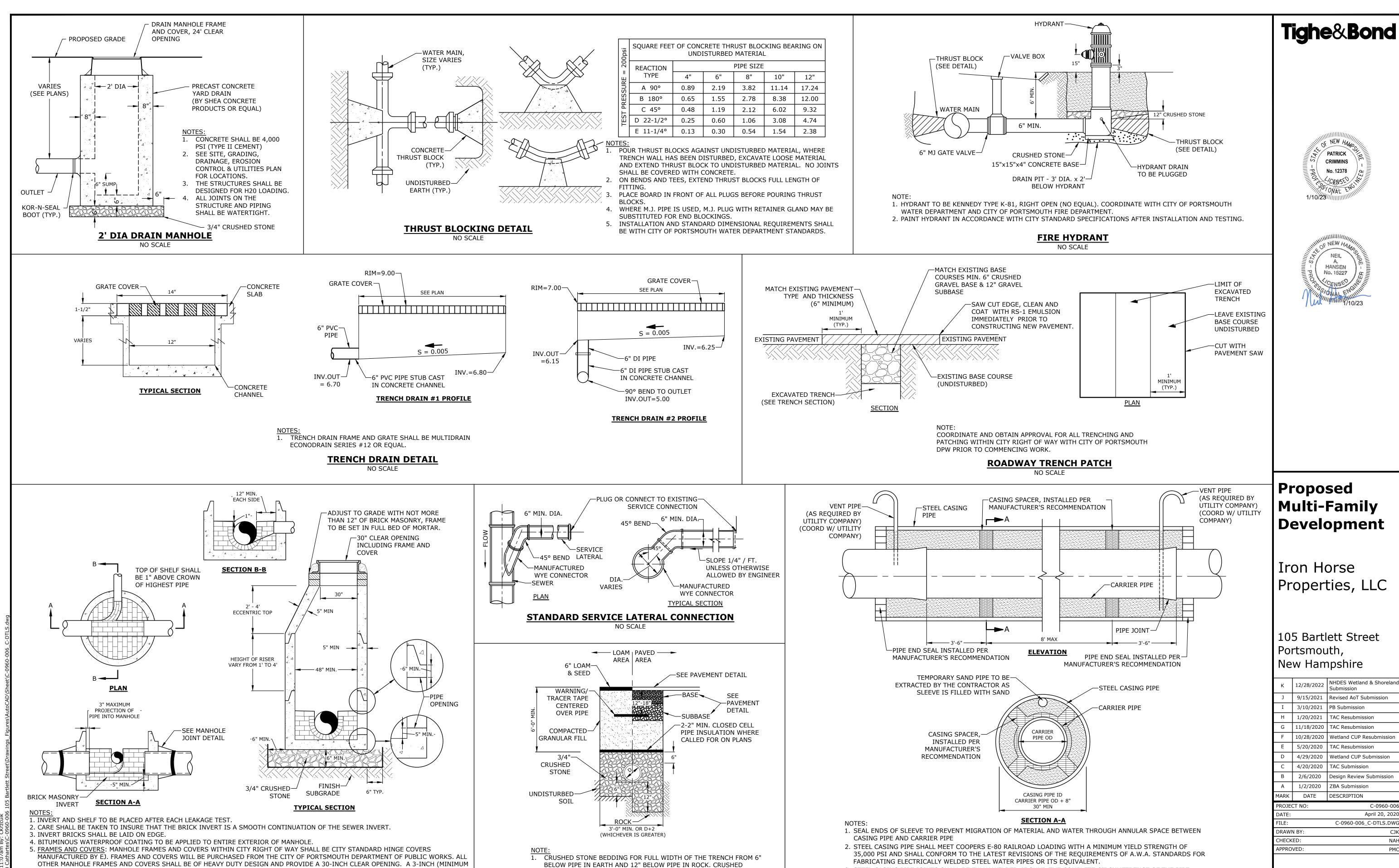
SCALE: AS SHOWN

DRAWN BY:

CHECKED:

PPROVED:

C-507



STONE SHALL ALSO COMPLETELY ENCASE THE PIPE AND COVER THE

PIPE TO A GRADE 6" OVER THE TOP OF THE PIPE FOR THE ENTIRE

2. COORDINATE ALL INSTALLATIONS WITH THE CITY OF PORTSMOUTH.

SEWER SERVICE TRENCH

NO SCALE

WIDTH OF THE TRENCH.

3. STEEL CASING PIPE JOINTS SHALL BE FULLY WELDED AROUND THE COMPLETE CIRCUMFERENCE OF THE PIPE.

WATER PIPELINE SLEEVE DETAIL (CARRIER PIPE)

WITH PAN-AM & THE CITY PORTSMOUTH DPW PRIOR TO CONSTRUCTION.

4. CONTRACTOR SHALL COORDINATE ALL UTILITY AND CARRIER PIPE WORK WITHIN THE RAIL ROAD RIGHT OF WAY

DETAILS SHEET

C-508

AS SHOWN

SCALE:

Last Saved: 12/23/2022

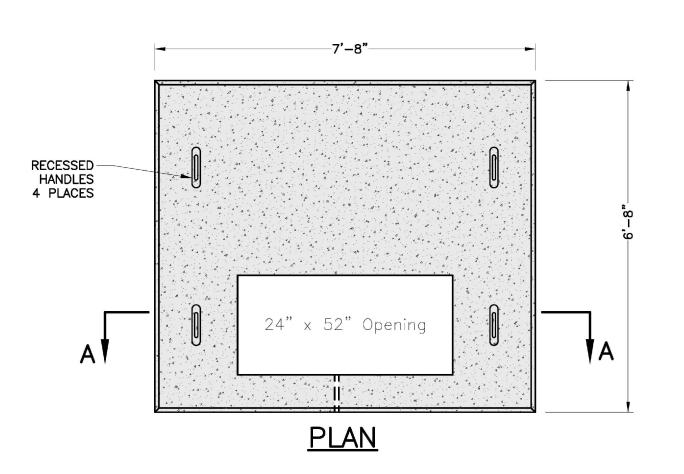
C478-06.

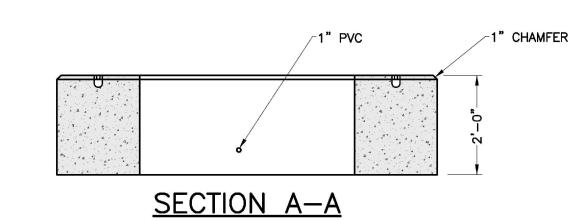
HEIGHT) WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.

6. HORIZONTAL JOINTS SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.

SEWER MANHOLE

7. BARREL AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED FOR H20 LOADING, AND CONFORMING TO ASTM





3-PHASE TRANSFORMER PAD

NO SCALE

<u>NOTES:</u> 1. DIMEN

 DIMENSIONS SHOWN REPRESENT TYPICAL REQUIREMENTS. MANHOLE LOCATIONS AND REQUIREMENTS SHALL BE COORDINATED WITH EVERSOURCE PRIOR

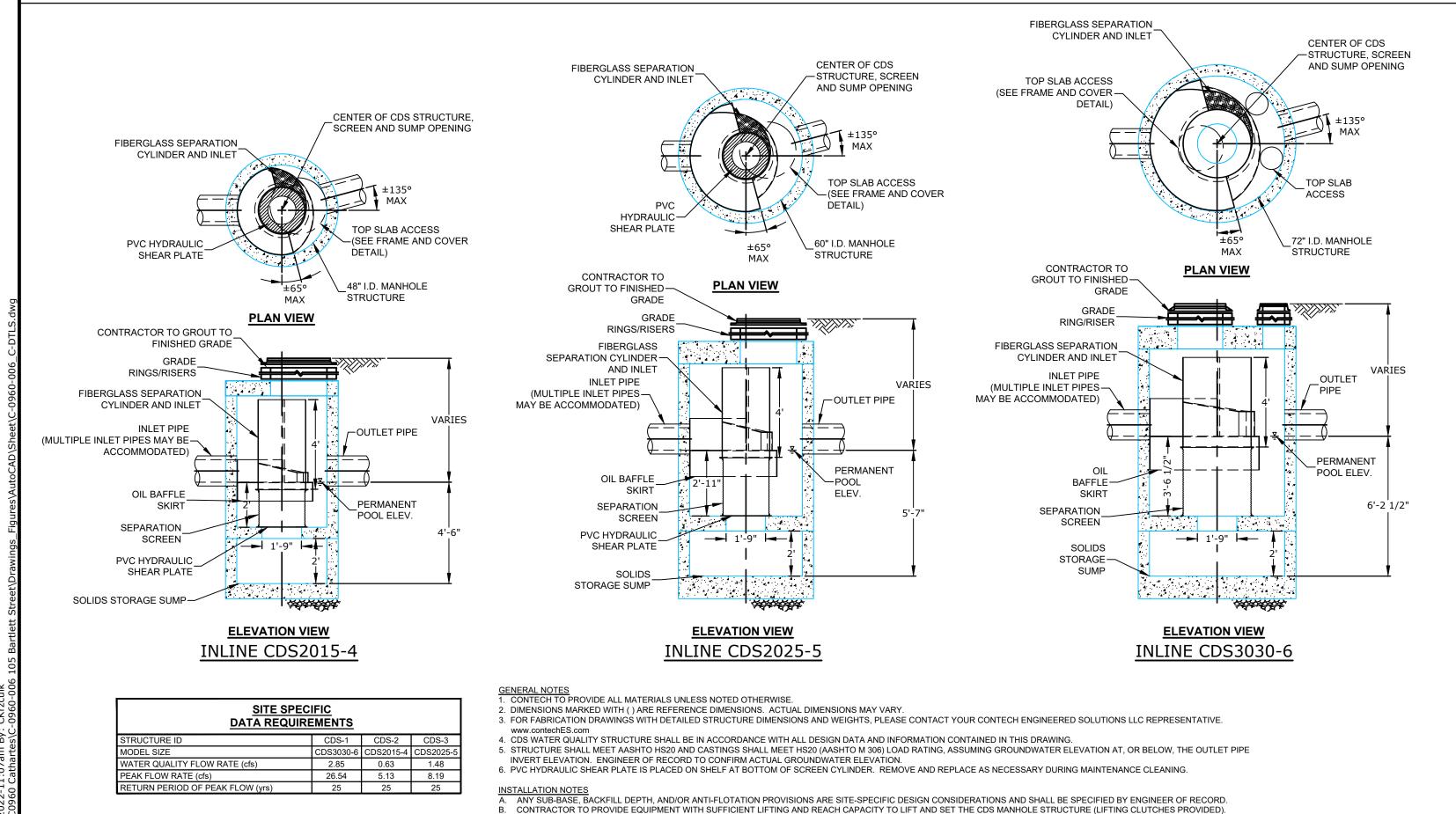
TO CONSTRUCTION

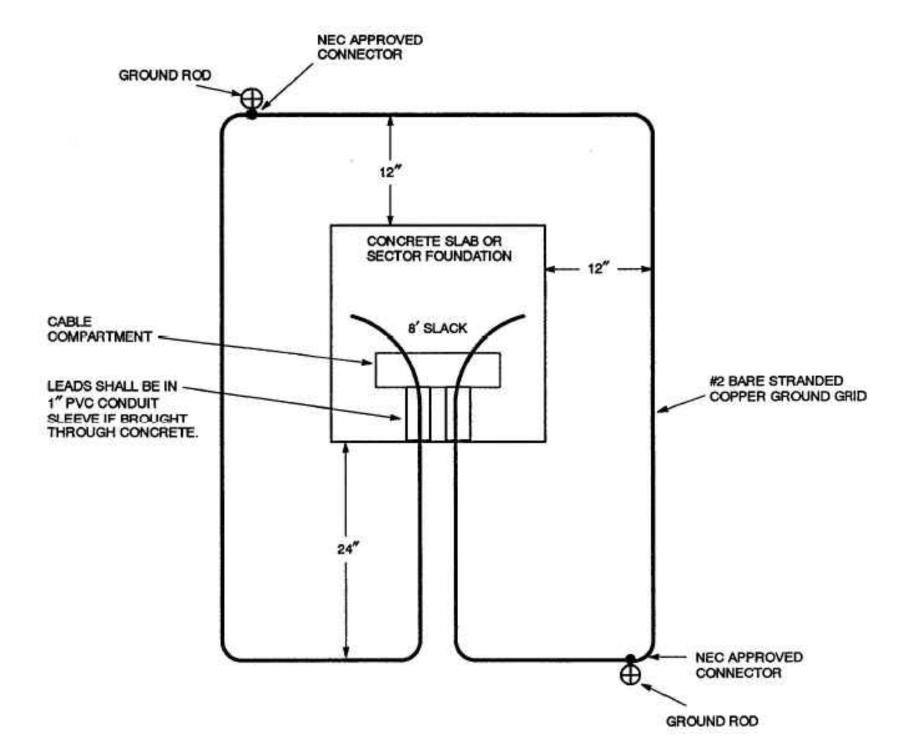
2. CONCRETE MINIMUM STRENGTH - 4,000
PSI @ 28 DAYS

3. STEEL REINFORCEMENT - ASTM A615,

GRADE 60
4. PAD MEETS OR EXCEEDS EVERSOURCE

4. PAD MEETS OR EXCEEDS EVERSOUR SPECIFICATIONS





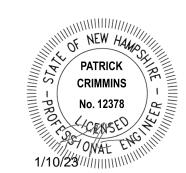
NOTES: THE GROUND GRID SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR AND IS TO BE BURIED AT LEAST 12 INCHES BELOW GRADE. EIGHT FEET OF EXTRA WIRE FOR EACH GROUND GRID LEG SHALL BE LEFT EXPOSED IN

INCHES BELOW GRADE. EIGHT FEET OF EXTRA WIRE FOR EACH GROUND GRID LEG SHALL BE LEFT EXPOSED IN THE CABLE COMPARTMENT TO ALLOW FOR THE CONNECTION TO THE TRANSFORMER. THE TWO 8-FOOT GROUND RODS MAY BE EITHER GALVANIZED STEEL OR COPPERWELD AND THEY SHALL BE CONNECTED TO THE GRID WITH NEC APPROVED CONNECTORS.

PAD-MOUNTED EQUIPMENT GROUNDING GRID DETAIL

NO SCALE

Tighe&Bond





Proposed Multi-Family Development

Iron Horse Properties, LLC

105 Bartlett Street Portsmouth, New Hampshire

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MARK	DATE	DESCRIPTION
PROJECT NO:		C-0960-006
DATE:		April 20, 2020

APPROVED:

DETAILS SHEET

C-0960-006_C-DTLS.DWG

SCALE: AS SHOWN

DRAWN BY:

CHECKED:

C-509

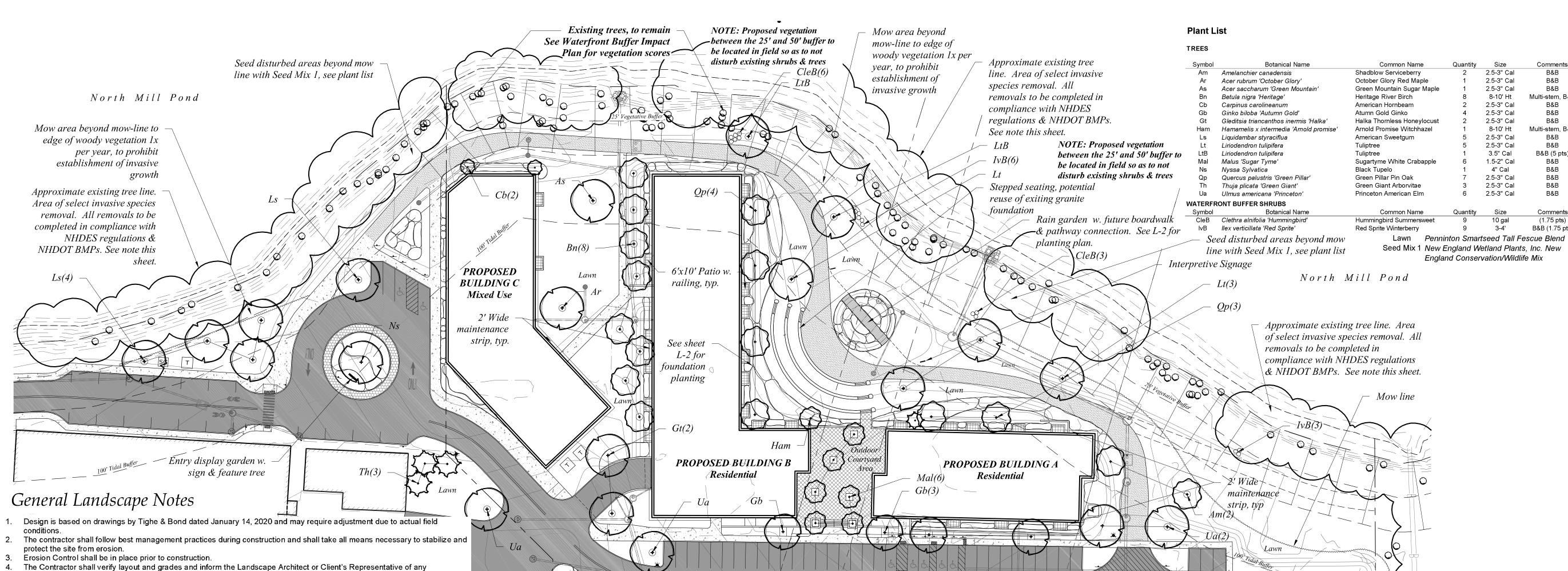
ast Saved: 12/23/2022

CONTECH CDS PRETRATMENT UNITS

CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.

