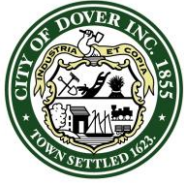


CITY OF DOVER

DOVER CONSERVATION COMMISSION – AGENDA

Meeting Type: Regular Meeting
Meeting Location: City Council Conference Room - 288 Central Avenue Dover NH
Meeting Date: Tuesday, October 10, 2023
Meeting Time: 5:30 pm

1. CALL TO ORDER AND ROLL CALL
2. CITIZEN'S FORUM
3. APPROVAL OF THE PRIOR MEETING MINUTES – September 11th, 2023
4. OLD BUSINESS
5. NEW BUSINESS
 - A. NHDES Standard Dredge and Fill Wetlands Permit Application for Robert A. Pruyn Revocable Trust, (Agent: Ambit Engineering, Inc.), Assessor's Map N Lot 22-C-8, zoned R-40, located at 10 Gerry's Lane. Proposal is to construct a tidal dock adjacent to the Cocheco River. The proposed docking structure consists of a 4' x 5' accessway, a 4' x 30' fixed wood pier, a 3' x 42' gangway and a 10' x 20' float totaling 20 square feet of permanent impact to the previously developed Tidal Buffer Zone and 446 square feet of permanent impact to tidal wetlands.
 - B. Recognizing Traditional Foraging Rights on City of Dover Public Conservation Lands
 - C. Update on Active Land Conservation Projects
6. REPORT FROM THE CHAIR
 - A. Review of Correspondence received from NH Department of Environmental Services
7. OTHER BUSINESS
 - A. Update from Forest Management Subcommittee
8. ADJOURNMENT



CITY OF DOVER

DOVER CONSERVATION COMMISSION – MINUTES

Meeting Type: Regular Meeting
Meeting Location: City Council Conference Room - 288 Central Avenue, Dover, NH
Meeting Date: Monday, September 11, 2023
Meeting Time: 5:30 pm

MEMBERS PRESENT: Bill Hunt (Chair), Steve Fellows (Vice Chair), Jay Aube, Amy Kramer-Perry, Kristen Murphy, Bruce Batchelder (Alternate), Abigail Lyon

Absent (Excused): Robert Atwood (Secretary), Jake Geddes (Alternate)

STAFF PRESENT: Jackson Kaspari – Resilience Manager

OTHERS PRESENT: Ben Clark, Rad Nichols, Ryan Kaplan

A. Kramer-Perry arrived at 5:40 pm.

1. CALL TO ORDER AND ROLL CALL

The meeting was convened at 5:30 PM.

2. CITIZENS' FORUM

None

3. APPROVAL OF THE PRIOR MEETING MINUTES – August 14, 2022

S. Fellows moved to approve the minutes of August 14th as submitted. B. Batchelder seconded.

Vote: 4 yes with J. Aube and A. Lyon abstaining.

4. OLD BUSINESS:

None

5. NEW BUSINESS:

- A.** City of Dover Conditional Use Permit for David Laroche, (Agent: Nichols Environmental, LLC.), Assessor's Map A, Lot 39-2, zoned R-40, located at 7 Fieldstone Drive. Proposal is to allow a septic system to be constructed within 75 feet of wetlands.

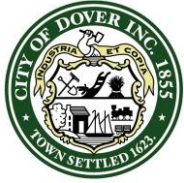
Ryan Kaplan represented the item and explained when the house was built, the regulations were 50'. Since then, the lot has been subdivided into two lots and in March of 2003 a note was added to the file that although the State regulations remain 50', the City changed to 75', but this property was given exception as being 'grandfathered in'. However, a CUP wasn't pulled at that time, so it is being sought now as a replacement in kind with no changes. The plan has been submitted and approved by the state.

He walked the board through the site and described the proposed plan and confirmed the existing system has failed. There is no change in size for the proposed new system. He answered specific questions about the proposed system specs.

J. Kaspari noted the Planning Department wanted to be sure the proper procedures were followed for CUP. They are comfortable with the proposal.

S. Fellows moved to endorse the proposal as presented. K. Murphy seconded. Vote: 6 yes with A. Kramer Perry abstaining (due to late arrival).

2023.09.11_ConservationCommission.Minutes



CITY OF DOVER

DOVER CONSERVATION COMMISSION – MINUTES

Meeting Type: Regular Meeting
Meeting Location: City Council Conference Room - 288 Central Avenue, Dover, NH
Meeting Date: Monday, September 11, 2023
Meeting Time: 5:30 pm

- B.** City of Dover Conditional Use Permit for Cooperative Alliance for Seacoast Transportation, (Agent: CMA Engineers, Inc.), Assessor's Map H, Lot 35-C-4, zoned CM, located at 42 Sumner Drive. Proposal is to allow grading, placement of impervious surfaces and a stormwater management system, creating 14,479 square feet of temporary impact and 5,862 square feet of permanent impact to the 50-foot wetland buffer.

Ben Clark represented the item and explained the proposal for work on site at the COAST headquarters. The goal is to get all operations on one site, so the proposal includes an admin and maintenance building as well as bus storage.

The proposal includes roughly the same amount of impervious area which he described along with details of storm water and drainage.

He answered questions and gave further details about drainage, storm water, impervious areas, green areas, snow storage and invasive species.

J. Kaspari noted the applicant has been good at responding to Planning Department requests throughout the process and they have been through TRC. Staff is satisfied with the proposal due to the reduction of impervious areas and use of an existing site.

A. Lyon moved to endorse the proposal as presented. A. Kramer Perry seconded. Vote: 7 yes.

6. REPORT FROM THE CHAIR

- A.** Review of Correspondence Received from NH Department of Environmental Services

J. Kaspari noted the receipt of a request for more information on a standard wetlands dredge and fill permit that was filed with the state.

7. OTHER BUSINESS

- A.** Update from Forest Management Subcommittee

S. Fellows reported the subcommittee met and discussed the pocket forest and issues with the high school site. Other options were discussed.

J. Kaspari has been in touch with folks at the elementary school and they would love to see this happen. Staff will work on getting the proposal together and submitted for funding which would come from SUGI, an international organization.

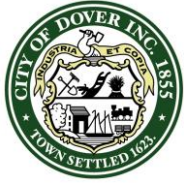
A certified arborist was also in attendance and educated the subcommittee on several interesting topics and details.

J. Kaspari gave a few more details about the meeting. Discussion occurred on a set of ash trees in the CBD.

Discussion occurred about updates regarding the storm water proposal.

J. Kaspari extended an invitation to the Commission members to the installation of a pergola at the Dover Community Garden this Sunday.

2023.09.11_ConservationCommission.Minutes



CITY OF DOVER

DOVER CONSERVATION COMMISSION – MINUTES

Meeting Type: Regular Meeting
Meeting Location: City Council Conference Room - 288 Central Avenue, Dover, NH
Meeting Date: Monday, September 11, 2023
Meeting Time: 5:30 pm

A. Lyon reported grant results for natural resource inventory should come in soon. Also, Coastal Conservation Commission round table information was emailed out to all members. The next meeting will present and discuss flood disclosure laws and proposed legislation at the state level. The meeting/ presentation can be viewed virtually. She also highlighted Great Bay 2030 and a project they are funding called changemaker bootcamp.

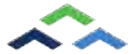
8. ADJOURNMENT

S. Fellows motioned to adjourn. A. Lyon seconded. Vote: 7 yes.
The meeting was adjourned at 6:27 PM.

DRAFT



AMBIT ENGINEERING, INC.

A DIVISION OF HALEY WARD, INC. 

30 August 2023

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

**Re: NHDES Major Impact Wetland Permit Application
Tax Map N, Lot 22-C-8
10 Gerry's Lane
Dover, New Hampshire**

Dear Wetland Inspector:

This letter transmits a New Hampshire Department of Environmental Services (NHDES) Major Impact Wetland Permit Application request to construct a tidal docking structure consisting of a 4' x 5' accessway, a 4' x 30' fixed wood pier, a 3' x 42' gangway and a 10' x 20' float totaling 20 sq. ft. of permanent impact to the previously developed 100' Tidal Buffer Zone and 446 sq. ft. of permanent impact to tidal wetlands.

Attached to this application you will find a "NH DES Dock Permit Plan-C2" which depicts the existing lot, jurisdictional areas, abutting parcels, existing structures, proposed work, 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 the beginning of Tidal Wetland on the attached plan set. Attached to this application is a Wetland Functions and Values Assessment and Coastal Vulnerability Assessment summarizing these functions; as this project is subject to the requirements of Env-Wt 603.04 and Env-Wt 603.05.

The proposed structure will be constructed on piles within the tidal wetland further reducing permanent impacts to the tidal wetland resource. The project will have no impact on the functions and values of the adjacent tidal wetland. The docking structure has been designed to allow the adjacent tidal resource to maintain its current functions and values. The docking structure will not contribute to additional storm water or pollution. It is anticipated that there will be no affect on any fish and wildlife species that currently use the site for food, cover, and/or habitat. The tidal docking structure 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. The float and gangway will be temporary docking structures and will be removed during winter months as to not interfere with ice floe.

The docking structure has been designed to provide recreational boating access utilizing the natural grade of the dock location. There is no grading of the shoreline required to construct the dock. There will be no





construction activity that will disturb the area adjacent to the use. All work will be performed from a crane barge at low tide. The barge floats into position and the piles are driven by the crane equipped with a vibratory hammer. This method eliminates any contact of construction equipment with the protected resource. Portions of the docking structure are pre-fabricated off site and transported to the site via crane barge.

The construction sequence for the proposed structure are as follows:

- Mobilization of a crane barge, push boat, work skiff, materials and prefabricated components such as the gangway and float to the site via the Cocheco River River.
- Mobilization of equipment trucks to the site.
- The barge will be positioned alongside the proposed location of the new dock and waterward of any emergent vegetation to minimize impacts.
- Installation of the sub structure will be performed from a crane barge or skiff to reduce the amount of foot traffic in the intertidal area.
- All work will be performed at low tide to minimize sedimentation.
- Piles will be driven by a vibratory hammer eliminating any excavation for installation of the pilings. Piles are driven to refusal.
- Piles are cut and beam caps are installed and the super structure of the pier is built. Materials are lifted from the barge and set into position by the crane.
- Once the pier is complete, the gangway and float are brought into position and installed.

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, and proposed structures. 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 resulted in the possible occurrence of eastern grasswort and seaside brookweed. The site has been surveyed for both species and both plant communities have been survey located and depicted on the plan set. The project design has been altered to avoid impacts to both plant communities through coordination with the NH Natural Heritage Bureau.



- (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. 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 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 docking structure 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. Since the construction will be conducted during low tide conditions, it is not anticipated that there will be any impacts to fish or shellfish. 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 requires a functional assessment (attached), 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 provide water depth information.
- (f)(4) A statement regarding impact on navigation and passage required by Env-Wt 603.09.
The Permit Plan Set will be provided to the Pease Development Authority, Division of Ports and Harbors, for formal review and comment by the Harbormaster. That documentation will be provided to NH DES upon receipt.

In accordance with New Hampshire Administrative Rule Env-Wt 606.02(a) and 606.06(e), the marine contractor which will be constructing the proposed dock modification utilizes a vibratory hammer to install piles. The vibratory hammer uses vibration to install the pile in the marine sediment, instead of a standard hammer which uses a physical force to drive the pile, and subsequently a much greater noise impact. Using the vibratory hammer is the least impacting alternative to drive piles for dock construction.

The proposed pile locations for the dock are located above the Mean Low Water (MLW) line will be installed at low tide. Installation during “the dry” greatly reduces the amount of noise that is transmitted into the water column, as no water will be present at the pile location.

Lastly, the proposed structure will use CCA (Chromated Copper Arsenate) treated lumber. The proposed piles will be CCA treated 12” diameter southern yellow pine. Attached to this application is a Safety Data Sheet for CCA treated wood. Per the data sheet, toxicity is limited to inhalation of wood dust originating from CCA treated lumber. Additionally, per the Safety Data Sheet, 12. Ecological Information (page 12) “The product is not classified as environmentally hazardous. However, this does exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.” The product is also insoluble in water. The marine contractor that will be constructing the proposed docking structure receives the timber piles and lumber pre-treated. The marine contractor does not treat the lumber, and therefore there is no risk of spilling the treatment chemical in or near resource areas.