NO SCALE

CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW



discrepancies or changes in layout and/or grade relationships prior to construction.

5. It is the contractor's responsibility to verify drawings provided are to the correct scale prior to any bid, estimate or installation. A

graphic scale bar has been provided on each sheet for this purpose. If it is determined that the scale of the drawing is incorrect, the landscape architect will provide a set of drawings at the correct scale, at the request of the contractor. 6. Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or

other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence shall be located at the drip line at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. Do not disturb roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Do not store any refuse or construction materials or portalets within the tree protection area.

7. This plan is for review purposes only, NOT for Construction. Construction Documents will be provided upon request.

8. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the

9. The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233.

10. The Contractor shall procure any required permits prior to construction.

11. Prior to any landscape construction activities Contractor shall test all existing loam and loam from off-site intended to be used for lawns and plant beds using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement.

12. Contractor shall notify landscape architect or owner's representative immediately if at any point during demolition or construction a site condition is discovered which may negatively impact the completed project. This includes, but is not limited to, unforeseen drainage problems, unknown subsurface conditions, and discrepancies between the plan and the site. If a contractor is aware of a potential issue, and does not bring it to the attention of the landscape architect or owner's representative immediately, they may be responsible for the labor and materials associated with correcting the problem.

13. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in the American Standard of Nursery Stock, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.

14. A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.

15. All plants shall be legibly tagged with proper botanical name.

16. The Contractor shall guarantee all plants for not less than one year from time of acceptance. 17. Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.

18. No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.

19. All landscaping shall be provided with the following:

a. Outside hose attachments spaced a maximum of 150 feet apart, and An underground irrigation system, or

c. A temporary irrigation system designed for a two-year period of plant establishment.

20. If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas. 21. The contractor is responsible for all plant material from the time their work commences until final acceptance. This includes but is not limited to maintaining all plants in good condition, the security of the plant material once delivered to the site, and watering of plants. Plants shall be appropriately watered prior to, during and after planting. It is the contractor's responsibility

to provide clean water suitable for plant health from off site, should it not be available on site. 22. All disturbed areas will be dressed with 6" of topsoil and planted as noted on the plans or seeded except plant beds. Plant

beds shall be prepared to a depth of 12" with 75% loam and 25% compost. 23. Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and ½" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer. Color of mulch shall be

24. In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch) over the root ball of any plant.

25. Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height of 6' to allow clear and safe passage of vehicles and pedestrians under tree canopy. Within the sight distance triangles at vehicle intersections the canopies shall be raised to 8' min.

26. Snow shall be stored a minimum of 5' from shrubs and trunks of trees.

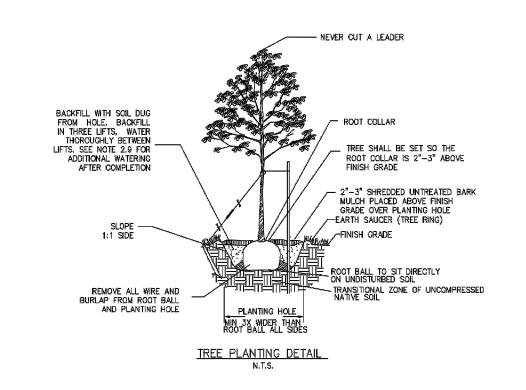
27. Landscape Architect is not responsible for the means and methods of the contractor

City of Portsmouth Landscape Notes

- 1. The property owner and all future property owners shall be responsible for the maintenance, repair and replacement of all required screening and landscape materials. 2. All required plant materials shall be tended and maintained in a healthy growing
- condition, replaced when necessary, and kept free of refuse and debris. All required fences and walls shall be maintained in good repair.
- 3. The property owner shall be responsible to remove and replace dead or diseased plant materials immediately with the same type, size and quantity of plant materials as originally installed, unless alternative plantings are requested, justified and approved by the Planning Board or Planning Director.

INVASIVES REMOVAL AND DISTURBANCES WITHIN THE BUFFER ZONE

With the exception of the Norway Maples in the 25' vegetated buffer, which are to remain, invasive species within the 100' shoreland setback will be removed. Invasives species within the 25' vegetated buffer will be flagged in field by the landscape architect or certified arborist to be removed. Invasive shrubs within the 25' vegetated buffer with caliper measuring greater than 3" such as Buckthorn and Autumn Olive will be flush cut repeatedly to kill the plant, leaving the stumps in place. Woody invasives smaller than 3" caliper shall be removed with hand tools. Areas of soil disturbance from such removals will be limited to the immediate root area surrounding each plant, dressed with loam, replanted with New England Wildlife and Conservation Seed Mix and stabilized with jute mesh staked in place. All other areas disturbed by headwalls and culverts shall be loamed, seeded with New England Wildlife and Conservation Seed Mix and stabilized with jute mesh.



PART 1 - GENERAL: 1.1 THE BASE OF THE CITY OF PORTSMOUTH TREE PLANTING
REQUIREMENTS IS THE ANSI A300 PART 6 STANDARD PRACTICES FOR
PLANTING AND TRANSPLANTING. ANSI A300 PART 6 LAYS OUT TERMS
AND BASIC STANDARDS AS SET FORTH BY INDUSTRY BUT IT TO
THE "END ALL" FOR THE CITY OF PORTSMOUTH. THE FOLLOWING ARE
THE CITY OF PORTSMOUTH, NH TREE PLANTING REQUIREMENTS THAT ARE IN ADDITION TO OR THAT GO BEYOND THE ANSI A300 PART 6.

PART 2 - EXECUTION:

- 2.1 ALL PLANTING HOLES SHALL BE DUG BY HAND NO MACHINES. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE NEW PLANTING PITS, PLANTING BEDS WITH GRANITE CURBING, AND PLANTING SITES WITH SILVA CELLS ARE BEING CREATED. IF A MACHINE IS USED TO DIG IN ANY OF THESE SITUATIONS AND PLANTING DEPTH NEEDS TO BE RAISED THE MATERIAL IN THE BOTTOM OF THE PLANTING HOLE MUST BE FIRMED WITH MACHINE TO PREVENT SINKING OF THE ROOT BALL.
- 2.2 ALL WIRE AND BURLAP SHALL BE REMOVED FROM THE ROOT BALL AND PLANTING HOLE.
- 2.3 THE ROOT BALL OF THE TREE SHALL BE WORKED SO THAT THE ROOT COLLAR OF THE TREE IS VISIBLE AND NO GIRDLING ROOTS ARE
- 2.4 THE ROOT COLLAR OF THE TREE SHALL BE 2"-3" ABOVE GRADE OF PLANTING HOLE FOR FINISHING DEPTH. 2.5 ALL PLANTINGS SHALL BE BACKFILLED WITH SOIL FROM THE SITE AND AMENDED NO MORE THAN 20% WITH ORGANIC COMPOST. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE ENGINEERED SOIL IS BEING USED IN CONJUNCTION WITH SILVA CELLS AND WHERE NEW PLANTING BEDS ARE BEING CREATED.
- 2.6 ALL PLANTINGS SHALL BE BACKFILLED IN THREE LIFTS AND ALL LIFTS SHALL BE WATERED SO THE PLANTING WILL BE SET AND FREE OF AIR POCKETS NO EXCEPTIONS.
- 2.7 AN EARTH BERM SHALL BE PLACED AROUND THE PERIMETER OF THE PLANTING HOLE EXCEPT WHERE CURBED PLANTING BEDS OR PITS ARE BEING USED.
- 2.8 2"-3" OF MULCH SHALL BE PLACED OVER THE PLANTING AREA. 2.9 AT THE TIME OF PLANTING IS COMPLETE THE PLANTING SHALL RECEIVE ADDITIONAL WATER TO ENSURE COMPLETE HYDRATION OF THE ROOTS,
- BACKFILL MATERIAL AND MULCH LAYER.
- 2.11 ALL PLANTING STOCK SHALL BE SPECIMEN QUALITY, FREE OF DEFECTS, AND DISEASE OR INJURY. THE CITY OF PORTSMOUTH, NH RESERVES THE RIGHT TO REFUSE/REJECT ANY PLANT MATERIAL OR PLANTING ACTION THAT FAILS TO MEET THE STANDARDS SET FORTH IN THE ANSI A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPORTATION AND/OR THE CITY OF PORTSMOUTH, NH PLANTING REQUIREMENTS.

City of Portsmouth Tree Planting Detail





B&B

Multi-stem, B&B

Multi-stem, B&B

B&B (5 pts)

B&B

B&B

VM Drawn By: RW Checked By: 1'' = 40' - 0''Scale: May 20, 2020 Date: Revisions: October 28, 2020 November 18, 2020 January 20, 2021 January 9, 2023 NHDES Wetland & Shoreland Submission

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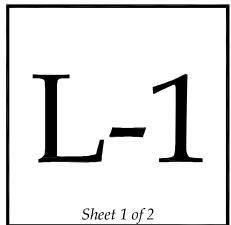
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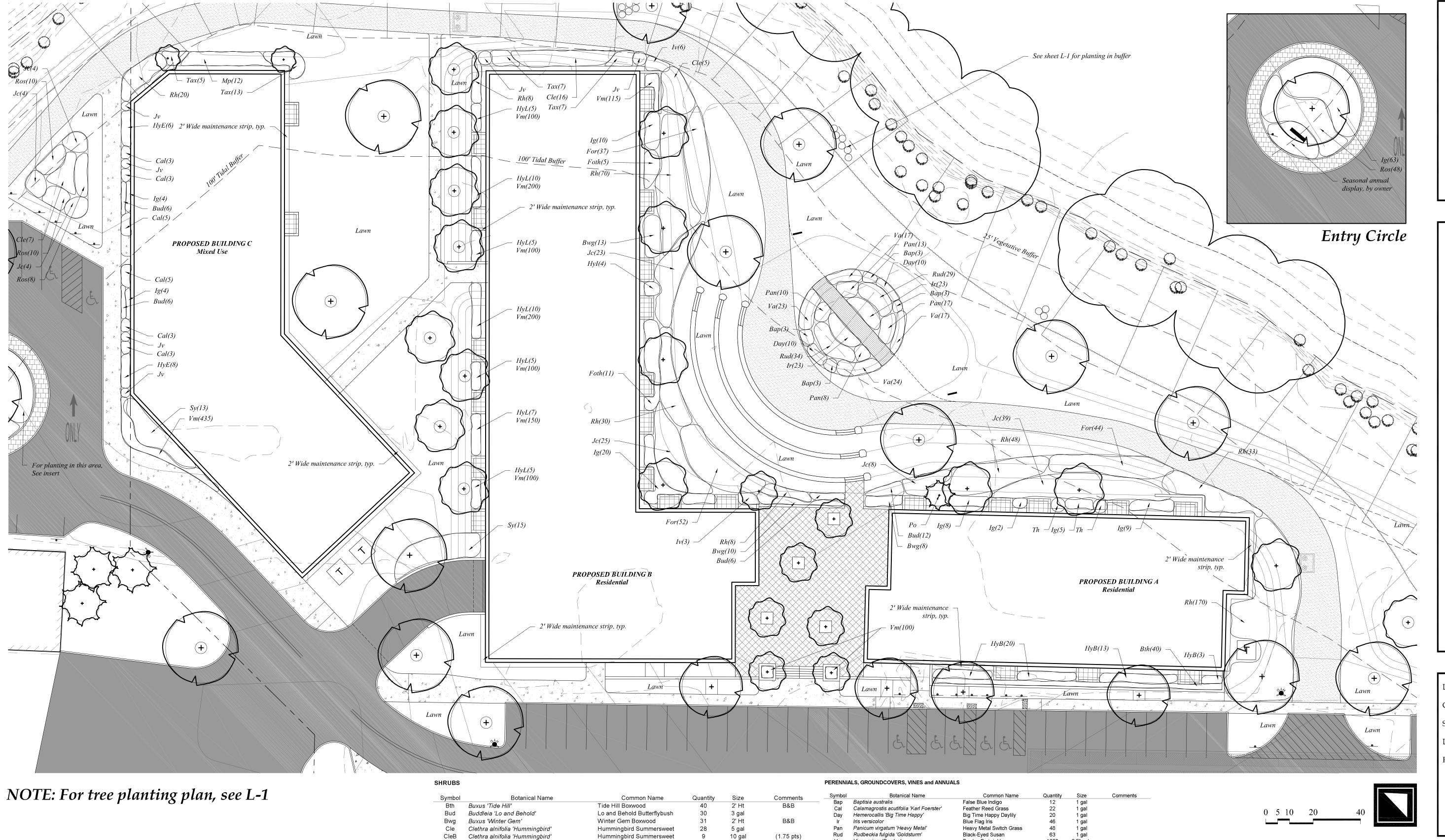
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Street

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177

16

14

47 125

107

12

387

32

67

Gold Tide Forsythia Dwarf Fothergilla

Incrediball Hydrangea

Little Lime Hydrangea

Red Sprite Winterberry

Red Sprite Winterberry

Gowdy Oriental Spruce

Emerald Sentinel Red Cedar

Shamrock Inkberry

Sargent Juniper

Northern Bayberry

Grow Low Sumac

Dwarf Korean Lilac

Lowbush Blueberry

Ever-Low Yew

Blush Knockout Rose

Emerald Green Arborvitae

Endless Summer Hydrangea

Bobo Hydrangea

Forsythia 'Gold Tide'

Fothergilla gardenii

llex glabra 'Shamrock'

Myrica pensylvanica

Picea orientalis 'Gowdy'

Rosa 'Blush Knockout'

Syringa meyeri 'Palibin'

Taxus media 'Ever-Low'

Vaccinium angustifolium

Thuja occidentalis 'Smaragd'

Rhus aromatica 'Grow-Low'

llex verticillata 'Red Sprite'

llex verticillata 'Red Sprite'

Juniperus chinensis 'Sargenti'

Hydrangea paniculata 'Bobo'

Hydrangea macrophylla 'Endless Summer'

Juniperus virginiana 'Emerald Sentinel'

Hydrangea arborescens 'Incrediball'

Hydrangea paniculata 'Little Lime'

Foth

3 gal

5 gal

3 gal

5 gal 5 gal

3 gal 5 gal

3 gal 3-4'

5 gal

5 gal

8-10' Ht

3 gal

3 gal

3-4' Ht

3 gal

7-8' Ht

1 gal

7-8' Ht

full to ground

B&B (1.75 pts)

B&B

B&B

B&B

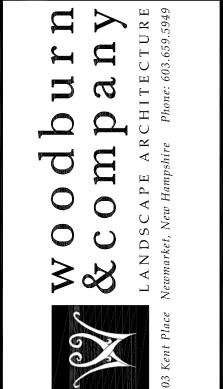
B&B

Rudbeckia fulgida 'Goldsturm' 63 10 gal Black-Eyed Susan Clethra alnifolia 'Hummingbird' **Hummingbird Summersweet**

Bowles Periwinkle

Vinca minor 'Bowles'

1600



Development eq Propose

Drawn By: Checked By: 1'' = 20' - 0'Scale:

November 4, 2020 Revisions:

November 18, 2020 January 20, 2021 January 9, 2023 NHDES Wetland & Shoreland Submission

Sheet 2 of 2

January 25, 2023

Conservation Commission City of Portsmouth 1 Junkins Avenue Portsmouth, NH 03801

Dear Conservation Commission Members,

At its regularly scheduled meeting of Thursday April 21, 2022, the City of Portsmouth Planning Board granted a Wetland Conditional Use Permit to the property owner at 325 Little Harbor Road to replace the existing single family structure, carriage house, shed, barn, and paddock; construct a garage, pool, pool cabana playground; and renovate the existing barn and shed with all associated electric, gas, water, and sewer updates as required on private property and within the public right of way resulting in 195,656 S.F. of impact in the tidal buffer area and 17, 189 S.F. of temporary impact to in the tidal wetland area. This was granted with the following stipulations:

- 2.a) For each review identified and provided for in the Land Management Plan, an update and report of findings will also be provided to the Planning Board.
- 2.b) There will be an inspection and report submitted to the Planning Board on the bridge status and safety every 5 years.