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

Respectfully submitted,

Steve Riker, CWS
Project Scientist/Project Manager
sriker@haleyward.com

31 August, 2023

To Whom It May Concern:

RE: State of New Hampshire DES Wetlands Bureau Standard Dredge and Fill Application for proposed shoreline stabilization within the previously developed 100' Tidal Buffer Zone and jurisdictional wetlands for Robert A Pruyn Revocable Trust of 10 Gerry's Lane Dover, NH

This letter is to inform the City of Dover in accordance with State Law that the following entities:

Riverside Marine Construction, Inc.
Ambit Engineering, Inc

Are authorized to represent me as my agent in the approval process.

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

Sincerely,



Robert A. Pruyn Revocable Trust
Robert Pruyn, Trustee
10 Gerry's Lane
Dover, NH 03820

21 December, 2022

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

RE: New Hampshire Wetland Application for proposed tidal docking structure for Robert A. Pruyn Revocable Trust, 10 Gerry's Lane, Dover, NH.

This letter is to inform the New Hampshire Department of Environmental Services (DES) Wetlands Bureau, in accordance with State Law that our abutter, **Robert A. Pruyn Revocable Trust**, has shown us plans (dated 12/16/22) depicting the proposed tidal docking structure on their property (Tax Map N, Lot 22-C-8) prepared by Ambit Engineering, Inc. We are aware that the proposed structure extends into a utility easement held by Eversource Energy.

In accordance with DES rules, we hereby sign this letter to indicate our acceptance of the proposed structure extending into the easement that Eversource Energy holds over the **Robert A. Pruyn Revocable Trust** property.

Sincerely,



Patricia A. Quinn, Supervisor
Transmission & Distribution Rights of Way
PSNH dba Eversource Energy
780 North Commercial Street
Manchester, NH 03101

By: Patricia A. Quinn
Printed Name & Title

Supervisor, T+D, Rights & Survey



**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: Robert A. Pruyn Revocable Trust **TOWN NAME:** Dover

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

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

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))

Please use the [Wetland Permit Planning Tool \(WPPT\)](#), the Natural Heritage Bureau (NHB) [DataCheck Tool](#), the [Aquatic Restoration Mapper](#), or other sources to assist in identifying key features such as: [priority resource areas \(PRAs\)](#), [protected species or habitats](#), coastal areas, designated rivers, or designated prime wetlands.

Has the required planning been completed?	☒ Yes ☐ No
Does the property contain a PRA? If yes, provide the following information:	☒ Yes ☐ No
Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.	☐ Yes ☒ No
- Protected species or habitat? - If yes, species or habitat name(s): low brackish riverbank marsh, eastern grasswort, seaside brookweed - NHB Project ID #: 23-0655	☒ Yes ☐ No
Bog?	☐ Yes ☒ No
Floodplain wetland contiguous to a tier 3 or higher watercourse?	☒ Yes ☐ No
Designated prime wetland or duly-established 100-foot buffer?	☐ Yes ☒ No
Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	☒ Yes ☐ No
Is the property within a Designated River corridor? If yes, provide the following information:	☐ Yes ☒ No
Name of Local River Management Advisory Committee (LAC):	

lrn@des.nh.gov or (603) 271-2147

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

www.des.nh.gov

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 provided below.	
The project proposes the construction of a tidal docking structure consisting of a 4' x 5' accessway, a 4' x 30' fixed wood pier, a 3' x 42' gangway and a 10' x 20' float totaling 20 sq. ft. of permanent impact to the previously developed 100' Tidal Buffer Zone and 446 sq. ft. of permanent impact to tidal wetlands.	
SECTION 3 - PROJECT LOCATION Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.	
ADDRESS: 10 Gerry's Lane	
TOWN/CITY: Dover	
TAX MAP/BLOCK/LOT/UNIT: Map N, Lot 22-C-8	
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Cocheco River ☐ N/A	
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): X: 1,199,262.6875° North	

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: 254,556.5254° West

SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 311.04(a))

If the applicant is a trust or a company, then complete with the trust or company information.

NAME: Robert A. Pruyn Revocable Trust

MAILING ADDRESS: 10 Gerry's Lane

TOWN/CITY: Dover

STATE: NH

ZIP CODE: 03820

EMAIL ADDRESS: rpruyn@rubber-group.com

FAX:

PHONE: 603-944-2740

ELECTRONIC COMMUNICATION: By initialing here: , I hereby authorize NHDES to communicate all matters relative to this application electronically.

SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c))☐ N/A

LAST NAME, FIRST NAME, M.I.: 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: sriker@haleyward.com

FAX:

PHONE: 603-430-9282

ELECTRONIC COMMUNICATION: By initialing here *SR*, I hereby authorize NHDES to communicate all matters relative to this application electronically.**SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b))**

If the owner is a trust or a company, then complete with the trust or company information.

☐ Same as applicant

NAME:

MAILING ADDRESS:

TOWN/CITY:

STATE:

ZIP CODE:

EMAIL ADDRESS:

FAX:

PHONE:

ELECTRONIC COMMUNICATION: By initialing here , I hereby authorize NHDES to communicate all matters relative to this application electronically.

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

Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters):

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.

☒ N/A – Compensatory mitigation is not required

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

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

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

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

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

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

JURISDICTIONAL AREA		PERMANENT			TEMPORARY		
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland						
	Scrub-shrub Wetland						
	Emergent Wetland						
	Wet Meadow						
	Vernal Pool						
	Designated Prime Wetland						
	Duly-established 100-foot Prime Wetland Buffer						
Surface Water	Intermittent / Ephemeral Stream						
	Perennial Stream or River						
	Lake / Pond						
	Docking - Lake / Pond						
	Docking - River						
Banks	Bank - Intermittent Stream						
	Bank - Perennial Stream / River						
	Bank / Shoreline - Lake / Pond						
Tidal	Tidal Waters						
	Tidal Marsh						
	Sand Dune						
	Undeveloped Tidal Buffer Zone (TBZ)						
	Previously-developed TBZ	20					
	Docking - Tidal Water	446					
TOTAL		466					

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

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

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

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

Permanent and temporary (non-docking):		SF	×	\$0.40 =	\$	
Seasonal docking structure:	326	SF	×	\$2.00 =	\$	652
Permanent docking structure:	140	SF	×	\$4.00 =	\$	560
Projects proposing shoreline structures (including docks) add \$400 =					\$	400
Total =					\$	1612

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

lrn@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 13 - PROJECT CLASSIFICATION (Env-Wt 306.05)		
Indicate the project classification.		
☐ Minimum Impact Project	☐ Minor Project	☒ Major Project
SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)		
Initial each box below to certify:		
Initials: SR	To the best of the signer's knowledge and belief, all required notifications have been provided.	
Initials: SR	The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.	
Initials: SR	The signer understands that: - The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: - Deny the application. - Revoke any approval that is granted based on the information. - If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. - The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. - The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.	
Initials: SR	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.	
SECTION 15 - REQUIRED SIGNATURES (Env-Wt 311.04(d); Env-Wt 311.11)		
SIGNATURE (OWNER): 	PRINT NAME LEGIBLY: 	DATE:
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER): 	PRINT NAME LEGIBLY: 	DATE:
SIGNATURE (AGENT, IF APPLICABLE): <i>Steven D. Riker</i>	PRINT NAME LEGIBLY: Steven D. Riker	DATE: 8/29/2023
SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))		
As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.		
TOWN/CITY CLERK SIGNATURE: <i>Gillian E. A. Bessette</i>	PRINT NAME LEGIBLY: <i>Gillian E. A. Bessette</i>	
TOWN/CITY: <i>Dover</i>	DATE: <i>9/7/2023</i>	

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DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(1)

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

DIRECTIONS FOR APPLICANT:

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



COASTAL RESOURCE WORKSHEET

Water Division/Land Resources Management Wetlands Bureau

[Check the Status of your Application](#)



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

APPLICANT LAST NAME, FIRST NAME, M.I.: Robert A. Pruyn Revocable Trust

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 the construction of a tidal docking structure consisting of a 4' x 5' accessway, a 4' x 30' fixed wood pier, a 3' x 42' gangway and a 10' x 20' float totaling 20 sq. ft. of permanent impact to the previously developed 100' Tidal Buffer Zone and 446 sq. ft. of permanent impact to tidal wetlands. Since the proposed tidal dock will serve to provide a water dependent function, practicable alternatives along the 80+/-feet of shoreline are reduced due to the presence of saltmarsh and maintaining a 20 foot setback to property lines extended. The proposed structure has been placed to provide the intended function and provide safe navigation to and from the proposed float location. The proposed tidal docking structure will provide recreational boating access to the Cocheco River.

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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 Functional Assessment and a Coastal Vulnerability Assessment is attached to this application per Env-Wt 603.04. 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.

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 permanent fixed pier, with an attached gangway and associated float. The gangway and float are/will be seasonal structures and will be removed in the non-boating season. Other than removal and re-installation, there is no maintenance or management of the tidal docking structure over its expected life span, which is 50-100 years.

- ☒ 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.

Review and comment by the Pease Development Authority will be provided to NH DES upon receipt.

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 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 application.

- 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

- 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

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

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

- ☒ The plan view shall depict the following:
- ☒ The engineering scale used, which shall be no larger than one inch equals 50 feet;
 - ☒ The location of tidal datum lines depicted as a line with the associated elevation noted, based on North American Vertical Datum of 1988 (NAVD 88), derived from https://tidesandcurrents.noaa.gov/datum_options.html, as described in Section 6.
 - ☒ An imaginary extension of property boundary lines into the waterbody and a 20-foot setback from those property line extensions;
 - ☒ The location of all special aquatic sites at or within 100 feet of the subject property;
 - ☒ Existing bank contours;
 - ☒ The name and license number, if applicable, of each individual responsible for the plan, including:
 - a. The agent for tidal docking structures who determined elevations represented on plans; and
 - b. The qualified coastal professional who completed the CFA report and located the identified resources on the plan; and
 - ☒ 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);
 - Tidal shoreline stabilization (Env-Wt 609);
 - Dredging activities (Env-Wt 607);
 - Protected tidal zone (Env-Wt 610);
 - 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 3 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), and for repair, rehabilitation or replacement of tier 4 stream crossings, demonstrate how the requirements of Env-Wt 904.09 are met.

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

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

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

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

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

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

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

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

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

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

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

- ☒ Provide habitat values;
- ☒ Protect tidal environments from potential sources of pollution;
- ☒ Provide stability of the coastal shoreline; and
- ☒ Maintain existing buffers intact where the lot has disturbed area defined under RSA 483-B:4, IV.

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

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

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

Projects in tidal surface waters or tidal wetlands shall:

- ☒ Optimize the natural function of the tidal wetland, including protection or restoration of habitat, water quality, and self-sustaining stability to storm surge;
- ☒ Be designed with a preference for living shorelines over hardened stabilization practices; and
- ☒ Be limited to public infrastructure or restoration projects that are in the interest of the general public, including a road, a bridge, energy infrastructure, or a project that addresses predicted sea-level rise and coastal flood risk.

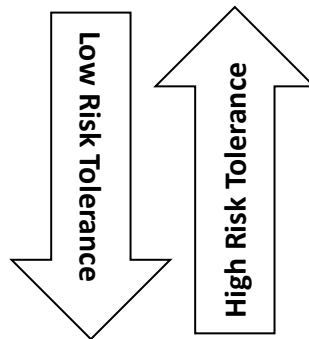
SECTION 10 – GUIDANCE

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

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

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

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



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



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.: Robert A. Pruyn Revocable Trust

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 THE CONSTRUCTION OF A TIDAL DOCKING STRUCTURE CONSISTING OF A 4' X 5' ACCESSWAY, A 4' X 30' FIXED WOOD PIER, A 3' X 42' GANGWAY AND A 10' X 20' FLOAT TOTALING 20 SQ. FT. OF PERMANENT IMPACT TO THE PREVIOUSLY DEVELOPED 100' TIDAL BUFFER ZONE AND 446 SQ. FT. OF PERMANENT IMPACT TO TIDAL WETLANDS. OVERALL STRUCTURE LENGTH WILL BE 82 FEET LOCATED ON 80+/- OF FRONTAGE ALONG THE COCHECO RIVER. SINCE THE PROPOSED TIDAL DOCK WILL SERVE TO PROVIDE A WATER DEPENDENT FUNCTION, PRACTICABLE ALTERNATIVES ALONG THE 80 +/- FEET OF SHORELINE ARE REDUCED DUE TO THE PRESENCE OF SALTMARSH AND MAINTAINING A 20 FOOT SETBACK TO PROPERTY LINES EXTENDED. THE PROPOSED STRUCTURE HAS BEEN LOCATED ALONG THE SUBJECT SHORELINE TO IMPACT THE LEAST AMOUNT SALTMARSH AREA POSSIBLE, DEMONSTRATING THE LEAST IMPACTING ALTERNATIVE.

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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 location represents the least impacting alternative as impacts to salt marshes to construct the proposed dock are located to impact the least amount of square footage over saltmarsh as possible .

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

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

The proposed docking structure will be constructed on piles within the tidal wetland further reducing permanent impacts to the tidal wetland resource. Since the docking structure will be constructed on piles, the structure 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.

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.

Per the NHB Review, low brackish riverbank marsh, seaside brookweed and eastern grass wort have been identified as a natural community on or near the project site. The proposed dock demonstrates the least impacting alternative in regards to square footage of structure placed over the natural community. Coordination with NHB resulted in conservation measures to ensure the protection of the state endangered plant communities.

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 tidal docking structure has been designed to not impede recreation, public commerce, and navigation. The docking structure does not extend into any federal or local navigation channel.

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 the dock will be constructed on piles therefore providing no significant 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.

The project does not propose impacts to riverine forested wetland systems and scrub shrub marsh complexes.

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.

PART II: FUNCTIONAL ASSESSMENT**REQUIREMENTS**

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. NAEPP-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, CWS

DATE OF ASSESSMENT: AUGUST 29, 2023

Check this box to confirm that the application includes a NARRATIVE ON FUNCTIONAL ASSESSMENT: ☒

For minor or major projects requiring a standard permit without mitigation, the applicant shall submit a wetland evaluation report that includes completed checklists and information demonstrating the RELATIVE FUNCTIONS AND VALUES OF EACH WETLAND EVALUATED. Check this box to confirm that the application includes this information, if applicable: ☒

Note: The Wetlands Functional Assessment worksheet can be used to compile the information needed to meet functional assessment requirements.



**AVOIDANCE AND MINIMIZATION
WRITTEN NARRATIVE**
Water Division/Land Resources Management
Wetlands Bureau
[Check the Status of your Application](#)



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

APPLICANT LAST NAME, FIRST NAME, M.I.: Robert A. Pruyn Revocable Trust

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?

Yes. The project proposes to construct a tidal docking structure for recreational boating access.

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 the construction of a tidal docking structure, providing a water dependent function, this is not applicable.

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 the construction of a tidal docking structure consisting of a 4' x 5' accessway, a 4' x 30' fixed wood pier, a 3' x 42' gangway and a 10' x 20' float totaling 20 sq. ft. of permanent impact to the previously developed 100' Tidal Buffer Zone and 446 sq. ft. of permanent impact to tidal wetlands. Overall structure length will be 82 feet located on 80+/- of frontage along the Cocheco River. Since the proposed tidal dock will serve to provide a water dependent function, practicable alternatives along the 80+/-feet of shoreline are reduced due to the presence of saltmarsh and maintaining a 20 foot setback to property lines extended.

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 docking structure will be constructed on piles within the tidal wetland further reducing permanent impacts to the tidal wetland resource. The docking structure has been designed to allow the adjacent tidal resource to maintain its current functions and values. The tidal docking structure 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. A Wetland Functions and Values Assessment is attached to this application.

Site Photograph #1

September 2022



Site Photograph #2

September 2022



Site Photograph #3

September 2022

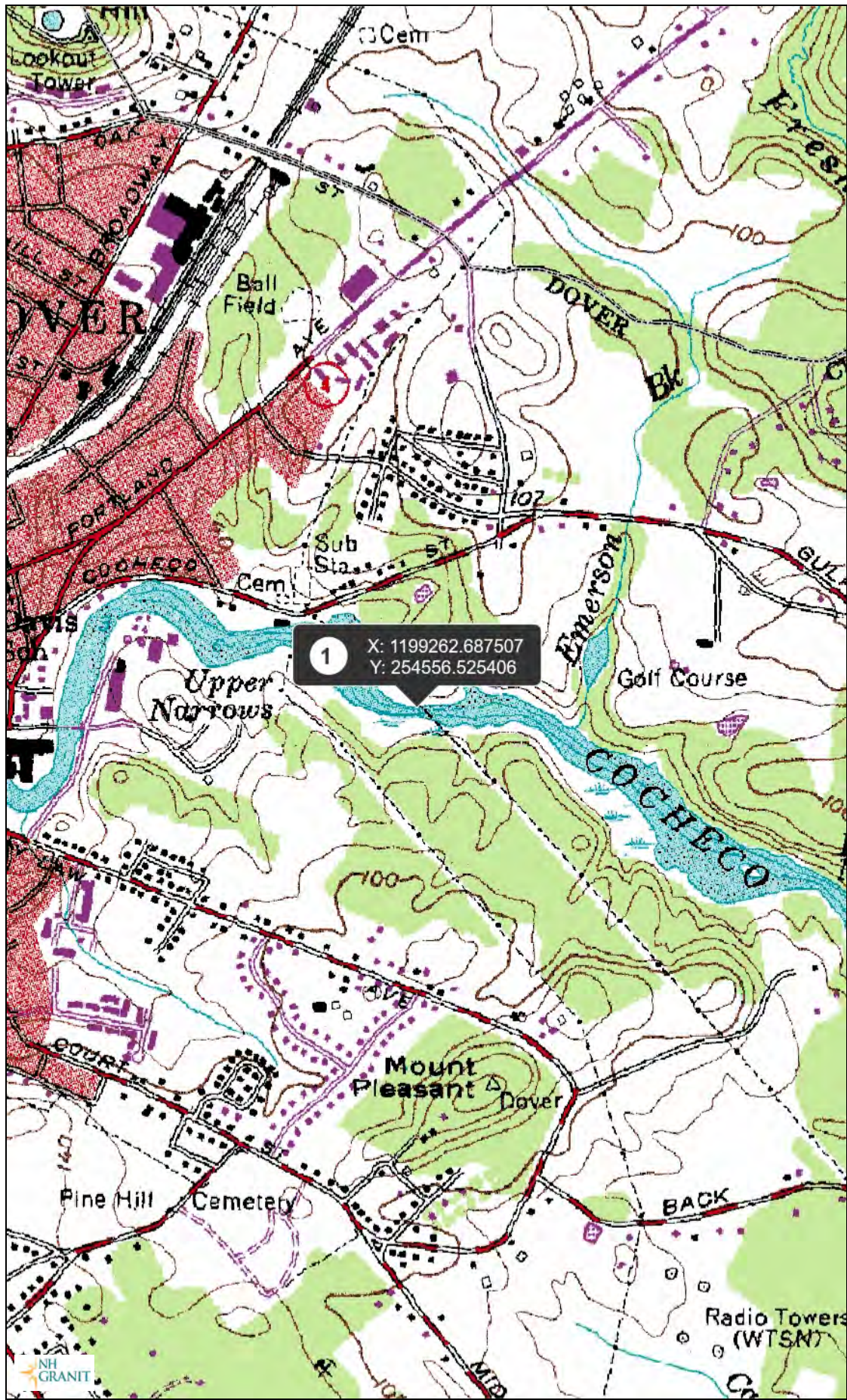


Site Photograph #4

September 2022



Map by NH GRANIT



1 X: 1199262.687507
Y: 254556.525406

Legend

- State
- County
- City/Town

Map Scale

1: 12,988

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Map Generated: 10/6/2022



Notes



**Property Information**

Property ID K0004-C00000
Location HENRY LAW AV
Owner CITY OF DOVER
Land Use 903
Zoning Code CWD



**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

City of Dover, 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 5/3/2021
Data updated Daily

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

Ambit Engineering Abutter List

Robert A. Pruyn Revocable Trust
10 Gerry's Lane
Dover, NH

Job # 3402.27

Applicant/Owner(s)

[illegible]

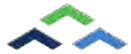
Engineer	Ambit Engineering Civil Engineers & Land Surveyors		200 Griffin Road, Unit #3	Portsmouth	NH	03801
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Other Consultants						
Other Consultants						
Other Consultants						

[illegible]

Ambit Engineering Abutter List



AMBIT ENGINEERING, INC.
A DIVISION OF HALEY WARD, INC. 

6 September, 2023

James R. & Ann Polizzo Trust
James R. & Ann Polizzo Trustees
8 Gerry's Lane
Dover, NH 03820

RE: New Hampshire Wetland Application for construction of a tidal docking structure for Robert A. Pruyn Revocable Trust, 10 Gerry's Lane Dover, 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 **impact jurisdictional wetlands for the construction of a tidal docking structure**, on behalf of your abutter, **Robert A. Pruyn Revocable Trust**.

This letter is sent to inform you as an abutter to the above-referenced property (according to local Municipal records) that **Robert A. Pruyn Revocable Trust** 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 **Dover** clerk, **Dover 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,

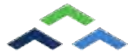


Steve Riker, CWS
Project Scientist/Project Manager
striker@haleyward.com

CERTIFIED MAIL/Return Receipt Requested





AMBIT ENGINEERING, INC.
A DIVISION OF HALEY WARD, INC. 

6 September, 2023

Elizabeth G. Pope Bonny Revocable Trust
Elizabeth G. Pope Bonny Trustee
9 Gerry's Lane
Dover, NH 03820

RE: New Hampshire Wetland Application for construction of a tidal docking structure for Robert A. Pruyn Revocable Trust, 10 Gerry's Lane Dover, 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 **impact jurisdictional wetlands for the construction of a tidal docking structure**, on behalf of your abutter, **Robert A. Pruyn Revocable Trust**.