An updated Land Management Plan dated December 2022 has been received by the Planning and Sustainability Department and is attached for your review. We have also included the original management plan for your reference (dated fall 2021). This updated report will also be submitted to the Planning Board for review at their February 2023 meeting. If you have any questions or need additional information please do not hesitate to contact me at kehomet@cityofportsmouth.com

Sincerely,

Kate Homet Associate Environmental Planner Planning & Sustainability Department City of Portsmouth

Land Management Plan

A Narrative for Invasive Plant Management and Native Plant Restoration

325 Little Harbor Road, Portsmouth, NE

Fall 2021

PARTERRE ECOLOGICAL



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Introduction and Primary Goals

The Dilorenzo residence is located at 325 Little Harbor Road in Portsmouth. The 11-acre island lies near the mouth of the Piscataqua River and the majority of the site is within the 100' tidal river buffer. An inventory of existing native and invasive plant species can be found in this plan.

The primary goal of this plan is to seek approval from the Portsmouth Conservation Commission to offset home construction and landscape improvements within the 100' Tidal buffer. We propose to remove invasive species on site and to restore the area with native species that will benefit the ecosystem around Piscataqua Rive and reduce further incursion of invasive species on the island. An inventory of existing native and invasive plant species can be found in this plan.

We propose removing invasive species by low-impact manual hand methods and cut & dab herbicide application by licensed applicators. All invasive species greater than 1" in caliper will be cut and dabbed with herbicide to reduce the chance of erosion along the banks. All existing erosion will be stabilize and any soil disturbed during planting will be stabilized and seeded with native wildflower mix. Techniques are outlined in the report. After removal of invasive species we will restore with native shrubs and perennials that will help prevent resurgence of the invasive plants and enhance the existing ecology.



A mass of invasive Multiflora Rose along the edges of the horse paddock with maturing Black Swallowort pods hanging from the stem. The majority of the western portion of the island is healthy pine/oak forest, but invasives are dense in areas with historically high disturbance. We propose managing all invasive species and replacing with native alternatives.



325 Little Harbor Road Invasive Plant Inventory

Mature invasive species have developed isolated populations along the tidal river buffer and threaten to spread into an otherwise healthy native ecosystem. We propose controlling invasive plant species that have developed self sustaining populations on the Dilorenzo's property and restoring with native species. The physiology of the invasive plants has enabled them to out compete the native plant community and compromise the ecological value of the native plant community. The dominant invasive plants, including Multiflora Rose and Barberry, disrupt the formation of a native understory by filling ecological niches and resisting any browsing by native species. A very small Japanese Knotweed population exists near the southwestern corner of the paddock. It can spread quickly in coastal areas and should be managed before it can establish itself. All invasive perennials and shrubs with viable fruit will be removed from the site. Poison lvy is a native species with valuable ecological benefits. We propose control the and areas of human traffic.

Invasive Plant Species Identified:

Acer platanoides, Norway Maple
Alliaria petiolata, Garlic Mustard
Berberis thunbergii, Japanese Barberry
Celastrus orbiculatus, Asiatic Bittersweet
Cynanchum louiseae, Black Swallowort
Elaeagnus umbellata, Autumn Olive
Fallopia japonica, Japanese Knotweed
Frangula alnus, Glossy Buckthorn
Lonicera morrowii, Morrow's Honeysuckle
Rhamnus cathartica, Common Buckthorn
Rosa multiflora, Multiflora Rose

*Likely Invasive Plant Species Identified:

Artemisia vulgaris, Mugwort Deutzia scabra, Fuzzy Deutzia Ligustrum vulgaris, Common Privet Rhodotypos scandens, Jetbead Vitus sp., Grape (Native but control)

* While not listed as an Invasive Species by ISC (New Hampshire Invasive Species Committee) these species can dominate the shrub layer and crowd out native trees and shrubs. We recommend removal of along with listed invasive plant species in wetland buffers and replace with native shrubs and trees.



Black Swallowort releasing seedheads in the paddock. The majority of this area is a healthy goldenrod/blackberry meadow with patches of Milkweed, but Black Swallowort can establish itself quickly and releases compounds in the soil to limit its competitor. Without intervention there will likely be a large infestation.





MAP FOR REFERENCE ONLY NOT A LEGAL DOCUMENT

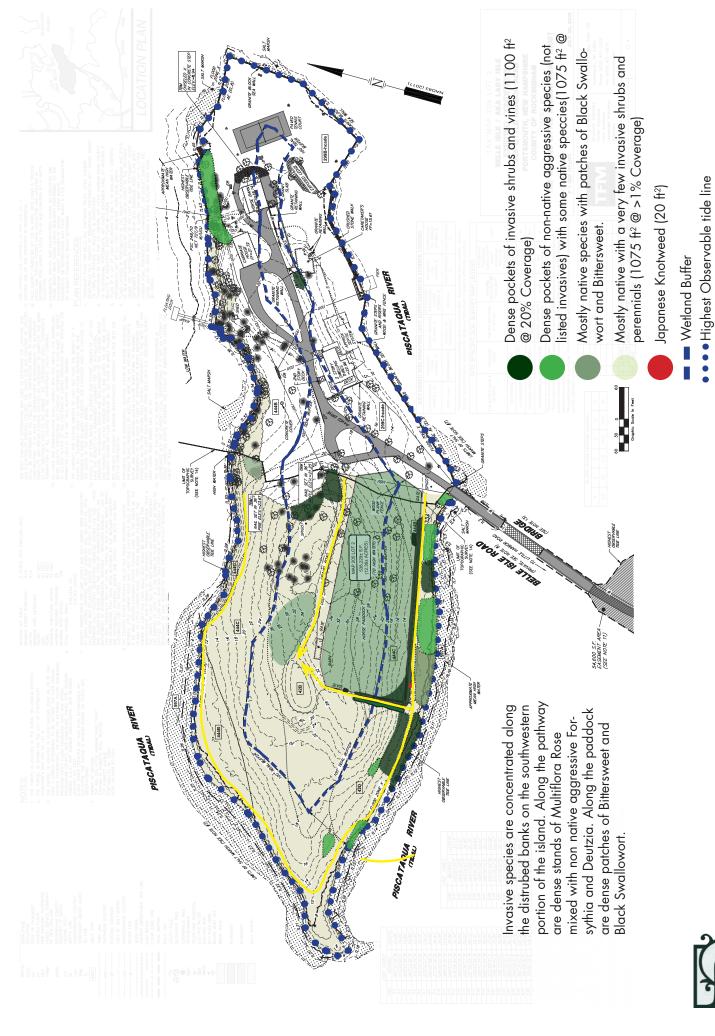
City of Portsmouth, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 4/1/2019 Data updated 7/17/2019

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.









Existing Pathways

325 Little Harbor Road Invasive Plant Images



Japanese Barberry with Deutzia and Black Swallowort at the edge of the forest



Garlic Mustard seedheads with Mugwort on the northern bank



Japanese Barberry with viable fruits



Autumn Olive in the open paddock



A single small population of Japanese Knotweed on site should be managed as soon as possible

325 Little Harbor Road

Invasive management techniques

We propose a combination of manual hand removal and cut & dab herbicide to control invasive plant species within the identified project areas over a phased time line. Once the initial identified invasive plant species have been removed by manual methods (described below), we propose seeding all exposed soil with native seed blend and begin planting identified tree, shrub and perennial plant species selected from the native plant community list that will increase the density and diversity of the existing wetland buffers.

Manual Hand Removal Methods:

Manual methods of invasive plant management will include hand pulling or cutting. To minimize soil disturbance, shallow-rooted invasive plants less than 1" in caliper will be hand pulled from the soil. Invasive plant species greater than 1" in diameter will be cut. All invasive plant material will be disposed of off site. Manual hand pulling and cutting will remove all invasive plants from the wetland buffer.

Cut and Dab and Foam application: All invasive plant species that have a base greater than 1" in caliper are proposed for herbicide application methods. Although invasive, the root systems of plants greater then 1" in caliper usually have extensive fibrous root systems, providing soil stabilization. So we propose a cut & dab method of application of a Triclopyr based herbicide (Garlon) or Glyphosate based herbicide approved for wetland use (trade name Rodeo) on individual cut stumps. Licensed Pesticide Applicators will complete all aspects of the proposed restoration. For treatment of perennial species that cannot be controlled with cut and dab or by manual methods should be treated by a foam based herbicide that is wiped onto the leaves using a cotton glove. This hyper-specific treatment limits any treatment of non-target plants. No treatment will occur in areas of standing water.



Qualified applicators with necessary Personal Protective Equipment paint the stems of invasive species after cutting



Proposed cut stump treatment (below) using hand tools and applying marking dye to eliminate possibility of treatment of stump twice, or missing stump entirely. (Above) Foam treatment allows highly specific placement of herbicide to remove invasive perennials that limits disturbance and protects surrounding species

325 Little Harbor Road Asiatic Bittersweet ID and Management

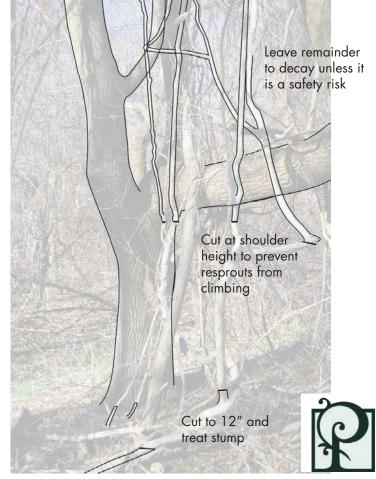
Invasive Bittersweet (*Celastrus orbiculatus*) have the capacity to girdle, weaken, and even kill mature canopy trees. Without some frequency of removal, they will eventually open large holes in the canopy while suppressing saplings from filling the holes. They readily resprout after being cut and can damage the aesthetic and ecological value of meadows.

Mature stems produce thousands of bright red berries that mature in late fall and are spread by birds.

Removing the entire vines from trees is often dangerous and unnecessary (unless it poses safety risk). Our team recommends making cuts at shoulder height followed by a cut at 12" and immediate herbicide treatment. Bittersweet aggressively suckers after cutting so it is important to cut and treat during or after its flowering period (late June to December).







325 Little Harbor Road Japanese Knotweed Management

Japanese Knotweed (Fallopia japonica) is one of the most difficult invasive species to control. Its main mode of spreading is through cut portions of its rhizomes or stem, which can actively resprout even when 1 inch in length. Growing 10-15' and shading out any competitors, Japanese Knotweed can quickly form a monoculture. It can take 2-5 seasons to fully contain through repeat herbicide treatments. It is at its weakest point during the flowering stage, when nutrients are flowing back into the roots (Aug, Sept.) Unfortunately, taproots can extend over 6' below the ground making organic eradication nearly impossible without excavation. There are two ways to approach treatment.

- Cut and treat: For smaller areas, involves cutting the stem between the 1st and 3rd node and adding a 66% solution of Aquaneat (glyphosate), generally 5 oz per treated stem. If density is less than 5 ft per plant treat every third stem. Do this for 2-5 seasons.
- Cut in May, wipe leaves in fall or apply to stem in fall: In this case, dense stands of Knotweed are mown in end of May so when they regrow they are at hip height by August. They can then be easily wiped with a 6.0% Aquaneat (glyphosate) solution





Identification: Herbaceous perennial, with long heart shaped leaves. Young sprouts can be red, rhubarb in nature. Extensive roots can spread and colonize quickly and can reach 15 ft. at maturity.



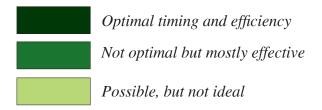




Japanese Knotweed cut in preparation for a fall herbicide foliar wipe treatment (top left). Treatment of Japanese Knotweed stems using a cut and fill method (above). A combination of cut and fill in the first season and foliar wipe in the second has shown to be effective. Foliar wipe can be accomplished by applying herbicide to a glove and wiping leaves or by utilizing a foaming agent to help herbicide stick to the leaves (left). It is a highly specific treatment with little risk of drift.

Management Calendar for Treatment and Planting

Task	March/ April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
Remove Garlic Mustard and Lesser Celandine seedlings by hand or smothering									
Cutting of Japanese Knotweed									
Cut and dab of woody invasive species									
Treatment of Japanese Knotweed									
Invasive vine management and cut and dab treatment									
Restoration planting									
Treatment of Black Swallowort									
Mowing of meadows									





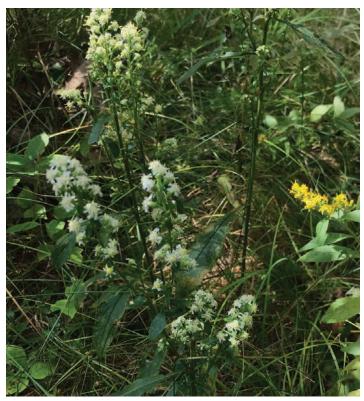
325 Little Harbor Road Native Plant Inventory

Within the tidal river buffer is a diverse native plant community dominated by mature Oaks and White Pines with Chokeberry, Black Cherry, Arrowood Viburnum, and lowbush Blueberry in the understory. In the sunnier areas is a wet meadow featuring Rough Goldenrod, Alleghaney Blackberry, Sumac, Common Rush and Elderberry. An occupied Belted Kingfisher nest was found during the site visits. We propose utilizing these existing native plant species as indicators of what naturally inhabits this plant community and propose additional planting of these species and diversifying with other native trees, shrubs and perennials.

Native Plant Species Identified:

Acer rubrum, Red Maple
Acer sacharinum, Sugar Maple
Aronia melanocarpa, Black Chokeberry
Betula populifolia, Gray Birch
Betula papyrifera, Paper Birch
Iva frutescens, Bigleaf Marsh-elder
Juncus tenuis, Path Rush
Juniperus virginiana, Eastern Red Cedar
Kalmia latifolia, Mountain Laurel
Myrica pensylvanica, Bayberry
Parthenocissus quinquefolia, Virginia Creeper
Pinus strobus, Eastern White Pine
Prunus virginana, Chokecherry

Toxicodendron radicans, Poison Ivy
Quercus alba, White Oak
Rosa virginiana, Virginia Rose
Rhus typhina, Staghorn Sumac
Rubus allegheniensis, Allegheny blackberry
Sambucus canadensis, Elderberry
Solidago bicolor, Silverrod
Solidago sempervirens, Sea-side Goldenrod
Solidago rugosa, Rough-leaved Goldenrod
Swida amonum, Silky Dogwood
Tilia americana, American Basswood
Vaccinium corymbosum, High-bush Blueberry
Viburnum dentatum, Arrowood Viburnum



Silverrod alongside Blue-stem Goldenrod and Carex. sp



Gray Birch along the bank

325 Little Harbor Road Invasive Plant Images

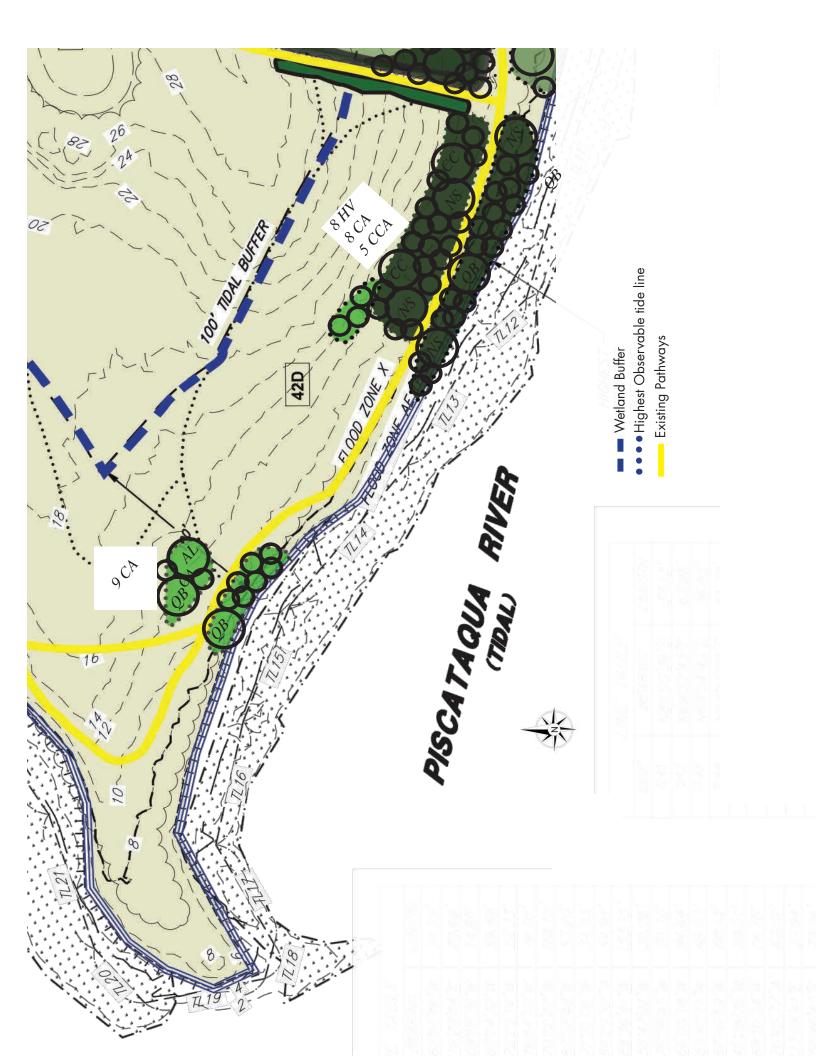


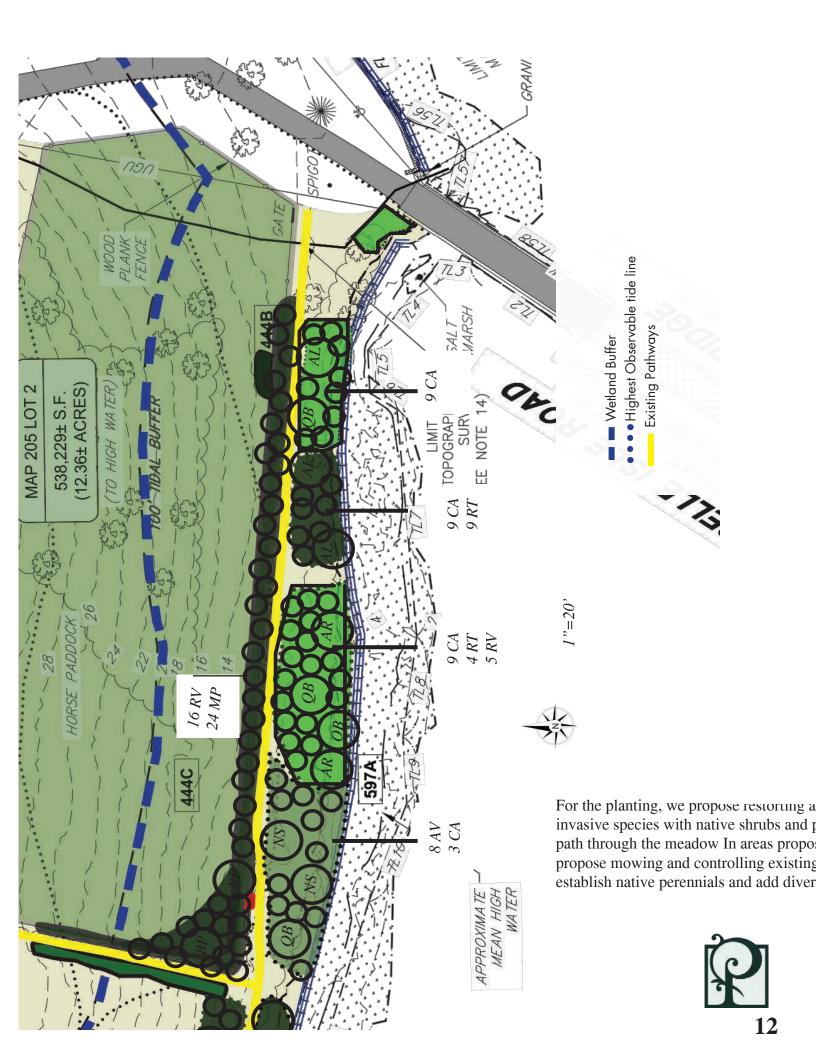
Staghorn Sumac along the banks with Arrowood Viburnum and Virginia Rose in the foreground

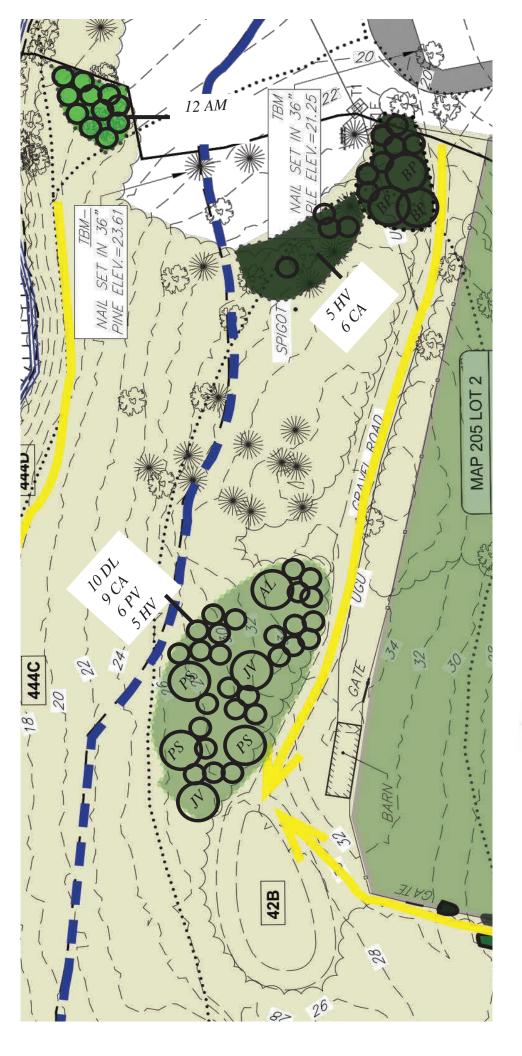


Marsh Elder along with Beechgrass line the western banks of the island









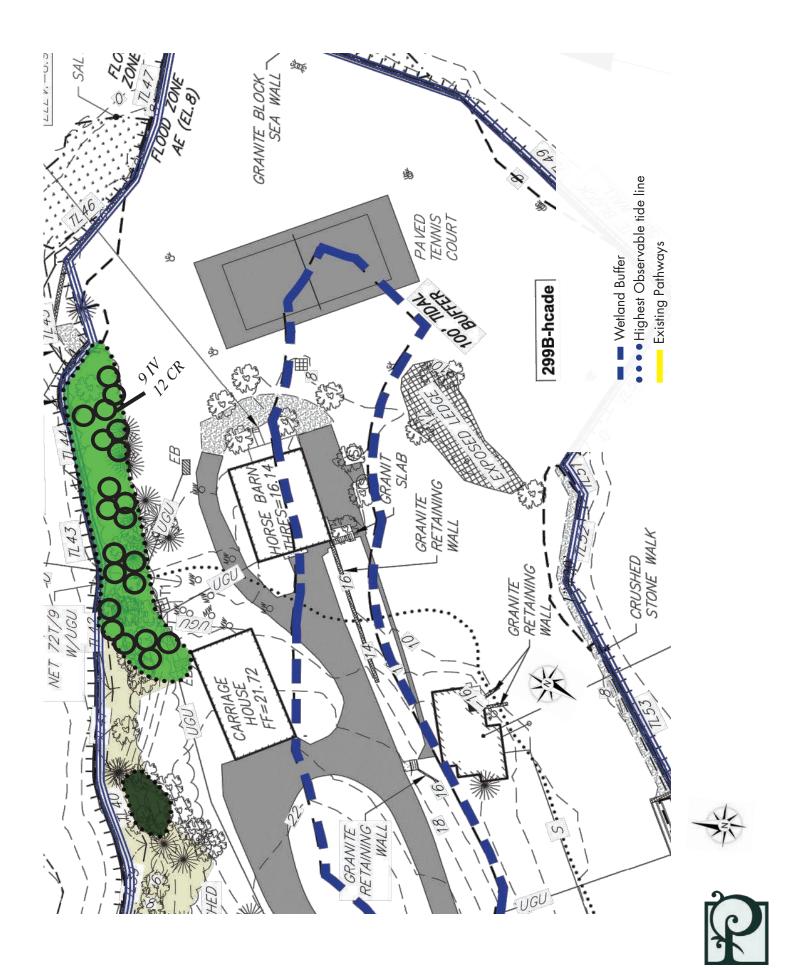


Highest Observable tide line

Existing Pathways







325 Little Harbor Road Native Restoration Strategies

After invasive plant species have been removed from the wetland buffer, the area will be planted with one to five gallon native conservation grade New England native trees, shrubs and perennials from local seed and cutting sources. It is proposed that native plants will have greater than 90% coverage by the conclusion of the 3 year Order of Conditions. Native plants proposed for installation will add diversity of existing native plants, provide habitat and forage for wildlife, and reduce storm water and sediment flow wetland areas. Plants proposed for installation include:

	Quantity	Size	Scientific name	Common name
Within 100' Tidal River Buffer	4	3-4'	Amelanchier laevis	Shadblow Serviceberry
	2	3-4'	Acer rubrum	Red Maple
	12	3-4'	Aronia melanocarpa	Black Chokecherry
	5	3-4'	Betula papyrifera [*]	Paper Birch
	2	3-4'	Carpinus caroliniana	Ironwood
	44	3-4'	Clethra alnifolia	Summersweet
	5	3-4'	Cornus amonum	Silky Dogwood
	12	3-4'	Cornus racemosa	Gray Dogwood
	10	3-4'	Diervilla lonicera	Northern Bush Honeysuckle
	18	3-4'	Hamamelis virginiana	Witchazel
	9	3-4'	llex vertilicillata	Winterberry
	2	3-4'	Juniperus virginiana	Eastern Red Cedar
	24	3-4'	Myrica pennsylvatica	Bayberry
	6	3-4'	Nyssa sylvatica	Black Tupelo
	6	3-4'	Prunus virginiana	Chokecherry
	3	3-4'	Prunus serotina	Black Cherry
	7	3-4'	Quercus bicolor	Swamp White Oak
	9	3-4'	Rhus typhina	Staghorn Sumac
	16	3-4'	Rosa virginiana	Virginia Rose

After planting the conservation grade native shrubs and trees and slope stabilizing perennials, we propose the area be seeded with a custom Dormant seed mix at recommended seeding rates. This dense seed mix will supply a matrix of vegetative growth to cover disturbed soils, and reduce recolonization of invasive plant species. These mixes include:

New England Showy New England Wildflower mix New England Understory Grass and Forb Mix



325 Little Harbor Road Maintenance Schedule

The recommendations for restoration take into consideration the long term health of the wetland. Once the invasive plant species have been managed in a locus area and any native plants installed, a long-term maintenance plan will be set in motion with the goal of continued control of invasive plant species on site, serve, and sustain native plant populations, and improve the native plant diversity and aesthetic beauty of the wetland.

Fall - Winter 2021

- Complete invasive species management of Buckthorn and woody invasive plant species by cut and dab methods
- Identify and manually hand-pull identified invasive shrubs and vines under 1' in caliper
- Cover all disturbed soil along with native seed mix

Winter 2021-Spring 2022

- Continue utilizing control methods of invasive plant management to exhaust seed bank
- Begin planting native plant species according to approved quantities and varieties
- Monitor plant response and continue hand pulling and herbicide application methods on re sprouting invasive plant species
- Cover exposed soils Conservation seed mix

Summer 2022

- Cut and dab/Foam application to Japanese Knotweed and remaining invasive shrub and tree species
- Continue utilizing control methods of invasive plant management to exhaust seed bank
- Continue planting native plant species according to approved quantities and varieties

Fall 2022 - Summer 2023

- Monitor plant response and continue hand pulling and herbicide application methods on re sprouting invasive plant species
- Followup treatment of Japanese Knotweed (Mowing in spring, treating in fall)
- Cover exposed soils Conservation seed mix
- Monitor native species for plant health

Ongoing Maintenance and Monitoring:

- After the treatments of fall 2023, the management plan should be re-evaluated. If
 management treatments have been successful, only monitoring and minimal hand removal
 should be required to keep invasive plant species from being reintroduced. Native trees,
 shrubs, and herbaceous forbs should dominate the wetland buffer.
- Implementation of the LMP should be completed by qualified professionals including:

NH Licensed pesticide applicator

Certified Massachusetts/NH Invasive Species Management

MCH Massachusetts Certified Horticulturist

 Monitoring reports shall be submitted to conservation at the end of each growing season indicating invasive species management efforts and establishment of the restoration plantings.







Bittersweet

Description:

Celastrus orbiculatus, Asiatic Bittersweet is a deciduous climbing vine common in areas of disturbance in our New England forests. It has glossy, rounded leaves that are alternate with finely toothed margins. The leaves turn yellow in the fall. The fruiting plants produce small greenish flower clusters from leaf axils that mature in fall to produce high numbers of fruiting seed. The seed are noticeably yellow, globular capsules that split open at maturity to reveal red-orange fruiting seeds. Roots are also distinctly orange.

Habitat:

Bittersweet spreads easily into forest edges, woodlands, unmanaged meadows and old fields. Most disturbed sites that are not being actively managed that receive full sun are susceptible. The vine can tolerate shade but is often found in more open, sunny areas.

Management:

Asiatic Bittersweet management is a combination of manual hand pulling with cut & dab herbicide treatments. For established plants, vines should be cut to ground to reduce mass. Persistent root infestations will require repeat cutting and treatments over several seasons. Rake any seeds present, bagging in plastic bags, tying, and disposing of correctly.

Celastrus orbiculatus, Asiatic Bittersweet





Honeysuckle

Description:

Lonicera morrowii, Morrow's honeysuckles are upright, deciduous shrubs that typically have a multi-stem mounding appearance. Oval leaves are opposite along the stem with smooth edges (no teeth or lobes) and hairy on the underside. Mature stems are often hollow on the interior and peeling on the outer bark. In the spring pairs of fragrant, tubular flowers less than an inch long are borne along the stem in the leaf axils. The fruits are red to orange, and fleshy.



Habitat:

Honeysuckles are relatively shadeintolerant and most often occur in forest edges, abandoned fields, and other open, upland habitats. Woodlands and open meadows, especially those that have been grazed or otherwise disturbed and are left unmanaged are also highly susceptible. Morrow's Honeysuckle have the greatest habitat diversity and are capable of invading wetland edges and other uncommon habitat types.



Management:

Morrows Honeysuckle management is a combination of mechanical mowing and manual hand pulling with cut and dab herbicide treatments. When feasible, the root system is generally shallow and plants can be uprooted easily. Persistent root re sprouting may require repeat cutting with herbicide application over several seasons to fully control.

Lonicera morrowii, Morrow's Honeysuckle









Buckthorn

Description:

Frangula alnus, Glossy Buckthorn is a deciduous shrub that grows up to 20 ft.. tall. The oblong leaves are up to 2" long, arranged alternately along the stem and are dark green on the surface, glossy above and slightly pubescent beneath. The leaves turn yellow in the fall, and remain on the plant when most other species have already lost their leaves. The yellow-green flowers are arranged in 1-8 flowered sessile, glabrous umbels. This plant flowers after the leaves expand, from May to September . The fruit ripen from red to black July to August.