This letter is sent to inform you as an abutter to the above-referenced property (according to local Municipal records) that **Robert A. Pruyn Revocable Trust** 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 **Dover** clerk, **Dover 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,



Steve Riker, CWS
Project Scientist/Project Manager
sriker@haleyward.com

CERTIFIED MAIL/Return Receipt Requested



7022 0410 0002 6196 5234

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at www.usps.com ®.	
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☐ Adult Signature Required \$	
☐ Adult Signature Restricted Delivery \$	
Postage \$	
Total Postage and Fees \$	
Sent To JAMES P. & ANN POLIZZO TRUST Street and Apt. No., or PO Box No. 8 GERRY'S LANE City, State, ZIP+4® DOVER, NH 03820	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

7022 0410 0002 6196 5227

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☐ Adult Signature Required \$	
☐ Adult Signature Restricted Delivery \$	
Postage \$	
Total Postage and Fees \$	
Sent To ELIZABETH G. POPE BONNY TRUST Street and Apt. No., or PO Box No. 9 GERRY'S LANE City, State, ZIP+4® DOVER, NH 03820	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

Map by NH GRANIT



Legend

- 2021
- Coastal 2019 1-foot RGB
- World Imagery
- Low Resolution 15m Imager
- High Resolution 60cm Image
- High Resolution 30cm Image
- Citations
- 60cm Resolution Metadata

Map Scale

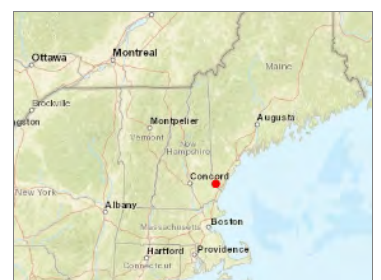
1: 1,624

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Map Generated: 10/6/2022



Notes

2021 Eelgrass



Map by NH GRANIT



Legend

Current Shellfish Beds

- Blue Mussel
- Oyster
- Razor Clam
- Softshell Clam
- Surf Clam

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager

High Resolution 60cm Image

High Resolution 30cm Image

Citations

60cm Resolution Metadata

Map Scale

1: 1,624

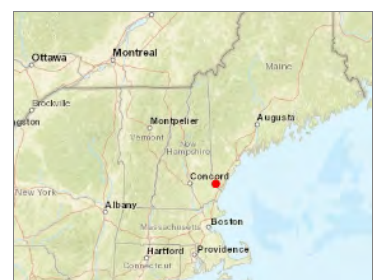
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Map Generated: 10/6/2022



Notes

Current Shellfish Beds



Map by NH GRANIT



Legend

Highest Ranked Wildlife Habitat

- Not Top Ranked
- Highest Ranked Habitat in NH
- Highest Ranked Habitat in Region
- Supporting Landscape

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager

High Resolution 60cm Imager

High Resolution 30cm Imager

Citations

60cm Resolution Metadata

Map Scale

1: 1,624

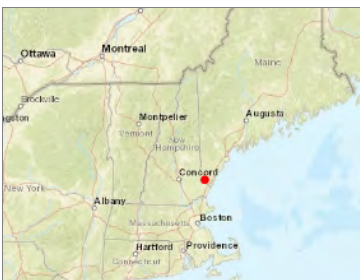
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Map Generated: 10/6/2022



Notes

Highest Ranked Wildlife Habitat



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: 3/9/2023 (valid until 03/09/2024)

Re: Review by NH Natural Heritage Bureau

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

NHB ID: NHB23-0655 Town: Dover Location: 10 Gerry's Lane
Description: The project proposes a tidal docking structure consisting of a 4' x 30' fixed wood pier, a 3' x 42' gangway and a 10' x 20' float secured by helical moorings and chains to provide recreational boating access to the Cocheco River.

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

Comments **NHB:** Please send NHB representative photos during the growing season and proposed conditions plans. NHB may request surveys for the rare plants listed on the DataCheck Letter.
F&G: No comments at this time.

Natural Community	State ¹	Federal	Notes
Low brackish riverbank marsh	--	--	
Plant species	State ¹	Federal	Notes
eastern grasswort (<i>Lilaeopsis chinensis</i>)	E	--	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.
seaside brookweed (<i>Samolus parviflorus</i>)	E	--	Occurs on river and streambanks, as well as estuarine and seashore habitats. Threats include direct destruction of the plants and major alterations of their habitat.

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.

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 ANY 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.

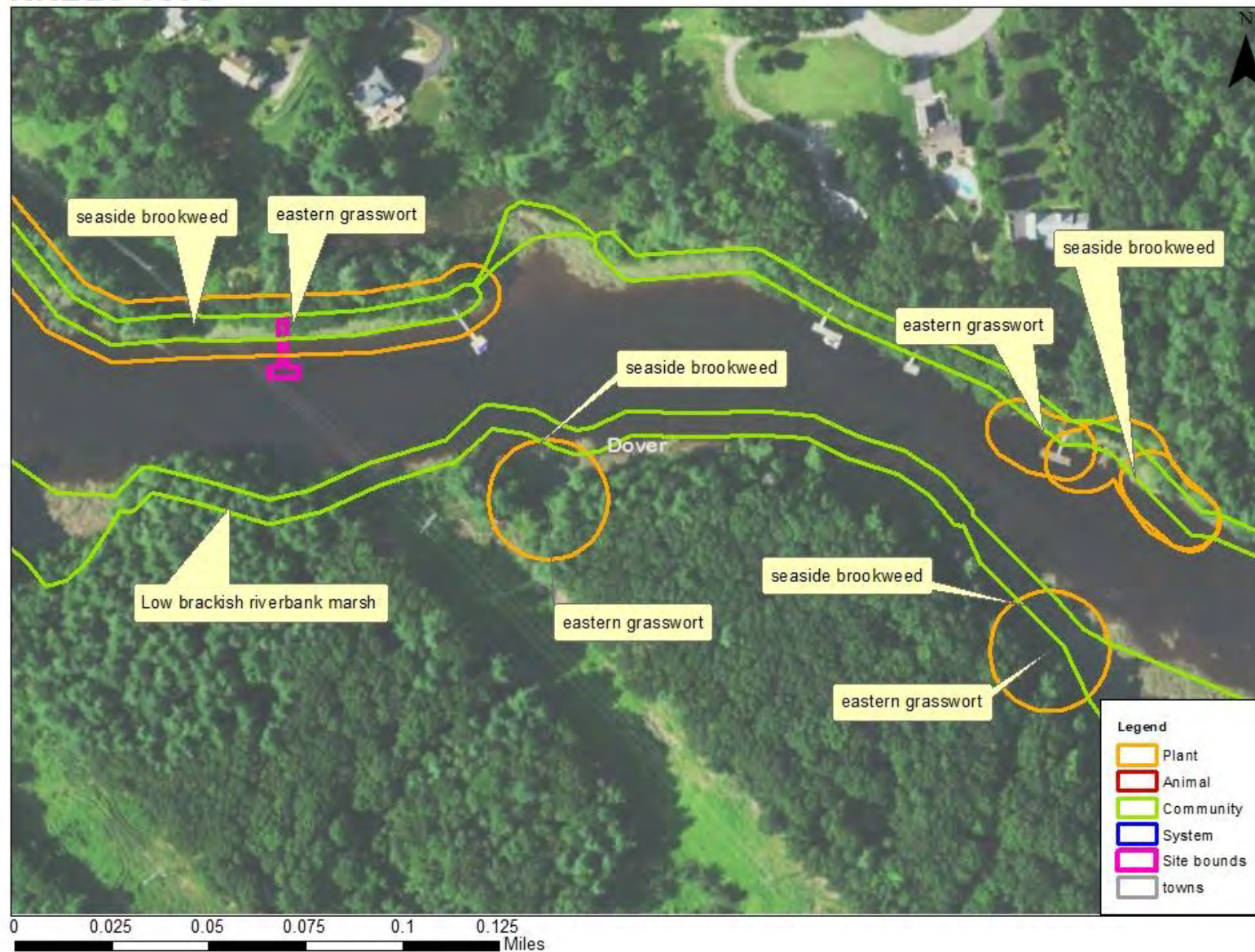
If this NHB Datacheck letter includes a record for a threatened (T) or endangered (E) wildlife species, consultation with the New Hampshire Fish and Game Department under Fis 1004 may be required. To review the Fis 1000 rules (effective February 3, 2022), please go to <https://wildlife.state.nh.us/wildlife/environmental-review.html>. 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 rule, 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

NHB23-0655



New Hampshire Natural Heritage Bureau - Community Record

Low brackish riverbank marsh

Legal Status

Federal: Not listed
State: Not listed

Conservation Status

Global: Not ranked (need more information)
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Fair quality, condition and/or landscape context ('C' on a scale of A-D).
Comments on Rank: --

Detailed Description: 2004: Dominant species are *Spartina alterniflora* (smooth cord-grass), *Amaranthus cannabinus* (water hemp), and *Typha angustifolia* (narrow-leaved cattail). Less frequent are *Lemna minor* (lesser duckweed), *Polygonum hydropiper* (water-pepper), *Argentina egedii* (coastal silverweed), *Eleocharis parvula* (small spike-rush), *Ranunculus cymbalaria* (seaside crowfoot), *Lilaeopsis chinensis* (eastern lilaeopsis), and *Samolus parviflorus* (false water pimpernel). 1988: Forms a narrow zone along the river, dominated by *Spartina alterniflora* (smooth cord-grass). A few stands of *Typha angustifolia* (narrow-leaved cattail) exist, mostly less than an acre in size. Rare plant species present are *Samolus parviflorus* (false water pimpernel), *Lilaeopsis chinensis* (eastern lilaeopsis), and *Eleocharis parvula* (small spike-rush). *Spartina alterniflora* (smooth cord-grass) is dominant. A few stands of *Typha angustifolia* (narrow-leaved cat-tail) exist. Many exotic species are present. The bases of steep, rocky slopes support virtually no emergent vegetation.

General Area: 2004: This low marsh lies adjacent to a sparsely or narrowly vegetated **high brackish tidal riverbank marsh**. The high tidal riverbank is often an unvegetated zone grading into the adjacent upland. Some characteristic species are *Solidago sempervirens* (seaside goldenrod) and *Spartina pectinata* (fresh-water cord-grass). Along most of the riverbank community, moderate residential and commercial development occurs on adjacent lands. High levels of development occur along the west end of the riverbank in downtown Dover. 1988: A narrow zone along the river. Bordered by steep forested slopes and heavily impacted areas.

General Comments: --

Management Comments: 2004: Several invasive species occur on the higher margins of the riverbank community, especially at the west end nearest downtown Dover. They include *Lythrum salicaria* (purple loosestrife), *Phalaris arundinacea* (reed canary-grass), *Rorippa nasturtium-aquaticum* (true watercress), *Polygonum cuspidatum* (Japanese knotweed), and *Solanum dulcamara* (nightshade). These plants should be monitored. 1988: Guard against future development. Current disturbance includes impacts by rock fill, dams, clearing, and power plant construction.

Location

Survey Site Name: Cocheco River Narrows
Managed By:

County: Strafford

Town(s): Dover

Size: 94.2 acres

Elevation:

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

Directions: Cocheco River downstream of downtown Dover. 2004: The tidal riverbank marsh extends from downtown Dover (beginning downstream of Washington Street) to the mouth of the Cocheco. For the tidal marsh nearest downtown Dover, park at Henry Law Park. For the tidal marsh 0.75 miles eastward, from Henry Law Avenue, turn north onto access road to baseball fields. Park in lot for baseball fields and walk NE, across power line corridor, to Cocheco River. 1988: Tidal wetlands and shores along Cocheco River between upper and lower narrows, due east and just downstream of downtown Dover.

Dates documented

First reported: 1988-09-13

Last reported: 2004-09-23

New Hampshire Natural Heritage Bureau - Plant Record

eastern grasswort (*Lilaeopsis chinensis*)**Legal Status**

Federal: Not listed
 State: Listed Endangered

Conservation Status

Global: Demonstrably widespread, abundant, and secure
 State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Fair quality, condition and/or landscape context ('C' on a scale of A-D).

Comments on Rank: Rank is for the entire population.

Detailed Description: 2004: At the Upper Narrows (west shore), 500+ stems observed, none in bloom. Below the Upper Narrows (west shore), 1,000 stems observed, many in flower. Plant vigor is normal. 1996: Healthy population with 200-500 leaves (expanded, bladeless petioles) in one group south of Emerson Brook, with additional scattered plants nearby. 1995: Observed covering an approximately 625-square foot area south of Emerson Brook and a 150-square foot area north of the brook. Forming dense mats. 1988: Dense population of immature fruiting plants on eastern shore of Upper Narrows.

General Area: 2004: Population occurs in a low and **high brackish tidal riverbank marsh**. Common associates include *Spartina alterniflora* (smooth cord-grass), *Amaranthus cannabinus* (water hemp), and *Typha angustifolia* (narrow-leaved cattail). Less frequent are *Lemna minor* (lesser duckweed), *Polygonum hydropiper* (water-pepper), *Argentina egedii* (coastal silverweed), *Eleocharis parvula* (small spike-rush), *Ranunculus cymbalaria* (seaside crowfoot), and *Samolus parviflorus* (false water pimpernel). 1996: Lower end of the *Spartina pectinata* (fresh-water cord-grass) high marsh. Associated species include *Spartina alterniflora* (smooth cord-grass) and *Acnida* (*Amaranthus*) *cannabinus* (water hemp). Inundated to saturated bottom land with filtered light. 1995: Below the mean high water line (within 10-15 feet of the line), growing underneath *Spartina alterniflora* (smooth cord-grass). 1988: Growing in shade of *Spartina alterniflora* (smooth cord-grass).