Habitat:

Buckthorn thrives in early successional habitat. Abandoned agricultural or pasture lands, an opening in canopy within woodland, or unmanaged meadows are common areas. Buckthorn will also tolerate wetland soils where it can form dense stands that suppress the growth of native plant species. The seed is readily dispersed by birds, and the extended productivity of the fruit into winter allows the plant to be dispersed through the entire season.

Management:

Manual methods of hand-pulling seedlings is recommended. For larger saplings, a 'Weed Wrench' is effective. Mature Buckthorn can also be cut and the stump application of Triclopyr based herbicide. Rake any seeds present, bagging and disposing of correctly.

Frangula alnus, Glossy buckthorn





Multiflora Rose

Description:

Rosa multiflora, Multiflora Rose is a shrub with arching canes with a mounding shape in the landscape. The leaves are divided into five to eleven sharply toothed leaflets. The base of each leaf stalk has a pair of fringed bracts which is a key identifier of the plant from other wild rose. Beginning in early summer, clusters of showy white flowers appear. The flowers are followed by developing red fruit, or hips, during the summer that remain on the plant through the winter.



Habitat:

Multiflora Rose thrives in early successional habitat. The rose has a wide tolerance for various soil, moisture, and light conditions. It occurs in dense woods, along river banks and roadsides and in open unmanaged fields. It can form a dense understory that suppresses growth of native plant species. The seed is readily dispersed by birds, and the extended productivity of the fruit into winter months allows wide spread distribution of the plant.



Management:

Manual methods of hand-pulling seedlings is effective. For more established shrubs, a combination of pruning to reduce mass followed by cut & dab treatments with a Triclopyr based herbicide is recommended. Persistent root infestations may require repeat cutting over several seasons. Rake any seeds present, bagging and disposing of correctly.

Rosa multiflora, Multiflora rose



IDENTIFICATION AND QUALIFICATION OF APPLICANT

This plan has been developed by Miles H. Connors, Director of Ecological Services at Parterre Ecological, a division of Parterre Garden Services. Parterre Ecological Services provides Land Management Planning, expert Invasive Plant Management services, Native Plant Restoration strategies, and ongoing Maintenance and Monitoring in natural area restorations.

PLAN AUTHOR AND QUALIFICATIONS

Miles Hilton Connors Director of Ecological Services mconnors@parterreecological.com

Parterre Garden Services 67 Smith Place, unit 12A Cambridge MA 12138

Miles holds an Bachelor of Science degree in Environmental Planning and Policy and Biology, with a Masters of Science in Sustainable Landscape Planning and Design. Miles is also a Massachusetts Certified Horticulturist, holds an Invasive Plant Certification from UMASS Amherst and is a Licensed Pesticide Applicator.

Members of the Parterre Ecological team are licensed Massachusetts Pesticide Applicators, are Massachusetts Certified Horticulturists and hold an Invasive Plant Certification from UMASS Amherst.





1. Existing Conditions - Client under an enforcement order to restore buffer after tree & shrub removal and hydroseeding turf



2. After installation of sediment control, we mechanically mowed area and seeded with New England Conservation and Wildlife Seed Mix



3. Covered exposed loam with straw erosion control blanket: BioNet S75BN and staple into existing slope



4. Layout native plant species suitable for an Oak Hickory Forest plant community



5. Native plant species installed: Quercus rubra, Kalmia latifolia, Ostrya virginiana, Corylus americana, Betula lenta, Fagus grandiflora and Viburnum acerfolium



Land Management Annual Monitoring Report

325 Little Harbor Rd. Portsmouth, NH

December 2022



Prepared By: Ryan Corrigan Project Manager of Ecological Services

Parterre Garden Services 2 Republic Road North Billerica, MA 01880 617.492.2230 (office) rcorrigan@parterregarden.com



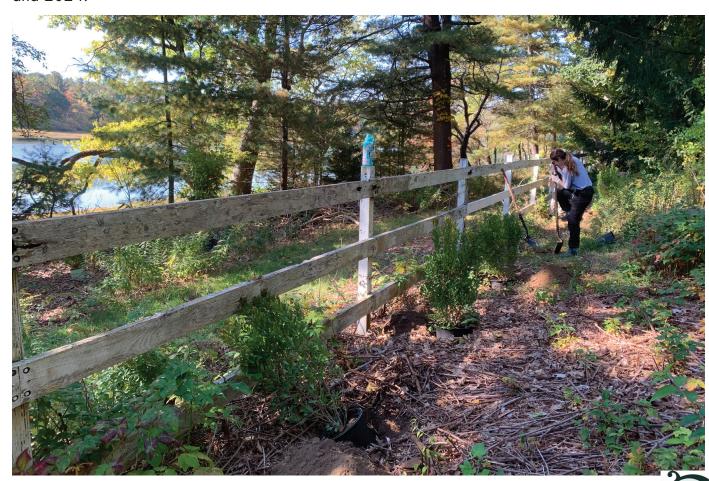
Work Completed 2022

Spring to Fall 2022 Invasive Species Management:

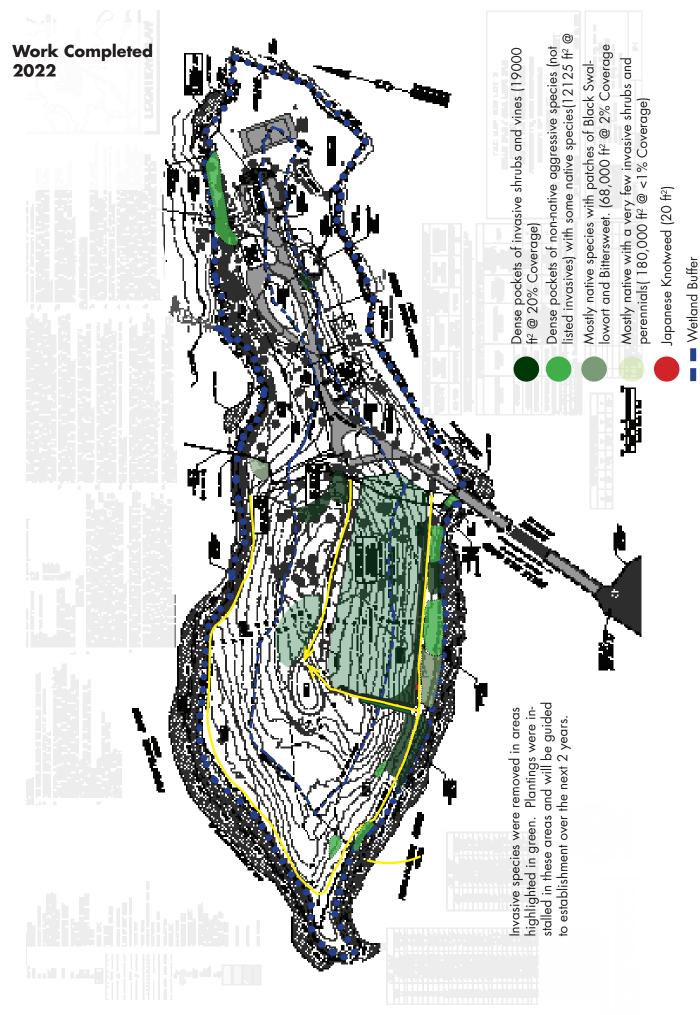
During the Spring and Summer of 2022, the Parterre Ecological team managed extensive invasive species on site including Oriental Bittersweet (Celastrus orbiculatus), Japanese and European Barberry (Berberis), Multiflora Rose (Rosa multiflora), Black Swallowort (Cynanchum louiseae), Glossy Buckthorn (Frangula alnus), and Japanese Knotweed (Fallopia japonica). Woody invasive species were cut and chipped in the spring, then re-cut and treated with approved stem-based herbicide (Garlon 3a) in the summer. The small patch of Japanese Knotweed on site was treated in the summer with an approved foam-based herbicide applied directly to the leaves (Rodeo). Black Swallowort was mowed at specific times of the year to prevent it from going to seed. After the first season of management, approximately 75% of invasive species were eradicated.

Native Plant Restoration:

During Fall of 2022, Parterre Ecological installed native trees and shrubs per the approved planting plan within the Land Management Plan with modifications based on plant availability and suitability within the wetland buffer. Plantings were installed in pockets where dense invasive species were removed and deer fencing was placed around susceptible plantings. All plantings per the Land Management Plan were installed in 2022 and will be guided to establishment in 2023 and 2024.



Northern Bayberry installed along the lower pasture fence where Multiflora Rose previously dominated.





• • • Highest Observable tide line

Existing Pathways

Invasive Species Management



Established
Multiflora Rose
and Bittersweet
along the
Pasture Fence
before cutting
and chipping

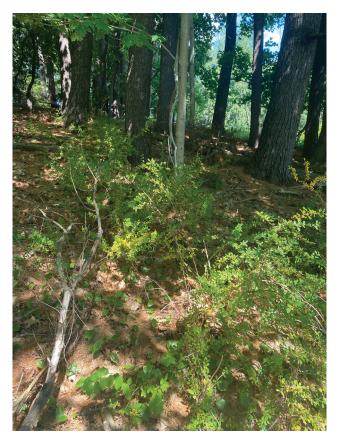


Established
Multiflora Rose
and Bittersweet
along the
Pasture Fence
after cutting
and chipping



Invasive species were chipped in the spring to avoid fruiting branches which could further spread of seedlings

Invasive Species Management





Established
European
Barberry cut
and dabbed
allowing light to
native Canada
Mayflower.





Left: Treated stump of Oriental Bittersweet that was established in a Norway Spruce.

Right: Foamherbicide treatment of Japanese Knotweed



2022 Installed Plantings:

Per the order of conditions, the removal of invasive species and disturbance within the wetland was offset with planting of native shrubs and trees listed below. Plants susceptible to deer browsing were caged and compost was added to holes were soil was particularly thin. Where soil was disturbed, the soil was overseeded with a native understory mix listed below.

	Quantity	Size	Scientific name	Common name
Within 100' Tidal River Buffer	4	3-4'	Amelanchier laevis	Shadblow Serviceberry
	2	3-4'	Acer rubrum	Red Maple
	20	3-4'	Aronia melanocarpa	Black Chokecherry
	5	3-4'	Betula papyrifera [*]	Paper Birch
	2	3-4'	Carpinus caroliniana	Ironwood
	44	3-4'	Clethra alnifolia	Summersweet
	5	3-4'	Cornus amonum	Silky Dogwood
	12	3-4'	Cornus racemosa	Gray Dogwood
	10	3-4'	Diervilla lonicera	Northern Bush Honeysuckle
	18	3-4'	Hamamelis virginiana	Witchazel
	9	3-4'	llex vertilicillata	Winterberry
	2	3-4'	Juniperus virginiana	Eastern Red Cedar
	24	3-4'	Myrica pennsylvatica	Bayberry
	6	3-4'	Nyssa sylvatica	Black Tupelo
	6	3-4'	Prunus virginiana	Chokecherry
	3	3-4'	Prunus serotina	Black Cherry
	7	3-4'	Quercus bicolor	Swamp White Oak
	24	3-4'	Rhus glabra	Smooth Sumac
	16	3-4'	Rosa virginiana	Virginia Rose

New England Understory Grass and Forb Mix:

Virginia Wildrye (Elymus virginicus), Canada Wild Rye (Elymus canadensis), Partridge Pea, (Chamaecrista fasciculata), Red Fescue, (Festuca rubra), Spiked Gayfeather/Marsh Blazing Star (Liatris spicata), Sensitive Fern (Onoclea sensibilis), Zigzag Aster (Aster prenanthoides/Symphyotrichum prenanthoide), Hollow-Stem Joe Pye Weed (Eupatorium fistulosum/Eutrochium fistulosum), White Avens, (Geum canadense), Eastern Columbine (Aquilegia canadensis), Path Rush (Juncus tenuis)

Native Plant Restoration:



Northern Bush Honeysuckle and Gray Birch installed along the forest edge



Summersweet installed where Barberry was previously established



Caging of Black Chokecherry (Aronia melanocarpa) to protect from deer



Proposed Management for 2023:

Building off the momentum for invasive species management and native plant restoration Parterre will continue management of significantly reduced Japanese Knotweed into 2023

Spring 2023

 Monitor plant response and continue hand pulling and herbicide application methods on re sprouting invasive plant species

Summer 2023

- Monitor plant response and continue hand pulling and herbicide application methods on resprouting invasive plant species
- Spot water native shrubs and trees through dry months for plant establishment
- Seasonally mow pasture where Black Swallowort is established to prevent it from going to seed.

Fall 2023

- Continue utilizing control methods of invasive plant management to exhaust seed bank
- Followup treatment to Japanese Knotweed

2023

Ongoing Maintenance and Monitoring:

• After the treatments of 2023, the management plan should be re-evaluated. If management treatments have been successful, only monitoring and minimal hand removal should be required to keep species from being reintroduced



Arrowood
Viburnum
(Viburnum
dentatum)
established
amongst removed
invasive species





Department of Environmental Services



Robert R. Scott, Commissioner

January 19, 2023

PORTSMOUTH MUNICIPAL CLERK/CONSERVATION COMMISSION
1 JUNKINS AVE
PORTSMOUTH NH 03801

Re: Received Standard Dredge and Fill Wetlands Permit Application (RSA 482-A)

NHDES File Number: 2023-00122

Subject Property: 105 Bartlett St, Portsmouth, Tax Map #157, Lot #1,2

Dear Sir or Madam:



Pursuant to RSA 482-A:11, III, if notification by a local conservation commission, local river management advisory committee, or the New Hampshire Rivers Council pursuant to this paragraph is not received by the department within 14 days (January 31, 2023) following the date the notice is filed with the municipal clerk, the department shall not suspend its normal action, but shall proceed as if no notification has been made. Please include the NHDES file number on the written notification.

Please provide a copy of this letter to all local level departments, boards, and commissions. Pursuant to current state laws and regulations, NHDES is not authorized to consider local zoning and regulatory issues pertaining to a project. These issues must be addressed at the local level.

If you have any questions, please contact the Wetlands Bureau at (603) 271-2147

Sincerely,

meliasa F Ruemani

Melissa F. Rusinski Application Receipt Center, Wetlands Bureau Land Resources Management, Water Division



Department of Environmental Services



Robert R. Scott, Commissioner

January 19, 2023

IRON HORSE PROPERTIES LLC ROB SIMMONS 6 LIBERTY SQUARE PMB 90767 BOSTON MA 02109

Re:

Administrative Completeness Notice – Standard Dredge and Fill Wetlands Permit Application (RSA 482-A)

NHDES File Number: 2023-00122

Subject Property: 105 Bartlett St, Portsmouth, Tax Map #157, Lot #1,2

Dear Applicant:

On January 19, 2023, the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau received the above-referenced Standard Dredge and Fill Wetlands Permit Application (Application). On January 19, 2023, NHDES determined the Application was administratively complete in accordance with RSA 482-A:3, XIV.

The Application has been added to the technical review queue for compliance review. This application shall be reviewed in accordance with the timeframes established under RSA 482-A:3, XIV. The language of RSA 482-A:3, XIV has been provided on the reverse of this document for your reference. The status of the application is available at https://www4.des.state.nh.us/lrmonestop/.

Please note that with the 2022 U.S. Army Corps of Engineers NH General Permit, additional mitigation may be required under the Clean Water Act. If your project has 5,000 square feet or greater of non-tidal wetlands impacts, impacts to tidal wetlands, stream work greater than 200 linear feet or proposes discharge of dredge or fill material within a vernal pool depression, please contact the USACE at 1-978-318-8832, 1-978-318-8295, or by email at cenae-r-nh@usace.army.mil to see if additional mitigation may be required from the USACE.

Please note this letter is **not** a permit or authorization to begin work. If you have any questions, please contact the Wetlands Bureau at (603) 271-2147.

Sincerely,

meliaca F Ruemani

Melissa F. Rusinski Program Assistant I, Wetlands Bureau Land Resources Management, Water Division

cc: Clipper Traders LLC, Portsmouth Hardware & Lumber LLC, Iron Horse Properties LLC Tighe & Bond Inc Neil Hansen

RSA 482-A:3, XIV

- (a) In processing an application for permits under this chapter, except for a permit by notification, the department shall:
 - (1) Within 10 days of receipt by the department, issue a notice of administrative completeness or send notice to the applicant, at the address provided on the application, identifying any additional information required to make the application administratively complete and providing the applicant with the name and telephone number of the department employee to whom all correspondence shall be directed by the designated department employee regarding incompleteness of the application. Each receipt of additional information in response to any notice shall re-commence the 10-day period until the department issues a notice of administrative completeness. Any notice of incompleteness sent under this subparagraph shall specify that the applicant or authorized agent shall submit such information as soon as practicable and shall notify the applicant or authorized agent that if the requested information is not received within 60 days of the notice, the department shall deny the application.
 - (2) Within 50 days of the issuance of a notice of administrative completeness for projects where the applicant proposes under one acre of jurisdictional impact and 75 days for all other projects, request any additional information that the department is permitted by law to require to complete its evaluation of the application, together with any written technical comments the department deems necessary. Such request and technical comments may be sent by electronic means if the applicant or authorized agent has indicated an agreement to accept communications by electronic means, either by so indicating on the application or by a signed statement from the applicant or authorized agent that communicating by electronic means is acceptable. Any request for additional information under this subparagraph shall specify that the applicant submit such information as soon as practicable and shall notify the applicant that if the requested information is not received within 60 days of the request, the department shall deny the application. The department shall grant an extension of this 60-day time period upon request of the applicant.
 - (3) Where the department requests additional information pursuant to subparagraph (a)(2), within 30 days of the department's receipt of a complete response to the department's information request:
 - (A) Approve the application, in whole or in part, and issue a permit; or
 - (B) Deny the application and issue written findings in support of the denial; or
 - (C) Schedule a public hearing within 30 days in accordance with this chapter and rules adopted by the commissioner; or
 - (D) Extend the time for rendering a decision on the application for good cause and with the written agreement of the applicant; or
 - (4) Where no request for additional information is made pursuant to subparagraph (a)(2), within 50 days from the issuance of the notice of administrative completeness for proposed projects under one acre of jurisdictional impact, or 75 days for all others:
 - (A) Approve the application, in whole or in part, and issue a permit; or
 - (B) Deny the application and issue written findings in support of the denial; or
 - (C) Schedule a public hearing within 30 days in accordance with this chapter and rules adopted by the commissioner; or
 - (D) Extend the time for rendering a decision on the application for good cause and with the written agreement of the applicant.
 - (5) Where the department has held a public hearing on an application filed under this chapter, within 45 days following the closure of the hearing record, approve the application in whole or in part, and issue a permit or deny the application and issue written findings in support of the denial.
- (b) (1) The time limits prescribed by this paragraph shall supersede any time limits provided in any other provision of law. The time limits prescribed by this paragraph shall not apply to applications submitted by the department of transportation, for which time limits shall be set by a memorandum of agreement between the commissioner of the department of environmental services and the commissioner of the department of transportation. If the department fails to act within the applicable time frame established in subparagraphs (a)(3), (a)(4), and (a)(5), the applicant may ask the department to issue the permit by submitting a written request. If the applicant has previously agreed to accept communications from the department by electronic means, a request submitted electronically by the applicant shall constitute a written request.
 - (2) Within 14 days of the date of receipt of a written request from the applicant to issue the permit, the department shall:

- (A) Approve the application, in whole or in part, and issue a permit; or
- (B) Deny the application and issue written findings in support of the denial.
- (3) If the department does not issue either a permit or a written denial within the 14-day period, the applicant shall be deemed to have a permit by default and may proceed with the project as presented in the application. The authorization provided by this subparagraph shall not relieve the applicant of complying with all requirements applicable to the project, including but not limited to requirements established in or under this chapter, RSA 485-A relating to water quality, and federal requirements.
- (4) Upon receipt of a written request from an applicant, the department shall issue written confirmation that the applicant has a permit by default pursuant to subparagraph (b)(3), which authorizes the applicant to proceed with the project as presented in the application and requires the work to comply with all requirements applicable to the project, including but not limited to requirements established in or under this chapter, and RSA 485-A relating to water quality, and federal requirements.
- (c) If extraordinary circumstances prevent the department from conducting its normal function, time frames prescribed by this paragraph shall be suspended until such condition has ended, as determined by the commissioner.
- (d) The time limits prescribed by this paragraph shall not apply to an application filed after the applicant has already undertaken some or all of the work covered by the application, or where the applicant has been adjudicated after final appeal, or otherwise does not contest, the department's designation as a chronic non-complier in accordance with rules adopted pursuant to this chapter.
- (e) Any request for an amendment to an application or permit shall be submitted to the department on the appropriate amendment form. Any request for a significant amendment to a pending application or an existing permit which changes the footprint of the permitted fill or dredge area shall be deemed a new application subject to the provisions of RSA 482-A:3, I and the time limits prescribed by this paragraph. "Significant amendment" means an amendment which changes the proposed or previously approved acreage of the permitted fill or dredge area by 20 percent or more, includes a prime wetland, or elevates the project's impact classification. This meaning of "significant amendment" shall not apply to an application amendment that is in response to a request from the department.
- (f) The department may extend the time for rendering a decision under subparagraphs (a)(3)(D) and (a)(4)(D), without the applicant's agreement, on an application from an applicant who, within the 5 years preceding the application, has been determined, after the exhaustion of available appellate remedies, to have failed to comply with this chapter or any rule adopted or permit or approval issued under this chapter, or to have misrepresented any material fact made in connection with any activity regulated or prohibited by this chapter, pursuant to an action initiated under RSA 482-A:13, RSA 482-A:14, or RSA 482-A:14-b. The length of such an extension shall be no longer than reasonably necessary to complete the review of the application, but shall not exceed 20 days unless the applicant agrees to a longer extension. The department shall notify the applicant of the length of the extension.
- (g) The department may suspend review of an application for a proposed project on a property with respect to which the department has commenced an enforcement action against the applicant for any violation of this chapter, RSA 483-B, RSA 485-A:17, or RSA 485-A:29-44, or of any rule adopted or permit or approval issued pursuant to this chapter, RSA 483-B, RSA 485-A:17, or RSA 485-A:29-44. Any such suspension shall expire upon conclusion of the enforcement action and completion of any remedial actions the department may require to address the violation; provided, however, that the department may resume its review of the application sooner if doing so will facilitate resolution of the violation. The department shall resume its review of the application at the point the review was suspended, except that the department may extend any of the time limits under this paragraph and its rules up to a total of 30 days for all such extensions. For purposes of this subparagraph, "enforcement action" means an action under RSA 482-A:13, RSA 482-A:14, RSA 482-A:14-b, RSA 483-B:18, RSA 485-A:22, RSA 485-A:42, or RSA 485-A:43.



The State of New Hampshire **Department of Environmental Services**



Robert R. Scott, Commissioner

WETLANDS AND NON-SITE SPECIFIC PERMIT 2022-02376

NOTE CONDITIONS

PERMITTEE:

NH DEPT OF NATURAL AND CULTURAL RESOURCES (DNCR)

C/O SETH PRESCOTT 172 PEMBROKE RD CONCORD NH 03301

PROJECT LOCATION:

375 LITTLE HARBOR RD, PORTSMOUTH

TAX MAP #203, LOT #4

WATERBODY:

PORTSMOUTH HARBOR

APPROVAL DATE:

JANUARY 04, 2023

EXPIRATION DATE: JANUARY 04, 2028

Based upon review of permit application 2022-02376 in accordance with RSA 482-A and RSA 485-A:17, the New Hampshire Department of Environmental Services (NHDES) hereby issues this Wetlands and Non-Site Specific Permit. To validate this Permit, signatures of the Permittee and the Principal Contractor are required.

PERMIT DESCRIPTION:

Temporarily impact 752 square feet (SF) within the previously developed tidal buffer zone for the in-kind repair of 163 linear feet (LF) of a legally constructed seawall. Temporarily impact 3,582 SF within the previously developed tidal buffer zone and 1,333 SF below the highest observable tideline during low tide for construction access and erosion and sedimentation controls.

THIS PERMIT IS SUBJECT TO THE FOLLOWING PROJECT-SPECIFIC CONDITIONS:

- 1. All work shall be done in accordance with the approved plans dated October 17, 2022, by Civilworks New England and received by the NH Department of Environmental Services (NHDES) on December 5, 2022, in accordance with Env-Wt 307.16.
- 2. In accordance with Env-Wt 609.10(b)(3), there shall be no change in the location, configuration, construction type, or dimensions of the seawall installation.
- 3. In accordance with Env-Wt 609.10(b)(4), all work shall be done at low tide when the work area is fully exposed.
- 4. All development activities associated with any project shall be conducted in compliance with applicable requirements of RSA 483-B and Env-Wq 1400 during and after construction in accordance with Env-Wt 307.07.
- 5. All work shall be conducted and maintained in such a way as to protect water quality as required by Rule Env-Wt 307.03(a) through (h).
- 6. No activity shall be conducted in such a way as to cause or contribute to any violation of surface water quality standards per Env-Wt 307.03(a).
- 7. All work including management of soil stockpiles, shall be conducted so as to minimize erosion, minimize sediment transfer to surface waters or wetlands, and minimize turbidity in surface waters and wetlands per Env-Wt 307.03(b).
- 8. In accordance with Env-Wt 307.15(a), heavy equipment shall not be operated in any jurisdictional area unless specifically authorized by this permit.
- 9. In accordance with Env-Wt 307.15(c), where construction requires the operation of heavy equipment in areas below the highest observable tide line, the equipment shall either have low ground pressure, namely less than 4 psi, or not be located directly on wetland soils and vegetation to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation.



January 4, 2023 Page **2** of **3**

- 10. In accordance with Env-Wt 307.03(h), equipment shall be staged and refueled outside of jurisdictional areas (unless allowed) and in accordance with Env-Wt 307.15.
- 11. In accordance with Env-Wt 307.03(g)(1), the person in charge of construction equipment shall inspect such equipment for leaking fuel, oil, and hydraulic fluid each day prior to entering surface waters or wetlands or operating in an area where such fluids could reach groundwater, surface waters, or wetlands.
- 12. In accordance with Env-Wt 307.03(g)(2), the person in charge of construction equipment shall repair any leaks prior to using the equipment in an area where such fluids could reach groundwater, surface waters, or wetlands.
- 13. In accordance with Env-Wt 307.03(g)(3) and (4), the person in charge of construction equipment shall maintain oil spill kits and diesel fuel spill kits, as applicable to the type(s) and amount(s) of oil and diesel fuel used, on site so as to be readily accessible at all times during construction; and train each equipment operator in the use of the spill kits
- 14. In accordance with Env-Wt 307.03(c)(3), water quality control measures shall be installed prior to start of work and in accordance with the manufacturer's recommended specifications or, if none, the applicable requirements of Env-Wq 1506 or Env-Wq 1508.
- 15. In accordance with Env-Wt 307.03(c)(1), water quality control measures shall be selected and implemented based on the size and nature of the project and the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to jurisdictional areas.
- 16. In accordance with Env-Wt 307.03(c)(5), water quality control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during and after construction.
- 17. In accordance with Env-Wt 307.03(c)(6), water quality control measures shall remain in place until all disturbed surfaces are stabilized to a condition in which soils on the site will not experience accelerated or unnatural erosion by achieving and maintaining a minimum of 85% vegetative cover using an erosion control seed mix, whether applied in a blanket or otherwise, that is certified by its manufacturer as not containing any invasive species; or placing and maintaining a minimum of 3 inches of non-erosive material such as stone.
- 18. In accordance with Env-Wt 307.03(c)(7), temporary water quality control methods shall be removed upon completion of work when compliance with Env-Wt 307.03(c)(6) is achieved.
- 19. In accordance with Env-Wt 307.05(e), to prevent the use of soil or seed stock containing nuisance or invasive species, the contractor responsible for work shall follow Best Management Practices for the Control of Invasive and Noxious Plant Species (Invasive Plant BMPs).
- 20. In accordance with Env-Wt 307.12(i), wetland areas where permanent impacts are not authorized shall be restored to their pre-impact conditions and elevation by replacing the removed soil and vegetation in their pre-construction location and elevation such that post-construction soil layering and vegetation schemes are as close as practicable to pre-construction conditions.
- 21. In accordance with Env-Wt 307.11(c), slopes shall be immediately stabilized by a method specified in Env-Wq 1506 or Env-Wq 1508, as applicable, to prevent erosion into adjacent wetlands or surface waters.

THIS PERMIT IS SUBJECT TO THE FOLLOWING GENERAL CONDITIONS:

- 1. Pursuant to RSA 482-A:12, a copy of this permit shall be posted in a secure manner in a prominent place at the site of the approved project.
- 2. In accordance with Env-Wt 313.01(a)(5), and as required by RSA 482-A:11, II, work shall not infringe on the property rights or unreasonably affect the value or enjoyment of property of abutting owners.
- 3. In accordance with Env-Wt 314.01, a standard permit shall be signed by the permittee, and the principal contractor who will build or install the project prior to start of construction, and will not be valid until signed.
- 4. In accordance with Env-Wt 314.03(a), the permittee shall notify the department in writing at least one week prior to commencing any work under this permit.
- 5. In accordance with Env-Wt 314.08(a), the permittee shall file a completed notice of completion of work and certificate of compliance with the department within 10 working days of completing the work authorized by this permit.
- 6. In accordance with Env-Wt 314.06, transfer of this permit to a new owner shall require notification to, and approval of, the NHDES.

January 4, 2023 Page **3** of **3**

- 7. The permit holder shall ensure that work is done in a way that protects water quality per Env-Wt 307.03; protects fisheries and breeding areas per Env-Wt 307.04; protects against invasive species per Env-Wt 307.05; meets dredging activity conditions in Env-Wt 307.10; and meets filling activity conditions in Env-Wt 307.11.
- 8. This project has been screened for potential impact to known occurrences of protected species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or only cursory surveys have been performed, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species. This permit does not authorize in any way the take of threatened or endangered species, as defined by RSA 212-A:2, or of any protected species or exemplary natural communities, as defined in RSA 217-A:3.
- 9. In accordance with Env-Wt 307.06(a) through (c), no activity shall jeopardize the continued existence of a threatened or endangered species, a species proposed for listing as threatened or endangered, or a designated or proposed critical habitat under the Federal Endangered Species Act, 16 U.S.C. §1531 et seq.; State Endangered Species Conservation Act, RSA 212-A; or New Hampshire Native Plant Protection Act, RSA 217-A.
- 10. In accordance with Env-Wt 307.02, and in accordance with federal requirements, all work in areas under the jurisdiction of the U.S. Army Corps of Engineers (USACE) shall comply with all conditions of the applicable state general permit.

APPROVED:

Kristin L. Duclos

Rout Dins

Wetlands Specialist, Wetlands Bureau Land Resources Management, Water Division

THE SIGNATURES BELOW ARE REQUIRED TO VALIDATE THIS PERMIT (Env-Wt 314.01).			
PERMITTEE SIGNATURE (required)	PRINCIPAL CONTRACTOR SIGNATURE (required)		



The State of New Hampshire **Department of Environmental Services**



Robert R. Scott, Commissioner

January 06, 2023

CITY OF PORTSMOUTH 97 JUNKINS AVE PORTSMOUTH NH 03801

Re: Request for More Information – Shoreland Permit Application (RSA 483-B)

NHDES File Number: 2022-03229

Subject Property: 99 Peirce Island Rd, Portsmouth, Tax Map #208, Lot #1

Dear Applicant:

On January 6, 2023, the New Hampshire Department of Environmental Services (NHDES) Shoreland Program reviewed the above-referenced Shoreland Permit Application (Application). Pursuant to RSA 483-B:5-b, V(a), the NHDES Shoreland Program determined the following additional information is required to complete its evaluation of the Application:

- 1. The copy of the deed provided with the application appears to be cropped at the top and bottom of the pages and does not include the registry of deeds book or page number. Please provide a complete copy of the deed in accordance with Env-Wq 1406.12(a).
- 2. Please revise the application form to include the legal name of the property owner as it appears on the deed of record in accordance with Env-Wq 1406.07(a).
- 3. Please revise all plan sheets to show the reference line, the primary building line, the limits of the natural woodland buffer, and the limits of the protected shoreland as those terms are defined in RSA 483-B:4 in accordance with Env-Wq 1406.09(e), as well as the 100-foot tidal buffer zone line in accordance with Env-Wq 1406.09(f).
- 4. Please revise the plans to clearly identify the dimensions and locations of all proposed temporary impacts associated with completion of the project including the full limits of disturbance in accordance with Env-Wq 1406.09(h). Additionally, please clearly identify the locations and dimensions of all permanent and temporary impacts within the 100-foot tidal buffer zone to be permitted under the separate wetland permit application (Wetland File #2022-03228).
- 5. In order to meet compliance with RSA 483-B:9 V,(g),(2), please provide documentation demonstrating that the proposed drywell will provide adequate sump volume to infiltrate the runoff from the 1,394 square feet of additional impervious surface proposed for this project in accordance with Env-Wq 1406.10(b). If the proposed stormwater management technologies must be redesigned as a result of this request, then please revise all plans and stormwater details to meet compliance with RSA 483-B:9 V,(g),(2).
- 6. Please revise the plans involving work within the waterfront buffer to show each segment of the waterfront buffer that will be impacted by the project with the location and diameter of all existing trees and saplings at least up to that which is sufficient to meet the point requirement specified in RSA 483-B:9, V(a)(2), and includes a designation of trees to be cut during the project, if any, in accordance with Env-Wq 1406.10(f).
- 7. The plans identify a "Porous unit paver" system will be installed within the salvaged outdoor shower (See plan drawings CS101, and C-503). In accordance with Env-Wq 1406.10(e), please revise the plan detail to include specifications for how this pervious surface will be maintained.
- 8. Please provide some additional photos of the pool and deck areas that will be disturbed as a part of this project in accordance with Env-Wq 1406.12(c).