General Comments: --

Management: --

Comments:

Location

Survey Site Name: Cocheco River Narrows
 Managed By: Great Bay Megasite

County: Strafford

Town(s): Dover

Size: 3.1 acres

Elevation:

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

Directions: Cocheco River downstream of downtown Dover. 2004: From Henry Law Avenue, turn north onto access road to baseball fields. Park in lot for baseball fields and walk northeast, across power line corridor, to Cocheco River. 1996: On north [east] bank of Cocheco River at Emerson Brook junction. 1995: Two areas on the eastern shore, just upstream and downstream of an existing 4-inch gas pipeline [mouth of Emerson Brook]. 1988: Eastern shore only.

Dates documented

First reported: 1988-09-13

Last reported: 2004-09-05

New Hampshire Natural Heritage Bureau - Plant Record

seaside brookweed (*Samolus parviflorus*)

Legal Status

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Fair quality, condition and/or landscape context ('C' on a scale of A-D).
Comments on Rank: Rank is for the entire population.

Detailed Description: 2016: Boat House - Site 1: Approximately 130 plants, many in flower, observed in several patches. 2004: 200+ stems observed at the Upper Narrows (west shore) and 100+ stems observed below the Upper Narrows. Plant vigor is normal. 1995: 129 plants located in five patches at the mouth of Emerson Brook. 1988: 1001-10,000 flowering and immature vigorous plants, mostly on the east shore.

General Area: 2016: The plants were documented along the right bank of the Cocheco River, a tidal river. At low tide, the plants are located along the upper reaches of the river bank, which had a gentle slope. It is presumed that these plants are submerged during most high tides. The substrate consists of cobbly gravel in some areas, while other areas consist of mudflats. There are very few other plant species present, but for little-headed spikerush (*Eleocharis parvula*), as this area is generally submerged at high tide. 2004: Population occurs in a low and **high brackish tidal riverbank marsh**. Common associates include *Spartina alterniflora* (smooth cord-grass), *Amaranthus cannabinus* (water hemp), and *Typha angustifolia* (narrow-leaved cattail). Less frequent are *Lemna minor* (lesser duckweed), *Polygonum hydropiper* (water-pepper), *Argentina egedii* (coastal silverweed), *Lilaeopsis chinensis* (eastern lilaeopsis), *Ranunculus cymbalaria* (seaside crowfoot), and *Eleocharis parvula* (small spike-rush). 1995: Gulf of Maine brackish tidal marsh. Inundated to saturated bottom land with partial light. Found with *Lilaeopsis chinensis* (eastern lilaeopsis). 1988: Gulf of Maine Brackish Tidal Marsh. Growing on gravelly shore. Associated plant species include *Plantago* cf. *major* (common plantain), *Atriplex patula* (narrow-leaved orach), *Spartina alterniflora* (smooth cord-grass), *Bidens cernua* (nodding bur-marigold), and *Acuidia cannabina* [*Amaranthus cannabinus*] (water hemp).

General Comments: --
Management Comments: 1988: Guard against further disturbance.

Location

Survey Site Name: Cocheco River Narrows
Managed By: Great Bay Megasite

County: Strafford
Town(s): Dover
Size: 3.2 acres Elevation:

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

Directions: Cocheco River downstream of downtown Dover. 2016: Boat House - Site 1: In downtown Dover, take Washington Street over the Cocheco River. Continue on Washington Street to the second crossing over Cocheco River. Take your next left onto River Street. Take your first right and park near the boat house. Walk north along the path towards the river, keeping the boat house on your right. Walk down the steps to the riverbank and turn right, heading east, and downstream (right bank). At low tide, individual *Samolus valerandi* ssp. *parviflorus* can be found along this stretch of the river within the upper reaches of the mudflats, often surrounded by larger patches of little-headed spikerush (*Eleocharis parvula*). 2004: Henry Law Avenue, turn north onto access road to baseball fields. Park in lot for baseball fields and walk northeast, across power line corridor, to Cocheco

River. 1995: North and south of the mouth of Emerson Brook. 1988: Between Upper Narrows and Emerson Brook, east shore (a few plants on west shore).

Dates documented

First reported:	1988-09-13	Last reported:	2016-08-24
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From: [DNCR: NHB Review](#)
To: [Steve Riker](#)
Subject: RE: NHB:23-0655, 10 Gerry's Lane, Dover, NH
Date: Thursday, June 29, 2023 7:48:08 AM
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)

Hi Steve,

Thank you for providing the survey forms, and a revised plan set for this proposed work based on NHB's recommendations.

Based on the updated details provided on the plans, NHB agrees impact to **eastern grasswort**, and **seaside brookweed** will be minimized to the greatest possible extent.

NHB has no further concerns regarding this proposed project. Please contact NHB if there are any changes to scope of work, or if you have any questions.

Thank you for all your work on alterations to minimize impact to these rare species!

Have a great holiday weekend.

Ashley Litwinenko
Environmental Reviewer
Natural Heritage Bureau (NHB)
Division of Forests & Lands - DNCR
172 Pembroke Rd., Concord, NH 03301
Phone: 603-271-2834
[Datacheck Tool](#)
[NHB Botany information](#)

Vacation Notice – OFF 7/24 – 7/28

Follow-up on Environmental Review related emails will be delayed during that time, please email NHBReview@dnr.nh.gov prior to that week if a follow-up review is time sensitive. NHB DataCheck Letters will still be distributed, and NHB DataCheck Tool assistance will be available during this time. Thank you for your understanding.

From: Steve Riker <sriker@haleyard.com>
Sent: Wednesday, June 28, 2023 3:07 PM
To: DNCR: NHB Review <nhbreview@dnr.nh.gov>
Subject: RE: NHB:23-0655, 10 Gerry's Lane, Dover, NH

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

Ashley,

Attached is the revised plan set. We have moved pile placement as to not directly impact the seaside

brookweed & eastern grasswort, and we have also noted the use of thru-flow decking (See Detail Sheet-D1) where pier would be constructed over the sensitive species.

Also attached are the plant survey forms, a photo of the plants (growing together), and a shapefile for your use. I also included an area calculation worksheet of the plant colonies. I did my best with the forms so do not hesitate to reach out if you have any questions or need anything else.

If you could confirm receipt and “approval” of the plans that would be greatly appreciated. Thanks for your time with this one!



Steve Riker, CWS
Project Scientist | Project Manager
t: [603.430.9282](tel:603.430.9282) dd: [603.766.2986](tel:603.766.2986)
a: 200 Griffin Rd Unit 3, Portsmouth, NH 03801



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From: DNCR: NHB Review <nhbreview@dncr.nh.gov>
Sent: Friday, June 16, 2023 7:17 AM
To: Steve Riker <sriker@haleyward.com>
Cc: Kuerstin Fordham <kuerstin@riversideandpickering.com>
Subject: RE: NHB:23-0655, 10 Gerry's Lane, Dover, NH

Hi Steve,

Thank you for getting those survey forms together. You can send the reporting forms, photos, and shapefiles (if available) to this email.

Regarding time of year restrictions, NHB does prefer work is completed when the rare plants have senesced for the season, and not during the active growing season. Typically, we recommend that work occur after October 15th, and be completed by the end of May (all equipment removed, etc). This time of year restriction helps to minimize any secondary impacts to the rare plant species in the area.

However, based on the sequence of construction on the plan set, impacts to marsh vegetation will be minimized during construction and installation of the tidal docking structure to the greatest possible extent. If these time of year restrictions are not able to be implemented for this work that is agreeable for this project.

I will keep an eye out for the plan revision.

Thank you,

Ashley Litwinenko
Environmental Reviewer
Natural Heritage Bureau (NHB)
Division of Forests & Lands - DNCR
172 Pembroke Rd., Concord, NH 03301
Phone: 603-271-2834
[Datacheck Tool](#)
[NHB Botany information](#)

From: Steve Riker <sriker@haleyward.com>
Sent: Thursday, June 15, 2023 9:08 AM
To: DNCR: NHB Review <nhbreview@dnr.nh.gov>
Cc: Kuerstin Fordham <kuerstin@riversideandpickering.com>
Subject: RE: NHB:23-0655, 10 Gerry's Lane, Dover, NH

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Ashley,

Thanks for your quick review it is greatly appreciated!

I did want to discuss the time of year restriction for pile installation. We inadvertently left the “Nov 15th-March 15th” restriction on the plan set (Sheet D1), the result of our experience in coordinating with NH Fish & Game when the two endangered sturgeon species are identified in the NHB Data Check Results Letter. In this case, the NHB did not identify either of the two sturgeon species and therefore the marine contractor would like to be able to construct this dock at anytime during the year. We simply left this note on the plan in error.

Also, I am very happy to complete the rare plant reporting form. Do I provide that form along with photos to you or somebody else within NHB?

I will get plans revised & stamped and then send them to you for a “final review”.

Thanks!



Steve Riker, CWS
Project Scientist | Project Manager
t: [603.430.9282](tel:603.430.9282) dd: [603.766.2986](tel:603.766.2986)
a: 200 Griffin Rd Unit 3, Portsmouth, NH 03801



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From: DNCR: NHB Review <nhbreview@dncr.nh.gov>

Sent: Wednesday, June 14, 2023 9:29 AM

To: Steve Riker <sriker@haleyward.com>

Subject: RE: NHB:23-0655, 10 Gerry's Lane, Dover, NH

Hi Steve,

After sending my initial email, I realized many of my questions were already answered on scan782, and I apologize for overlooking this information!

Please do still send over the requested rare plant reporting forms, GPS locations, diagnostic photos, shapefiles etc. for both **eastern grasswort** and **seaside brook weed**.

NHB agrees with the recommendations you have provided below to avoid direct impact to these rare species and to minimize shading to the eastern grasswort and salt marsh.

-

To reiterate, and build on those recommendations:

- Relocate pile sets to avoid direct impact to eastern grasswort;
- Utilize flow thru decking on the fixed pier where eastern grasswort and salt marsh is located beneath. This will reduce the amount of shading compared to the traditional wood decking;
- The dock is proposed in a North-South orientation, which also limits the amount of shading to the greatest possible extent;
- The pier is designed to be 7' and 9' feet above the rare species;
- Work will be completed by barge and positioned waterward of any emergent vegetation;
- All work completed during low tide to minimize sedimentation;
- Piles to be installed between November 15th – March 15th in-the-dry
- Pilings will be mechanically driven by a crane eliminating any excavation for installation;

Please do provide NHB with revised plans containing the provided conservation measures to limit direct impact, and shading to these rare plants and salt marsh exemplary natural community.

Thank you,

Ashley Litwinenko

Environmental Reviewer

Natural Heritage Bureau (NHB)

Division of Forests & Lands - DNCR

172 Pembroke Rd., Concord, NH 03301

Phone: 603-271-2834

[Datacheck Tool](#)

[NHB Botany information](#)

From: DNCR: NHB Review <nhbreview@dncr.nh.gov>
Sent: Wednesday, June 14, 2023 8:32 AM
To: Steve Riker <sriker@haleyward.com>
Subject: RE: NHB:23-0655, 10 Gerry's Lane, Dover, NH

Hi Steve,

Thank you for following up regarding the proposed tidal docking structure (NHB23-0655).

Could you please provide NHB with a separate rare plant reporting form for both **eastern grasswort** and **seaside brook weed** found here: [Rare Plant List | Reports | NH Division of Forests and Lands](#) If you could also provide GPS locations, diagnostic photos, general population counts, shapefiles or as much information as possible. This will allow us to update our records with these locations for future Environmental Review.

Some initial questions:

- Will this tidal docking structure be constructed by floating barge?
- How will the pilings be installed? - Is it possible for these to be driven in place by a crane to prevent excavation?
- When is the anticipated commencement of work for this project? - Is it possible to complete this work during the late fall/ winter?

I appreciate your detailed description of work activities, and proposed conservation efforts to minimize impacts to this area and will certainly keep those in mind when providing my recommendations.

Best,

Ashley Litwinenko
Environmental Reviewer
Natural Heritage Bureau (NHB)
Division of Forests & Lands - DNCR
172 Pembroke Rd., Concord, NH 03301
Phone: 603-271-2834
[Datacheck Tool](#)
[NHB Botany information](#)

From: Steve Riker <sriker@haleyward.com>
Sent: Tuesday, June 13, 2023 12:45 PM
To: DNCR: NHB Review <nhbreview@dncr.nh.gov>
Subject: NHB:23-0655, 10 Gerry's Lane, Dover, NH

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

Ashley,

I am reaching out regarding review for the above referenced NHB in regards to a pending (to be filed) DES Wetland Application.

The project proposes a tidal docking structure including a fixed pier, gangway and a float to provide recreational boating access to the Cocheco River. To demonstrate the least impacting alternative, we placed the proposed fixed pier in the location that puts the least amount of surface area over saltmarsh which we survey located and depict on the plan set (see attached sketch plans).

I have waited all winter for the growing season to survey the site for eastern grasswort and seaside brookweed. I made a site visit on June 5th and we also survey located plant locations so we could put them on the plans. Those plans are attached for your review. Also attached is the NHB report and some photos.

There is no location on the site where the dock could be placed to totally eliminate shading impacts to the saltmarsh and the two protected species.

To reduce shading or direct impacts to the greatest extent practicable, we would like to propose the following conservation measures:

1. Relocate pile sets to totally avoid direct impact to the two protected species.
2. We would propose flow thru decking which is a decking product that is constructed to allow more sunlight penetration and water to pass through than traditional wood decking. We would propose this decking where the fixed pier is constructed over the protected species. See the product website here: [ThruFlow - Premium Decking Solutions for Docks and Walkways](#)

The height of the pier is already designed to be 7' and 9' feet respectively over the protected species where only 4 feet is required by DES Wetland Rules (See Details-Sheet D1).

If the above seems appropriate to you, I will revise plans to include the conservation measures and send them back to you for a "final consultation".

Your review and comment is appreciated. Thanks!

Thanks!



Steve Riker, CWS
Project Scientist | Project Manager
t: [603.430.9282](tel:603.430.9282) dd: [603.766.2986](tel:603.766.2986)
a: 200 Griffin Rd Unit 3, Portsmouth, NH 03801



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SAFETY DATA SHEET

1. Identification

Product identifier

CCA Treated Wood

Other means of identification

SDS number

92-KPC

Recommended use

Preservative Treated Wood for various weather protected and exterior uses.

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name

Koppers Performance Chemicals Inc.

Address

1016 Everee Inn Rd., Griffin, GA 30224

Telephone number

770-233-4200

Contact person

Regulatory Manager, KPC Inc.

Emergency Telephone

CHEMTREC 1-800-424-9300

Number

E-mail

KPCmgrsds@koppers.com

2. Hazard(s) identification

Physical hazards

Not classified.

Health hazards

Carcinogenicity (Inhalation)

Category 1A

OSHA defined hazards

Combustible dust

Label elements



Signal word

Danger

Hazard statement

May cause cancer by inhalation. May form combustible dust concentrations in air.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Wear protective gloves/protective clothing/eye protection/face protection. Prevent dust accumulation to minimize explosion hazard. Observe good industrial hygiene practices.

Response

If exposed or concerned: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use water fog, foam, carbon dioxide, dry chemical for extinction. Collect spillage.

Storage

Store away from incompatible materials.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Arsenic Pentoxide	1303-28-2	<3
Copper Oxide	1317-39-1	<1.5
Trivalent Chromium	1308-38-9	<3.5
Wood	N/A	<85

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Components not listed are either non-hazardous or are below reportable limits.

Depending on the additives applied to the treating solution, this wood may also contain <1 % of mold inhibitors, <1% of a non-hazardous oil emulsion, and <% of a colorant.

4. First-aid measures**Inhalation**

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately. Some species may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals.

Skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water for several minutes. Prolonged contact with treated wood and/or treated wood dust, especially when freshly treated at the plant, may cause irritation to the skin. Abrasive handling or rubbing of the treated wood may increase skin irritation. Some wood species, regardless of treatment, may cause dermatitis or allergic skin reactions in sensitized individuals. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact

Do not rub eye. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyelids wide apart. If irritation persists get medical attention.

Ingestion

Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed

Wood dust: May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation. Symptoms can include irritation, redness, scratching of the cornea, and tearing. May cause eczema-like skin disorders (dermatitis). Airborne treated or untreated wood dust may cause nose, throat, or lung irritation and other respiratory effects.

Indication of immediate medical attention and special treatment needed

If one ounce of treated wood dust per 10 lbs. of body weight are ingested, acute arsenic intoxication is a possibility.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures**Suitable extinguishing media**

Water fog. Foam. Carbon dioxide (CO₂). Dry chemical powder. Apply extinguishing media carefully to avoid creating airborne dust.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. Depending on moisture content, and more importantly, particle diameter and airborne concentration, wood dust in a contained area may explode in the presence of an ignition source. Wood dust may similarly deflagrate (combustion without detonation like an explosion) if ignited in an open or loosely contained area. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dusts. Reference NFPA Standards- 654 and 664 for guidance. Toxic vapors from wood and preservative may be given off in a fire. Ash will contain free arsenic and chromium and may be toxic.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

May form combustible dust concentrations in air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use only non-sparking tools. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Explosion-proof general and local exhaust ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Do not burn preserved wood. Do not use preserved wood as Mulch. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Keep away from heat, spark, open flames and other sources of ignition. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Type	Value	Form
Wood Dust (CAS N/A)	PEL	5 mg/m ³	Respirable dust.
		15 mg/m ³	Total fraction.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Trivalent Chromium (CAS 1308-38-9)	PEL	0.5 mg/m ³

ACGIH

Components	Type	Value	Form
Wood Dust (CAS N/A)	TWA	1 mg/m ³	Inhalable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value
Arsenic Pentoxide (CAS 1303-28-2)	TWA	0.01 mg/m ³
Trivalent Chromium (CAS 1308-38-9)	TWA	0.5 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Arsenic Pentoxide (CAS 1303-28-2)	Ceiling	0.002 mg/m ³	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Copper Oxide (CAS 1317-39-1)	TWA	1 mg/m ³	Dust and mist.
Trivalent Chromium (CAS 1308-38-9)	TWA	0.5 mg/m ³	
Wood Dust (CAS N/A)	TWA	1 mg/m ³	Dust.

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Arsenic Pentoxide (CAS 1303-28-2)	35 µg/l	Inorganic arsenic, plus methylated metabolites, as As	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear dust-resistant safety goggles with side shields where there is danger of eye contact.

Skin protection

Hand protection

When handling wood, wear leather or fabric gloves.

Other

Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH-approved respirator if there is a potential for exposure to dust exceeding exposure limits (See 29 CFR 1910.134, respiratory protection standard).

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

If wood dust contacts the skin, workers should wash the affected areas with soap and water. Clothing contaminated with wood dust should be removed, and provisions should be made for the safe removal of the chemical from the clothing. Persons laundering the clothes should be informed of the hazardous properties of wood dust. A worker who handles wood dust should thoroughly wash hands, forearms, and face with soap and water before eating, using tobacco products, using toilet facilities, applying cosmetics, or taking medication. Workers should not eat, drink, use tobacco products, apply cosmetics, or take medication in areas where wood dust is handled, or processed.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Solid.
Color	Yellow/green.

Odor Wood odor.

Odor threshold Not available.

pH Not applicable.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Combustible solid.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Highly insoluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Other information	
Density	As wood.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, sparks and open flame. Minimize dust generation and accumulation. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Toxic vapors from wood and preservative may be given off in a fire. Ash will contain free arsenic and chromium and may be toxic.

11. Toxicological information**Information on likely routes of exposure**

Inhalation	Wood dust, treated or untreated, is irritating to the nose, throat and lungs. Prolonged or repeated inhalation of wood dusts may cause respiratory irritation, recurrent bronchitis and prolonged colds. Some species may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals. Prolonged exposure to wood dusts by inhalation has been reported to be associated with nasal and paranasal cancer.
Skin contact	Handling may cause splinters. Prolonged contact with treated wood and/or treated wood dust, especially when freshly treated at the plant, may cause irritation to the skin. Abrasive handling or rubbing of the treated wood may increase skin irritation. Some wood species, regardless of treatment, may cause dermatitis or allergic skin reactions in sensitized individuals.
Eye contact	Dust may irritate the eyes.
Ingestion	Not likely, due to the form of the product. However, ingestion of dusts generated during working operations may cause nausea and vomiting. If one ounce of treated wood dust per 10 lbs. of body weight are ingested, acute arsenic intoxication is a possibility. Certain species of wood and their dusts may contain natural toxins, which can have adverse effects in humans.

Symptoms related to the physical, chemical and toxicological characteristics

Wood dust: May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation. Symptoms can include irritation, redness, scratching of the cornea, and tearing. May cause eczema-like skin disorders (dermatitis). Airborne treated or untreated wood dust may cause nose, throat, or lung irritation and other respiratory effects.

Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	Dust may irritate skin.
Serious eye damage/eye irritation	Dust may irritate the eyes.

Respiratory or skin sensitization

ACGIH Sensitization

Wood (CAS N/A)

Dermal sensitization

Respiratory sensitization

Respiratory sensitization

Exposure to wood dusts can result in hypersensitivity,

Skin sensitization

Exposure to wood dust can result in the development of contact dermatitis. The primary irritant dermatitis resulting from skin contact with wood dusts consist of erythema, blistering, and sometimes erosion and secondary infections occur.

Germ cell mutagenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a mutagen by OSHA.

Carcinogenicity

May cause cancer by inhalation.

This classification is based on an increased incidence of nasal and paranasal cancers in people exposed to wood dusts.

IARC Monographs. Overall Evaluation of Carcinogenicity

Arsenic Pentoxide (CAS 1303-28-2)

1 Carcinogenic to humans.

Trivalent Chromium (CAS 1308-38-9)

3 Not classifiable as to carcinogenicity to humans.

Wood (CAS N/A)

1 Carcinogenic to humans.

NTP Report on Carcinogens

Arsenic Pentoxide (CAS 1303-28-2)

Known To Be Human Carcinogen.

Wood Dust (CAS N/A)

Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Arsenic Pentoxide (CAS 1303-28-2)

Cancer

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Not likely, due to the form of the product.

Chronic effects

Chronic exposure to wood dusts can result in pneumonitis, and coughing, wheezing, fever and the other signs and symptoms associated with chronic bronchitis. Individuals with pre-existing disease in or a history of ailments involving the skin, kidney, liver, respiratory tract, eyes, or nervous system are at a greater than normal risk of developing adverse effects from woodworking operations with this product.

Further information

The effects of industrial exposure to the chrome-copper-arsenic preservative used to treat CCA wood has been evaluated in three independent epidemiology studies. In each case the authors concluded that workers exposed on a daily basis to these preservatives were at no increased risk of death or disease as a result of their exposure.

Recreational exposure to children using CCA treated wood playground equipment has been evaluated. The results of this study indicate that the amount of arsenic transferred from the wood surface to the child is within the normal variation of total arsenic exposure to children and that the maximum risks of skin cancer associated with the exposure approximates the skin cancer risk from the sunlight experienced during play periods. Leaf, stem, and fruit of grape plants grown adjacent to CCA treated wood poles did not take up preservative components from the poles above background levels (limit of detection 0.2 and 0.05 ppm for chrome and arsenic, respectively).

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available on bioaccumulation.

Mobility in soil

The product is insoluble in water.