January 6, 2023 Page **2** of **2**

Pursuant to RSA 483-B:5-b, V(a), this information must be received by the NHDES Shoreland Program within 60 days of the date of this request, or the Application will be denied. Therefore, please submit the required information to the NHDES Shoreland Program as soon as practicable and no later than March 7, 2023. Please include NHDES file number 2022-03229 on your submission. Pursuant to RSA-B:5-b, V(b), the NHDES Shoreland Program will approve or deny the Application within 30 days of receipt of all required information, unless the time for rendering a decision on the application is extended for good cause and with the written agreement of the applicant pursuant to RSA 483-B:5-b, V(b)(3). If, after submitting the requested information, you would like to request an extension under this provision to allow for review of the materials to confirm that all required information has been provided please make a written request to the file that includes the reason for the extension and the length of the extension requested.

If you have any questions, please contact me directly at Kristin.Duclos@des.nh.gov or (603) 559-1516.

Sincerely,

Kristin L. Duclos

Root Dillo

Wetlands Specialist, Shoreland Program Wetlands Bureau, Land Resources Management

Water Division

cc: Portsmouth Municipal Clerk
City of Portsmouth Department of Public Works, c/o Peter Rice
Oak Point Associates, Inc., c/o Wade Lippert, PE



Department of Environmental Services

Robert R. Scott, Commissioner



January 06, 2023

CITY OF PORTSMOUTH 97 JUNKINS AVE PORTSMOUTH NH 03801



Re:

Request for More Information – Standard Dredge and Fill Wetlands Permit Application (RSA 482-A)

NHDES File Number: 2022-03228

Subject Property: 99 Peirce Island Rd, Portsmouth, Tax Map #208, Lot #1

Dear Applicant:

On January 6, 2023, the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau reviewed the above-referenced Standard Dredge and Fill Wetlands Permit Application (Application). Pursuant to RSA 482-A:3, XIV(a)(2) and Rules Env-Wt 100 through 900, NHDES Wetlands Bureau determined the following additional information is required to complete its evaluation of the Application:

- 1. The copy of the deed provided with the application appears to be cropped at the top and bottom of the pages and does not include the registry of deeds book or page number. Please provide a complete copy of the deed in accordance with Env-Wt 311.06(e).
- 2. Please provide a copy of the completed <u>2022 Aquatic Resource Mitigation (ARM) Fund Calculator</u> that was used to generate the preliminary estimate of the in-lieu mitigation payment in accordance with Env-Wt 312.04(f).
- 3. The application indicates that there is an isolated persistent emergent wetland (PEM1E) located on the property, however, functional assessments were only provided for the tidal wetlands on the property. Please provide a functional assessment for all wetlands on the property as required for major projects in accordance with Env-Wt 311.03(b)(10).
- 4. In accordance with Env-Wt 311.09(c), please revise all plan sheets to show the landward limit of the 100-foot tidal buffer zone; the primary building line; and the total disturbed area within the protected shoreland as required for all projects within the protected shoreland as defined by RSA 483-B. Additionally, please identify any impacts outside of the 100-foot tidal buffer zone and within the 250 foot protected shoreland zone will require a Shoreland Permit in accordance with RSA 483-B.
- 5. Please revise the plans to identify the specific wetland resource types and their locations on the property using the Cowardin Classifications as required in accordance with Env-Wt 406.06(b), including but not limited to any forested, scrub-shrub, emergent, or tidal wetlands, streams, or rivers, on the property.
- 6. Please revise the plans to provide lightly shaded or stippled areas showing the limits of all temporary and permanent impacts in jurisdictional areas that have been labeled with the square footage of impact in accordance with Env-Wt 311.05(a)(18) and Env-Wt 311.04(g)(7).
- 7. In accordance with Env-Wt 311.05(a)(14), please revise the plan sheets to provide the name and professional license number of the individual responsible for the delineation of jurisdictional areas, including but not limited to wetlands, streams, and vernal pools on the property, if other than the individual identified as being responsible for the plan in accordance with Env-Wt 311.05(a)(5) and Env-Wt 603.07(b)(6).
- 8. If the plans were prepared by the certified wetland scientist (CWS) responsible for the delineation, then revise the plans to include their CWS stamp as required in accordance with Env-Wt 311.05(b)(2). However, if the plans were not prepared by a certified wetland scientist, then the application must be accompanied by a report that includes an

January 6, 2023 Page **2** of **3**

existing conditions plan that has been prepared and stamped by a certified wetland scientist in accordance with Env-Wt 311.05(b)(3). Please provide this information as a part of the response to this letter.

- 9. The plans identify a "Porous unit paver" system will be installed within the salvaged outdoor shower (See plan drawings CS101, and C-503). In accordance with Env-Wt 610.04(j) and Env-Wq 1406.10(e), please revise the plan detail to include specifications for how this pervious surface will be maintained.
- 10. In order to ensure compliance with RSA 483-B:9, V,(g), as required in accordance with Env-Wt 610.04(i), Env-Wt 610.13, and Env-Wq 1406.10(b), please provide documentation demonstrating that the proposed drywell will provide adequate sump volume to infiltrate the runoff from the 1,394 square feet of additional impervious surface proposed for this project. If the proposed stormwater management technologies must be redesigned as a result of this request, then please revise all plans and stormwater details to meet compliance with RSA 483-B:9 V,(g),(2).
- 11. Please revise the plans involving work within the waterfront buffer to show each segment of the waterfront buffer that will be impacted by the project with the location and diameter of all existing trees and saplings at least up to that which is sufficient to meet the point requirement specified in RSA 483-B:9, V(a)(2), and includes a designation of trees to be cut during the project, if any, in accordance with Env-Wt 610.06, Env-Wt 610.04(k), and Env-Wq 1406.10(f).
- 12. As the tidal shoreline stabilization plan proposes to install new riprap, please provide the following as a part of the response to this letter:
 - a. Documentation demonstrating the anticipated turbulence, flows, restricted space, fetch, or similar factors that render vegetative and diversion methods physically impractical for this project in accordance with Env-Wt 609.07(a)(1) and Env-Wt 609.07(b)(2).
 - b. Documentation demonstrating that the natural areas or naturalized soft shoreline stabilization within the vicinity of the project will not be damaged by the placement of the proposed riprap as required in accordance with Env-Wt 609.07(a)(1).
 - c. An assessment of the potential for the proposed riprap to erode the shoreline of neighboring properties, based on an examination of the shoreline and modeling based on tides, average wave height and force, and the energy absorption or deflection ability of the proposed riprap in accordance with Env-Wt 609.07(b)(3).
- 13. As this project includes a proposal to use riprap adjacent to a tidal water body for which the state holds fee simple ownership, please include a stamped survey plan showing the location of the mean high water tide line on the shoreline and the footprint of the proposed project as required in accordance with Env-Wt 609.07(c). Please note that if it is determined that impacts related to this project will take place below the mean high water tide line, then this project will require approval by the governor and executive council in accordance with Env-Wt 313.02(b) and pursuant to RSA 482-A:3, II(a).

Please submit the required information as soon as practicable. Pursuant to RSA 482-A:3, XIV(a)(2), the required information must be received by NHDES Wetlands Bureau within 60 days of the date of this request (no later than March 7, 2023), or the Application will be denied. Should additional time be necessary to submit the required information, an extension of the 60-day time period may be requested. Requests for additional time must be received prior to the deadline in order to be approved. In accordance with applicable statutes and regulations, the applicant is also expected to provide copies of the required information to the municipal clerk and all other interested parties.

Based on NHDES review your project has impacts to tidal wetlands. To ensure that you obtain permitting under the Clean Water Act, please contact the U.S. Army Corps of Engineers (USACE) at 1-978-318-8832, 1-978-318-8295, or by email at cenae-r-nh@usace.army.mil to see if additional mitigation may be required from the USACE.

Pursuant to RSA 482-A:3, XIV(a)(3), NHDES Wetlands Bureau will approve or deny the Application within 30 days of receipt of all required information, or schedule a public hearing, if required by RSA 482-A or associated rules.

January 6, 2023 Page **3** of **3**

If you have any questions, please contact me at Kristin.Duclos@des.nh.gov or (603) 559-1516.

Sincerely,

Kristin L. Duclos

Wetlands Specialist, Wetlands Bureau Land Resources Management, Water Division

cc: Portsmouth Municipal Clerk/Conservation Commission
City of Portsmouth Department of Public Works, c/o Peter Rice
Oak Point Associates, Inc., c/o Wade Lippert, PE



Department of Environmental Services

Robert R. Scott, Commissioner



December 16, 2022

DARRELL MOREAU

1B JACKSON HILL ST
PORTSMOUTH NH 03801



Re: Approved Standard Dredge and Fill Wetlands Permit Application – Required Payment to Aquatic Resource

Mitigation Fund (RSA 482-A) NHDES File Number: 2022-00494

Subject Property: Northwest Street, Portsmouth, Tax Map #122, Lot #2-1

Dear Applicant:

On December 16, 2022, the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau approved the above-referenced Standard Dredge and Fill Wetlands Permit Application to dredge and fill 40 square feet (SF) within tidal wetlands to install riprap outlet protection for an existing stormwater outfall and impact 2,701 SF within the previously developed tidal buffer to construct a portion of the primary structure, a concrete step pathway, and install a pervious patio, replace an existing gravel access associated with servicing an existing sewer pump station with a paved turn around area, and regrade the site. Temporarily impact 141 SF of tidal wetland for construction access and 2,147 SF of previously developed tidal buffer to remove a portion of an existing gravel access associated with servicing an existing sewer pump station, install native plantings within the tidal buffer zone, and for construction access.

Compensatory mitigation for the 40 SF of permanent impacts to tidal wetlands and the 1,294 SF of impact to the developed tidal buffer zone within 75-feet of a salt marsh consists of a one-time payment of \$514.78 into the Aquatic Resource Mitigation (ARM) Fund, within the Salmon Falls - Piscataqua Rivers Watershed account and the restoration of 908 SF of the tidal buffer zone with native plantings and the removal of 596 SF of existing impervious gravel surface to be loamed and seeded.

This approval is contingent on the following conditions being met:

- All work shall be done in accordance with the approved plans dated June 2021 and revised through September 29, 2022, by Ambit Engineering, Inc., and received by the NH Department of Environmental Services (NHDES) on October 3, 2022, in accordance with Env-Wt 307.16.
- 2. In accordance with Env-Wt 314.02(b) and (c), for projects in the coastal area, the permittee shall record any permit issued for shoreline stabilization and any work in the tidal buffer zone and tidal wetlands at the Rockingham County Registry of Deeds. Any limitations or conditions in the permit so recorded shall run with the land beyond the expiration of the permit. The permittee shall provide the department with a copy of the permit stamped by the registry with the book and page and date of receipt.
- 3. The permit is contingent on submittal of a check in the amount of \$514.78 to the Aquatic Resource Mitigation Fund by the applicant as calculated per Env-Wt 803.07 and RSA 482-A:30.
- 4. In accordance with Env-Wt 807.01(b), the payment shall be received by NHDES within 120 days from the approval decision or NHDES will deny the application.
- 5. The restoration of 908 SF of the tidal buffer zone with native buffer plantings and the removal of 596 SF of existing impervious gravel surface shall be completed prior to the completion of construction in accordance with the mitigation plan per Env-Wt 803.04.

File Number: 2022-00494 December 16, 2022

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- 6. Within 60 days of completing the mitigation project that includes the restoration plantings within the upland tidal buffer zone and removal of the impervious gravel surface, the applicant shall submit a post-construction monitoring report, documenting the conditions of the restored upland tidal buffer zone in accordance with Env-Wt 807.03(b).
- 7. In accordance with Env-Wt 307.18(a), Env-Wt 307.18(c), and Env-Wt 807.04(a), a compensatory mitigation project monitoring report that describes the monitoring conducted and date(s) of inspections, and includes photos showing the extent of jurisdictional impacts, areas of restoration, and progress of any plantings shall be submitted to the department annually in accordance with Env-Wt 803.04.
- 8. In accordance with Env-Wt 803.04(b)(1), mitigation project monitoring shall span no fewer than 5 growing seasons for any mitigation project that includes plantings.
- All development activities associated with any project shall be conducted in compliance with applicable requirements of RSA 483-B and Env-Wq 1400 during and after construction in accordance with Env-Wt 307.07.
- 10. All pervious technologies used shall be installed and maintained to effectively absorb and infiltrate stormwater as required per RSA 483-B:6, II and Rule Env-Wq 1406.15(c) in order to ensure compliance with RSA 483-B:9, V(g).
- 11. All work associated with the stabilization of the stormwater outfall shall be done at low tide when the work area is fully exposed in accordance with Env-Wt 609.10(b)(4).
- 12. No activity shall be conducted in such a way as to cause or contribute to any violation of surface water quality standards per Env-Wt 307.03(a).
- 13. All work including management of soil stockpiles, shall be conducted so as to minimize erosion, minimize sediment transfer to surface waters or wetlands, and minimize turbidity in surface waters and wetlands per Env-Wt 307.03(b).
- 14. In accordance with Env-Wt 307.15(c), where construction requires the operation of heavy equipment in wetlands, the equipment shall either have low ground pressure, namely less than 4 psi, or not be located directly on wetland soils and vegetation; or be placed on timber or swamp mats that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation.
- 15. In accordance with Env-Wt 307.15(e)(2) and (3), swamp mats shall be installed, used, and removed so as to minimize impacts to wetland areas, and be installed with adequate erosion and sediment controls at approaches to the mats to promote a smooth transition to, and minimize sediment tracking onto, the mats.
- 16. In accordance with Env-Wt 307.15(e)(1), swamp mats shall be placed in the wetland from the upland or from equipment positioned on swamp mats if working within a wetland.
- 17. In accordance with Env-Wt 307.15(d), timber and swamp mats shall be in good condition to ensure proper installation, use and removal; and thoroughly cleaned before re-use.
- 18. In accordance with Env-Wt 307.03(g)(1), the person in charge of construction equipment shall inspect such equipment for leaking fuel, oil, and hydraulic fluid each day prior to entering surface waters or wetlands or operating in an area where such fluids could reach groundwater, surface waters, or wetlands.
- 19. In accordance with Env-Wt 307.03(g)(3) and (4), the person in charge of construction equipment shall maintain oil spill kits and diesel fuel spill kits, as applicable to the type(s) and amount(s) of oil and diesel fuel used, on site so as to be readily accessible at all times during construction; and train each equipment operator in the use of the spill kits.
- 20. In accordance with Env-Wt 307.03(g)(2), the person in charge of construction equipment shall repair any leaks prior to using the equipment in an area where such fluids could reach groundwater, surface waters, or wetlands.
- 21. In accordance with Env-Wt 307.03(h), equipment shall be staged and refueled outside of jurisdictional areas (unless allowed) and in accordance with Env-Wt 307.15.
- 22. In accordance with Env-Wt 307.15(b), mobile heavy equipment working in wetlands shall not be stored, maintained, or repaired in wetlands, except that repairing or refueling in a wetland is allowed if equipment cannot practicably be removed and secondary containment is provided.
- 23. In accordance with Env-Wt 307.03(c)(3), water quality control measures shall be installed prior to start of work and in accordance with the manufacturer's recommended specifications or, if none, the applicable requirements of Env-Wq 1506 or Env-Wq 1508.
- 24. In accordance with Env-Wt 307.03(c)(1), water quality control measures shall be selected and implemented based on the size and nature of the project and the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to jurisdictional areas.

File Number: 2022-00494 December 16, 2022 Page **3** of **4**

- 25. In accordance with Env-Wt 307.03(c)(2), water quality control measures shall be comprised of wildlife-friendly erosion control materials if erosion control blankets are utilized.
- 26. In accordance with Env-Wt 307.03(c)(5), water quality control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during and after construction.
- 27. In accordance with Env-Wt 307.03(c)(6), water quality control measures shall remain in place until all disturbed surfaces are stabilized to a condition in which soils on the site will not experience accelerated or unmatural erosion by achieving and maintaining a minimum of 85% vegetative cover using an erosion control seed mix, whether applied in a blanket or otherwise, that is certified by its manufacturer as not containing any invasive species; or placing and maintaining a minimum of 3 inches of non-erosive material such as stone.
- 28. In accordance with Env-Wt 307.03(c)(7), temporary water quality control methods shall be removed upon completion of work when compliance with Env-Wt 307.03(c)(6) is achieved.
- 29. In accordance with Env-Wt 307.05(e), to prevent the use of soil or seed stock containing nuisance or invasive species, the contractor responsible for work shall follow Best Management Practices for the Control of Invasive and Noxious Plant Species (Invasive Plant BMPs).
- 30. In accordance with Env-Wt 307.11(b), limits of fill shall be clearly identified prior to commencement of work and controlled in accordance with Env-Wt 307.03 to ensure that fill does not spill over or erode into any area where filling is not authorized.
- 31. In accordance with Env-Wt 307.11(a), fill shall be clean sand, gravel, rock, or other material that meets the project's specifications for its use; and does not contain any material that could contaminate surface or groundwater or otherwise adversely affect the ecosystem in which it is used.
- 32. In accordance with Env-Wt 307.11(e), fill shall be not placed so as to direct flows onto adjacent or down-current property.
- 33. In accordance with Env-Wt 307.12(i), wetland areas where permanent impacts are not authorized shall be restored to their pre-impact conditions and elevation by replacing the removed soil and vegetation in their pre-construction location and elevation such that post-construction soil layering and vegetation schemes are as close as practicable to pre-construction conditions.
- 34. In accordance with Env-Wt 307.03(e), all exposed soils and other fills shall be permanently stabilized within 3 days following final grading.
- 35. In accordance with Env-Wt 307.11(c), slopes shall be immediately stabilized by a method specified in Env-Wq 1506 or Env-Wq 1508, as applicable, to prevent erosion into adjacent wetlands or surface waters.

This approval is based on the following findings:

- 1. This project is classified as a major project per Rule Env-Wt 610.17(a)(1), for any dredging, filling, or construction activity, or any combination thereof, that is proposed to occur within 100 feet of the Highest Observable Tide Line (HOTL), and that is proposed to alter a tidal shoreline bank and wetlands.
- 2. The impacts within the protected shoreland associated with this project are approved under NHDES Shoreland Permit #2022-00550.
- 3. Per Env-Wt 605.03(a), compensatory mitigation is required as the project impacts tidal wetlands and developed tidal buffer zone within 75 feet of a salt marsh that are intended to remain when the proposed project is completed.
- 4. Per Rule Env-Wt 605.04(b) and Env-Wt 801.03(a), the applicant is offering restoration of 908 SF of disturbed upland tidal buffer zone and removal of 596 SF of impervious surface on-site as permittee-responsible compensatory mitigation for the 1,294 SF of permanent impacts to the disturbed upland tidal buffer zone within 75-feet of a salt marsh.
- 5. Per Rule Env-Wt 605.04(f) and Env-Wt 803.08(a), for permittee-responsible mitigation, other than for stream impacts, the applicant has demonstrated that the compensatory mitigation plan meets or exceeds the ratios listed in Table 800-1, relative to the amount of impacted jurisdictional areas.
- 6. Per Rule Env-Wt 803.04(a), the applicant has prepared a monitoring plan that is commensurate with the complexity of the permittee-responsible restoration mitigation project.

File Number: 2022-00494 December 16, 2022

Page 4 of 4

- 7. Per Rule Env-Wt 801.03(b), the applicant is offering an in-lieu mitigation payment as specified in RSA 482-A:30 for the 40 SF of permanent impacts to tidal wetlands, as permittee-responsible compensatory mitigation is not practicable or appropriate for that portion of the applicant's project.
- 8. The payment into the ARM fund shall be deposited in the NHDES fund for the Salmon Falls Piscataqua Rivers watershed per RSA 482-A:29.
- 9. The Department decision is issued in letter form and upon receipt of the ARM fund payment, the Department shall issue a posting permit in accordance with Env-Wt 803.11(c).
- 10. Per Rule Env-Wt 803.10(e), the department has accepted the proposal for an in-lieu mitigation payment as the proposal meets the requirements of Env-Wt 803.10(b), and of Env-Wt 803.10(c), and the mitigation type or combination of mitigation types listed in Rule Env-Wt 803.08(a) Table 800-1 that are available in the same watershed as the impacts for compensating jurisdictional area losses are not practicable.
- 11. The Department finds that the project as proposed and conditioned meets the requirements of RSA 482-A and the Wetlands Program Code of Administrative Rules Chapters Env-Wt 100-1000. No waivers of RSA 482-A or the Wetlands Program Code of Administrative Rules Chapters Env-Wt 100-1000 were requested or approved under this permit action.

Pursuant to RSA 482-A:28, this approval is contingent on receipt of a one-time in-lieu mitigation payment of \$514.78 to the NHDES Aquatic Resource Mitigation (ARM) Fund. NHDES recommends delaying payment until after the 30-day reconsideration period ending January 15, 2023. In accordance with Env-Wt 803.11(c)(2) and Env-Wt 807.01(b), if NHDES has not received the in-lieu mitigation payment within 120 days of this letter, or by April 15, 2023, NHDES will deny the application. Please include a copy of this letter with the payment.

In accordance with RSA 482-A:10, RSA 21-O:14, and Rules Env-WtC 100-200, any person aggrieved by this decision may file a Notice of Appeal directly with the NH Wetlands Council (Council) within 30 days of the decision date, December 16, 2022. Every ground claiming the decision is unlawful or unreasonable must be fully set forth in the Notice of Appeal. Only the grounds set forth in the Notice of Appeal are considered by the Council. Information about the Council, including Council Rules, is available at https://nhec.nh.gov/wetlands/index.htm. For appeal related issues, contact the Council Appeals Clerk at (603) 271-6072.

If you have any questions, please contact me directly at MaryAnn.Tilton@des.nh.gov or (603) 271-2147.

Sincerely,

Mary Ann Tilton

Assistant Bureau Administrator, Wetlands Bureau Land Resources Management, Water Division

cc: Portsmouth Municipal Clerk/Conservation Commission
Ambit Engineering, Inc., c/o Steven D. Riker
Amanda B/Gregory J Morneault
ec: NHDES Wetland Mitigation Program

NHDES Wetland Mitigation Program
US Army Corps of Engineers



Department of Environmental Services



Robert R. Scott, Commissioner

WETLANDS AND NON-SITE SPECIFIC PERMIT 2020-02830

NOTE CONDITIONS

PERMITTEE: FRITZ FAMILY REVOCABLE LIVING TRUST

C/O EDGAR H FRITZ TTEE

PO BOX 524

NORTHWOOD NH 03261

PROJECT LOCATION: PATRICIA DR, PORTSMOUTH

TAX MAP #283, LOT #11

WATERBODY: DULY-ESTABLISHED PRIME WETLAND BUFFER (ADJACENT TO PACKERS BOG)

APPROVAL DATE: SEPTEMBER 06, 2022 EXPIRATION DATE: JUNE 09, 2026

Based upon review of permit application 2020-02830 in accordance with RSA 482-A and RSA 485-A:17, the New Hampshire Department of Environmental Services (NHDES) hereby issues this Wetlands and Non-Site Specific Permit. To validate this Permit, signatures of the Permittee and the Principal Contractor are required.

PERMIT DESCRIPTION:

Permanently impact 2,575 square feet within the duly-established 100-foot prime wetland buffer to remove impervious surface and to improve stormwater management infrastructure. In addition, temporarily impact 4,283 square feet within a duly-established 100-foot prime wetland buffer to improve an existing roadway for access to buildable upland for a 2-lot residential subdivision. Approve waiver request received 9/2/2022 for a one-time payment of \$14,576.76 into the Aquatic Resource Mitigation (ARM) Fund, to be provided by 12/31/2022.

THIS PERMIT IS SUBJECT TO THE FOLLOWING PROJECT-SPECIFIC CONDITIONS:

- 1. AMENDED: All work shall be done in accordance with the approved plans dated September 23, 2020 and revised through February 12, 2021, by N.H. Land Consultants, last received by the NH Department of Environmental Services (NHDES) on August 17, 2021, per Env-Wt 307.16 and 524.05(b).
- 2. AMENDED: The permit is contingent on submittal of a check in the amount of \$14,576.76 to the Aquatic Resource Mitigation Fund by the applicant as calculated per Env-Wt 803.07 and RSA 482-A:30.
- 3. AMENDED: In accordance with Env-Wt 807.01(b), the payment shall be received by NHDES by December 31, 2022 or NHDES will deny the application.
- 4. The permittee shall submit a construction notice with the department at least 48 hours prior to commencing work, per Env-Wt 524.05(a).
- 5. Jurisdictional areas where permanent impacts are not authorized shall be restored to their pre-impact conditions and elevation, in accordance with Env-Wt 307.12(i).
- 6. Limits of fill shall be clearly identified prior to commencement of work and controlled in accordance with Env-Wt 307.03 to ensure that fill does not spill over or erode into any area where filling is not authorized, per Env-Wt 307.11(b).
- 7. Temporary impact areas restored by seeding or plantings shall not be deemed successful if the area is invaded by nuisance species during the first full growing season following the completion of construction; and a remediation plan shall be submitted to the department that proposes measures to be taken to eradicate nuisance species during this same period, in accordance with Env-Wt 307.12(g).

File # 2020-02830 November 14, 2022 Page 2 of 3

- 8. Water quality control measures shall be comprised of wildlife-friendly erosion control materials per Env-Wt 307.03(c).
- 9. Fill shall be clean sand, gravel, rock, or other material that meets the project's specifications for its use; and does not contain any material that could contaminate surface or groundwater or otherwise adversely affect the ecosystem in which it is used, per Env-Wt 307.11(a).
- 10. Slopes shall be immediately stabilized by a method specified in Env-Wq 1506 or Env-Wq 1508, as applicable, to prevent erosion into adjacent wetlands or surface waters, per Env-Wt 307.11(c).
- 11. All exposed soils and other fills shall be permanently stabilized within 3 days following final grading, per Env-Wt 307.03(e).
- 12. Prior to construction, any heavy machinery shall be inspected for and cleaned of all vegetative matter by a method and in a location that prevents the spread of the vegetative matter to jurisdictional areas, per Env-Wt 307.05(a).
- 13. Any sediment collected by water quality control measures shall be removed with sufficient frequency to prevent the discharge of sediment; and placed in an upland location in a manner that prevents its erosion into a surface water or wetland, per Env-Wt 307.03(d).
- 14. The person in charge of construction equipment shall inspect such equipment for leaking fuel, oil, and hydraulic fluid each day prior to entering surface waters or wetlands or operating in an area where such fluids could reach groundwater, surface waters, or wetlands, per Env-Wt 307.03(g)(1).
- 15. The person in charge of construction equipment shall maintain oil spill kits and diesel fuel spill kits, as applicable to the type(s) and amount(s) of oil and diesel fuel used, on site so as to be readily accessible at all times during construction; and train each equipment operator in the use of the spill kits, per Env-Wt 307.03(g)(3) and (4).
- 16. No activity shall be conducted in such a way as to cause or contribute to any violation of surface water quality standards specified in RSA 485-A:8 or Env-Wq 1700; ambient groundwater quality standards established under RSA 485-C; limitations on activities in a sanitary protective area established under Env-Dw 302.10 or Env-Dw 305.10; or any provision of RSA 485-A, Env-Wq 1000, RSA 483-B, or Env-Wq 1400 that protects water quality, per Env-Wt 307.03(a).

THIS PERMIT IS SUBJECT TO THE FOLLOWING GENERAL CONDITIONS:

- 1. Pursuant to RSA 482-A:12, a copy of this permit shall be posted in a secure manner in a prominent place at the site of the approved project.
- 2. In accordance with Env-Wt 313.01(a)(5), and as required by RSA 482-A:11, II, work shall not infringe on the property rights or unreasonably affect the value or enjoyment of property of abutting owners.
- 3. In accordance with Env-Wt 314.01, a standard permit shall be signed by the permittee, and the principal contractor who will build or install the project prior to start of construction, and will not be valid until signed.
- 4. In accordance with Env-Wt 314.03(a), the permittee shall notify the department in writing at least one week prior to commencing any work under this permit.
- 5. In accordance with Env-Wt 314.08(a), the permittee shall file a completed notice of completion of work and certificate of compliance with the department within 10 working days of completing the work authorized by this permit.
- 6. In accordance with Env-Wt 314.06, transfer of this permit to a new owner shall require notification to, and approval of, the NHDES.
- 7. The permit holder shall ensure that work is done in a way that protects water quality per Env-Wt 307.03; protects fisheries and breeding areas per Env-Wt 307.04; protects against invasive species per Env-Wt 307.05; meets dredging activity conditions in Env-Wt 307.10; and meets filling activity conditions in Env-Wt 307.11.
- 8. This project has been screened for potential impact to known occurrences of protected species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or only cursory surveys have been performed, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species. This permit does not authorize in any way the take of threatened or endangered species, as defined by RSA 212-A:2, or of any protected species or exemplary natural communities, as defined in RSA 217-A:3.

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- 9. In accordance with Env-Wt 307.06(a) through (c), no activity shall jeopardize the continued existence of a threatened or endangered species, a species proposed for listing as threatened or endangered, or a designated or proposed critical habitat under the Federal Endangered Species Act, 16 U.S.C. §1531 et seq.; State Endangered Species Conservation Act, RSA 212-A; or New Hampshire Native Plant Protection Act, RSA 217-A.
- 10. In accordance with Env-Wt 307.02, and in accordance with federal requirements, all work in areas under the jurisdiction of the U.S. Army Corps of Engineers (USACE) shall comply with all conditions of the applicable state general permit.

APPROVED:

Fri L. Sommer

Lori L. Sommer Wetland Mitigation Coordinator, Wetlands Bureau Land Resources Management, Water Division

THE SIGNATURES BELOW ARE REQUIRED TO VALIDATE THIS PERMIT (Env-Wt 314.01).				
PERMITTEE SIGNATURE (required)	PRINCIPAL CONTRACTOR SIGNATURE (required)			





NOTIFICATION FOR WETLANDS PERMIT AMENDMENT REQUEST

VIA CERTIFIED MAIL

January 3, 2022

Project # 47099.01

Barbara McMillan, Chair Portsmouth Conservation Commission 1 Junkins Avenue, 3rd Floor Portsmouth, NH 03801



RE: Wetlands Permit Amendment Request, 325 Little Harbor Road, Portsmouth, NH 03801 Tax Map: 205, Lot: 2

Dear Barbara McMillan, Chair:

This letter is to inform you that a Wetland Permit Amendment Request will be filed with the NH Department of Environmental Services to amend NHDES Wetlands Permit 2017-02662 issued to the aforementioned property on February 15, 2018. Under NHDES Wetlands Bureau Administrative Rule Env-Wt 314.07, we are required to notify you of this permit amendment request.

As demonstrated within the amended plans included with this letter, there is no change in total impact area. We do not anticipate any impacts to sensitive archaeological or historical resources. Should you have any questions regarding this wetland permit amendment request, you're welcome to contact me anytime.

Sincerely, **TFMoran, Inc.**

Corey Colwell, LLS

Division Manager / Principal

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cc: NHDES Wetlands Bureau