Mobility in general

The product is not volatile but may be spread by dust-raising handling.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. DO NOT BURN! Ash may be toxic and a hazardous waste; combustion vapors may be toxic. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste P List: Reference

Arsenic Pentoxide (CAS 1303-28-2) P011

Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are listed on or exempt from the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Arsenic Pentoxide (CAS 1303-28-2) Cancer
Liver
Skin
Respiratory irritation
Nervous system
Acute toxicity

CERCLA Hazardous Substance List (40 CFR 302.4)

Arsenic Pentoxide (CAS 1303-28-2) LISTED
Copper Oxide (CAS 1317-39-1) LISTED
Trivalent Chromium (CAS 1308-38-9) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Arsenic Pentoxide	1303-28-2	1		100	10000

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Arsenic Pentoxide	1303-28-2	<3
Copper Oxide	1317-39-1	<1.5
Trivalent Chromium	1308-38-9	<3.5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Arsenic Pentoxide (CAS 1303-28-2)
Trivalent Chromium (CAS 1308-38-9)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Arsenic Pentoxide (CAS 1303-28-2)
Trivalent Chromium (CAS 1308-38-9)

US. New Jersey Worker and Community Right-to-Know Act

Arsenic Pentoxide (CAS 1303-28-2)
Copper Oxide (CAS 1317-39-1)
Trivalent Chromium (CAS 1308-38-9)
Wood Dust (CAS N/A)

US. Pennsylvania Worker and Community Right-to-Know Law

Arsenic Pentoxide (CAS 1303-28-2)
Trivalent Chromium (CAS 1308-38-9)
Wood Dust (CAS N/A)

US. Rhode Island RTK

Arsenic Pentoxide (CAS 1303-28-2)
Copper Oxide (CAS 1317-39-1)
Trivalent Chromium (CAS 1308-38-9)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Wood Dust (CAS N/A)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-April-2015
Revision date 01-June-2015
Version # 02

Further information

HMIS® is a registered trade and service mark of the NPCA.
E - Safety Glasses, Gloves, Dust Respirator

PERCENTAGE OF HAZARDOUS INGREDIENTS COMPONENT %:

0.25 pcf

Arsenic Pentoxide 0.3%, Copper Oxide 0.15%, Chromium Trioxide 0.4%, Wood Dust* 84.28%

0.4 pcf

Arsenic Pentoxide 0.4%, Copper Oxide 0.2%, Chromium Trioxide 0.6%, Wood Dust* 83.98%

0.6 pcf

Arsenic Pentoxide 0.6%, Copper Oxide 0.3%, Chromium Trioxide 0.9%, Wood Dust* 83.47%

1.0 pcf

Arsenic Pentoxide 1.0%, Copper Oxide 0.6%, Chromium Trioxide 1.4%, Wood Dust* 82.45%

2.5 pcf

Arsenic Pentoxide 2.6%, Copper Oxide 1.3%, Chromium Trioxide 3.3%, Wood Dust* 78.88%

* This represents the maximum amount of wood dust that could be generated if the wood was completely machined.

The above percentages are based on the applicable retention, a wood density of 32 pcf., and a moisture content of 15%, the above values may vary due to the variability of treatment and the natural variability of wood.

HMIS® ratings

Health: 1*

Flammability: 1

Physical hazard: 0

Personal protection: E

NFPA ratings



Disclaimer

Koppers Performance Chemicals Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Coastal Vulnerability Assessment

Prepared for:

**Robert A. Pruyn Revocable Trust
10 Gerry's Lane
Dover, New Hampshire 03820**

Prepared By:

**Ambit Engineering, Inc
200 Griffin, Unit 3
Portsmouth, New Hampshire 03801**



AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors

Introduction

This Coastal Vulnerability Assessment (CVA) is being provided in support of a New Hampshire Department of Environmental Services (NHDES) Wetland Permit Application for the construction of a tidal docking structure at 10 Gerry's Lane, Dover, NH (herein referred to as "project site"). The project site is a residential lot located on the southern end of Gerry's Lane and to the north of the Cocheco River with one occupied residential dwelling. The surrounding land use is residential with similar docking structures.

Methods

On September 23 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 Hampshire 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 the construction of a tidal docking structure on the residential lot adjacent to the Cocheco River. The purpose for the docking structure is to provide the applicant with recreational boating access to the Cocheco River. For more details regarding construction of the docking structure 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 10 Gerry's Lane, Dover, NH, Tax Map N, Lot 22-C-8 and consists of 1.46 acres of residential upland and 80+/- of shoreline frontage along the Cocheco River. Access to the project site will be from Gerry's Lane for the staging of equipment, and the Cocheco River for the staging of the barge to be used for dock and pile installation.

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 it is a docking structure which has 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 docking structure has a relatively low cost, is relatively easy to modify, proposes little to no implications on public function and/or safety; and has relatively low sensitivity to inundation, as docks are designed to withstand fluctuating tidal conditions including storm surge.

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 sea level rise from 2000 through 2150.

Table 3 from the Guidance Document:

Risk Tolerance	High	Medium	Low	Extremely Low
Example Project	Walking Trail *Docking structure & Stone Revetment	Local Road Culvert	Wastewater Treatment Facility	Hospital
Timeframe	Manage to the following sea level rise (ft*) Compared to the sea level in the year 2000			
	Lower magnitude Higher probability			Higher magnitude 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

Please see the attached Figure 1 – Projected SLR's; which depicts the project site and relevant Highest Observable Tide Line (HOTL), MHHW, and the projected SLR's for the year 2100. 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 fixed pier will be constructed at elevation 13. The projected sea level rise in year 2100 is 2.9 feet resulting in future HOTL elevation of 10.56 feet. MHW and projected SLR is depicted in the profile view on Details-Sheet D1 in relation to the proposed dock elevation.

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 project's position in the landscape was also considered relative to other infrastructure. The closest surface water to the project site is the adjacent Cocheco River, projections of RSLR of which have already been depicted and discussed. There are no current restrictions on the project site or associated with the proposed project. The HOTL associated with the project site is located approximately at elevation 7.66. Considering a 2.9 foot RSLR in the year 2100 resulting in an elevation of 10.56, and the proposed tidal docking structure constructed at elevation 13, the structure will function as intended throughout the expected useful life of the residential structure they will serve, simply by the means in which it will be constructed.

4.1 – RSLR and Coastal Storms

Due to the project site location being immediately adjacent to the Cocheco River, it is anticipated that RSLR and storm surge on the proposed project site will be comparable to adjacent properties with similar docking 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 method in which tidal docks are 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 method in which tidal docks are 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 project provides a structure that has a water dependent use, we do not believe groundwater rise should be a strong consideration.

5.2 – Projected Groundwater Depth at the Project Location

Based on knowledge of the site and soil morphology of the site, groundwater depth (Estimated Seasonal High Water Table) is between 20-25” below the soil surface.

6.1 – Best Available Precipitation Estimates

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

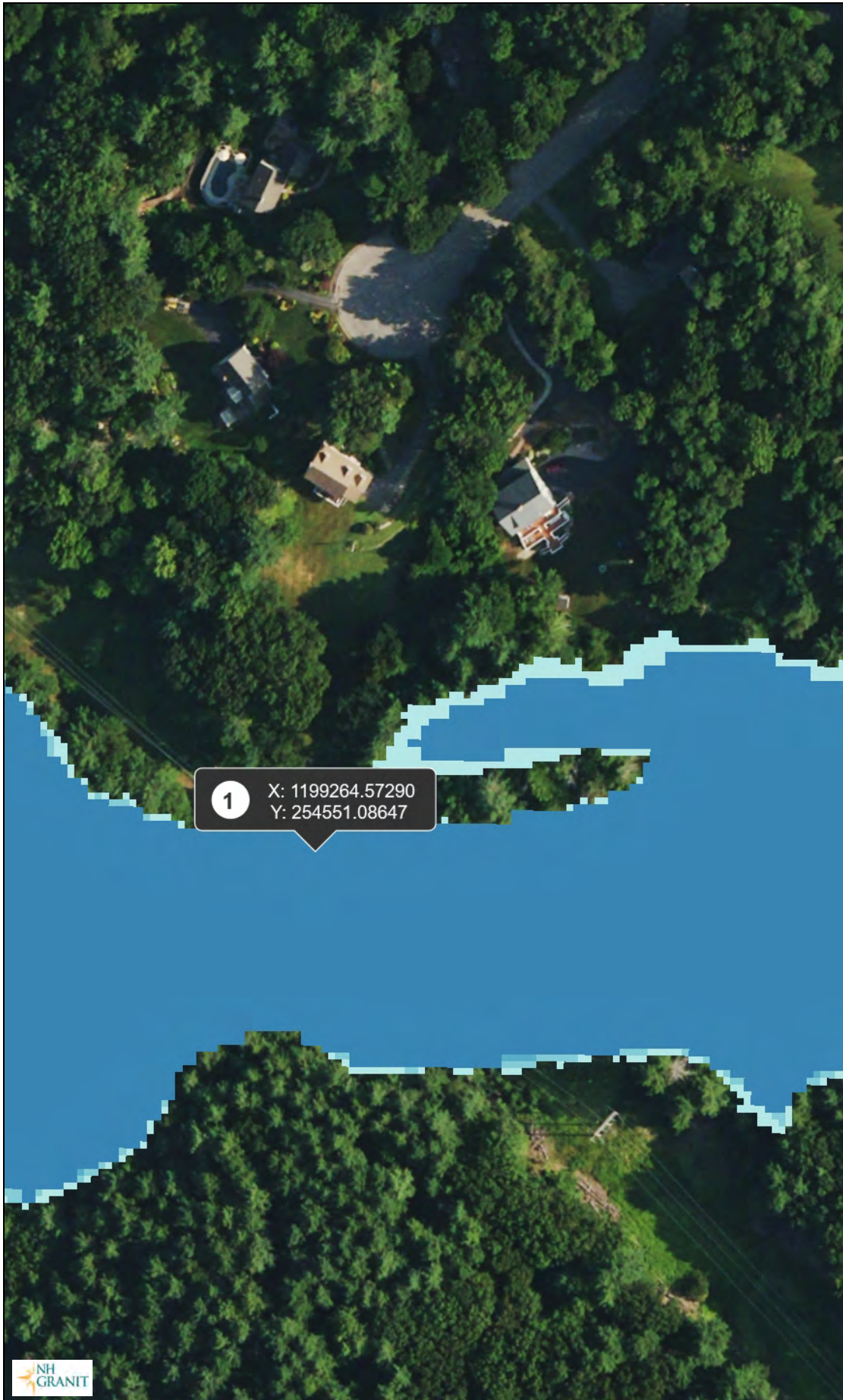
7.1 – Cumulative Coastal Flood Risk to the Project

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 docking structure. The projected SLR scenario through 2100 is 2.9’ (See profile view on Sheet D1), and the proposed docking structure has been designed to account for this projection.

Map by NH GRANIT



Legend

MHHW + 1-ft SLR

- 0 - 2
- 2 - 4
- 4 - 6
- 6 - 8
- 8 - 10

Coastal 2019 1-foot RGB
World Imagery
Low Resolution 15m Imager
High Resolution 60cm Imager
High Resolution 30cm Imager
Citations
60cm Resolution Metadata

Map Scale

1: 1,624

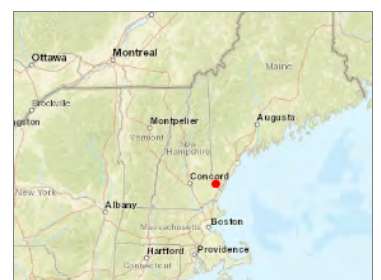
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Map Generated: 10/6/2022

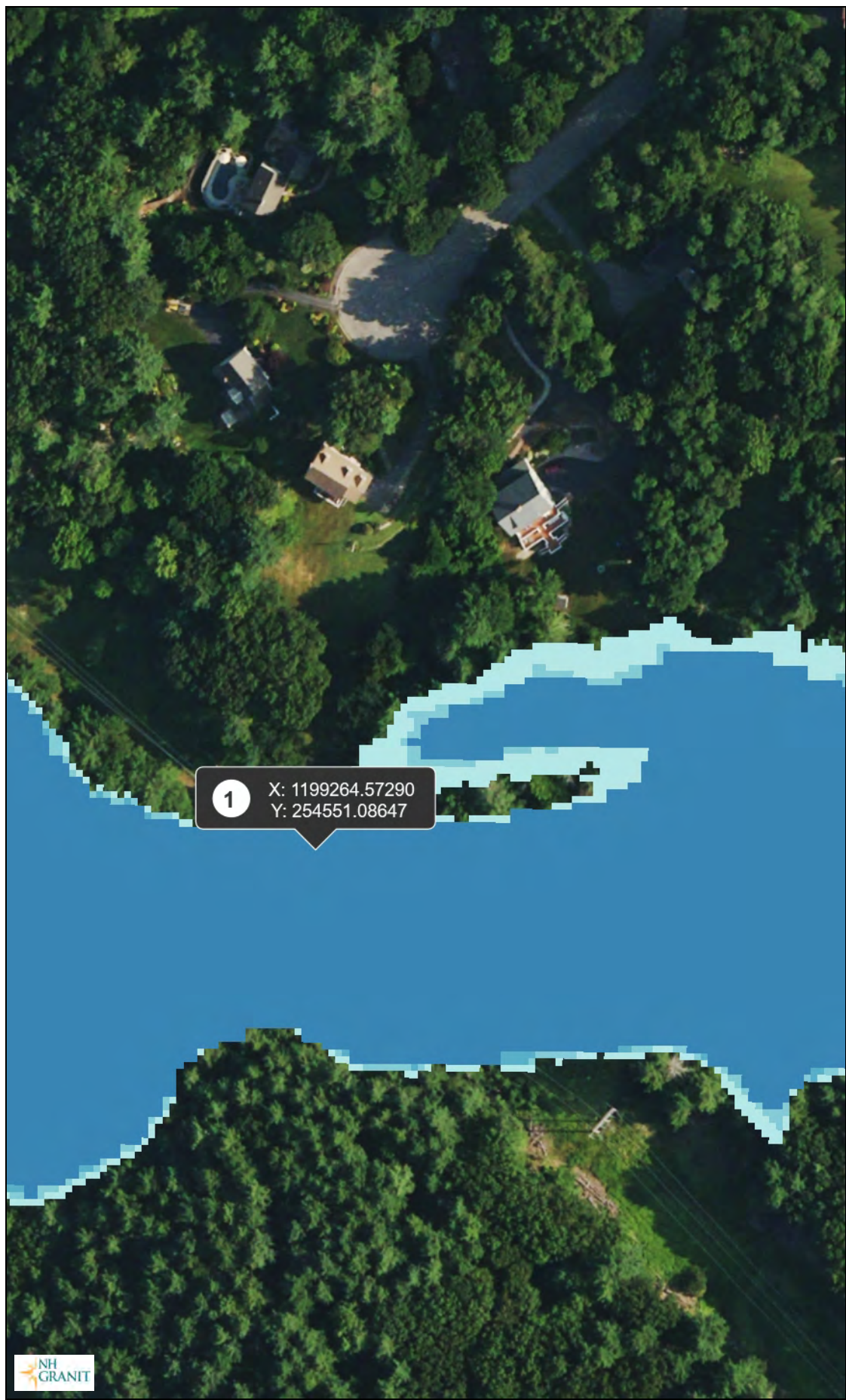


Notes

1 foot SLR



Map by NH GRANIT



Legend

MHHW + 2-ft SLR

- 0 - 2
- 2 - 4
- 4 - 6
- 6 - 8
- 8 - 10
- 10 +

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager

High Resolution 60cm Imager

High Resolution 30cm Imager

Citations

60cm Resolution Metadata

Map Scale

1: 1,624

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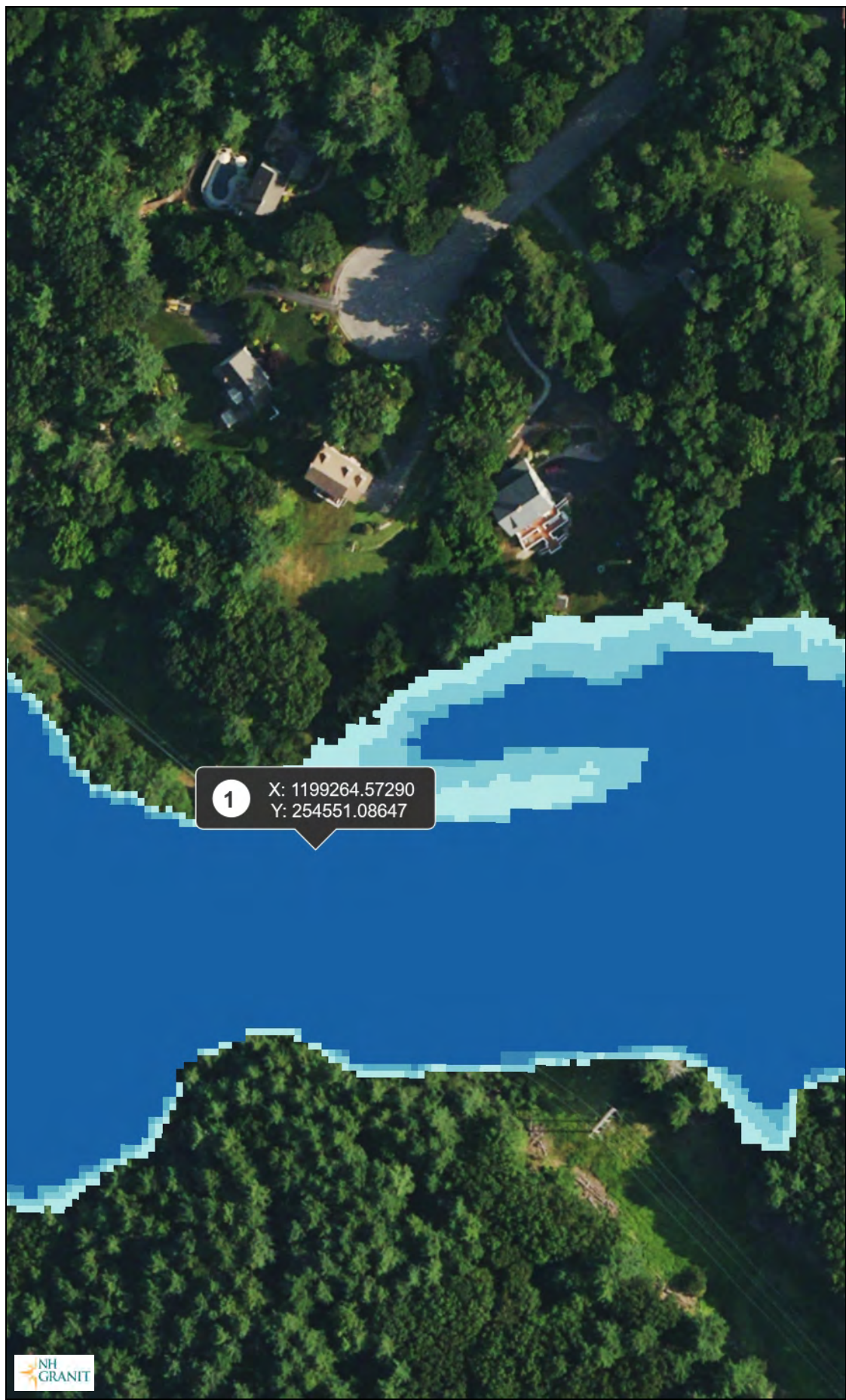


Notes

2 foot SLR



Map by NH GRANIT



Legend

MHHW + 4-ft SLR

- 0 - 2
- 2 - 4
- 4 - 6
- 6 - 8
- 8 - 10
- 10 +

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager

High Resolution 60cm Imager

High Resolution 30cm Imager

Citations

60cm Resolution Metadata

Map Scale

1: 1,624

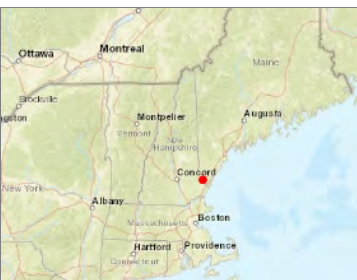
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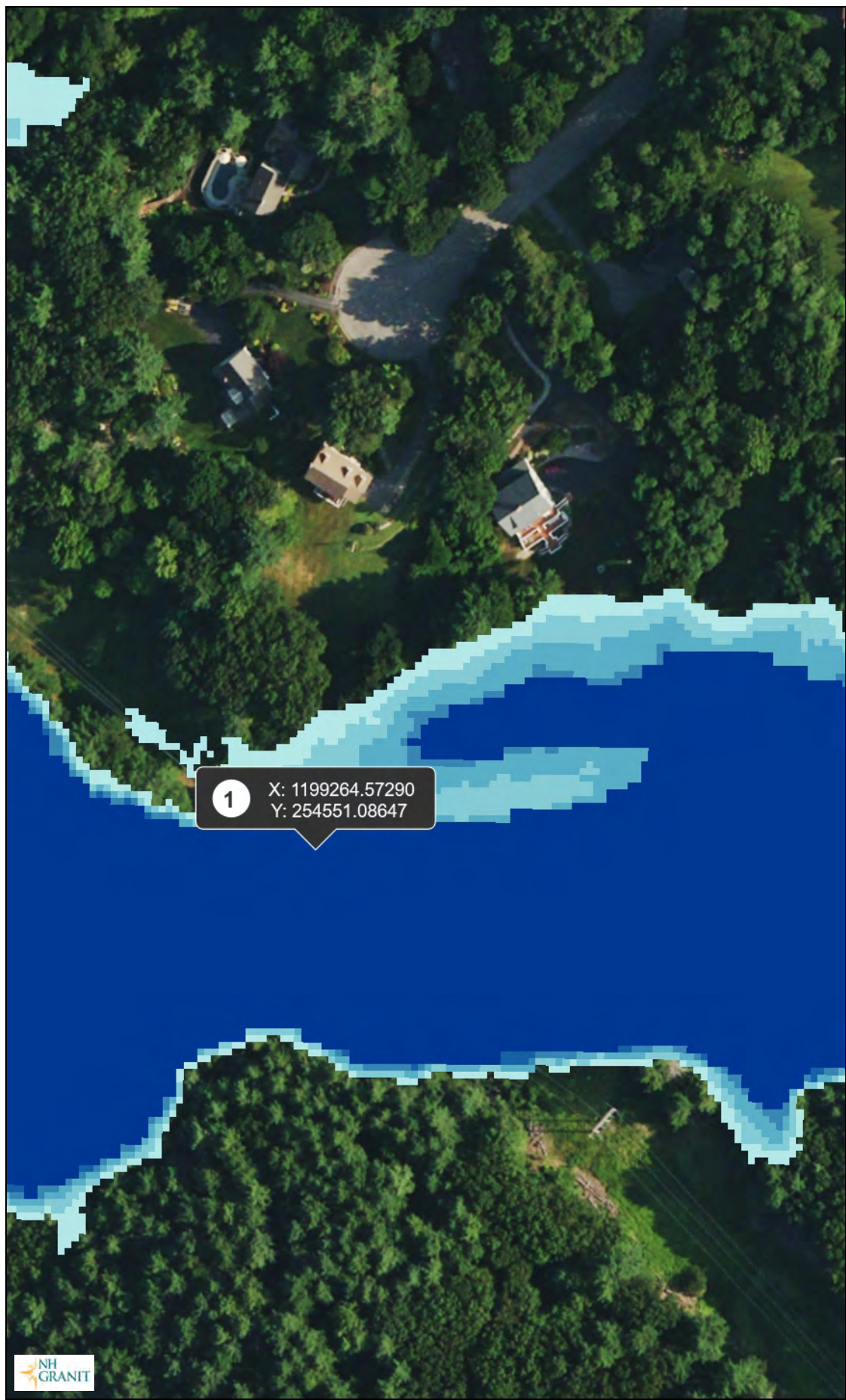


Notes

4 foot SLR



Map by NH GRANIT



Legend

MHHW + 6-ft SLR

- 0 - 2
- 2 - 4
- 4 - 6
- 6 - 8
- 8 - 10
- 10 +

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager

High Resolution 60cm Imager

High Resolution 30cm Imager

Citations

60cm Resolution Metadata

Map Scale

1: 1,624

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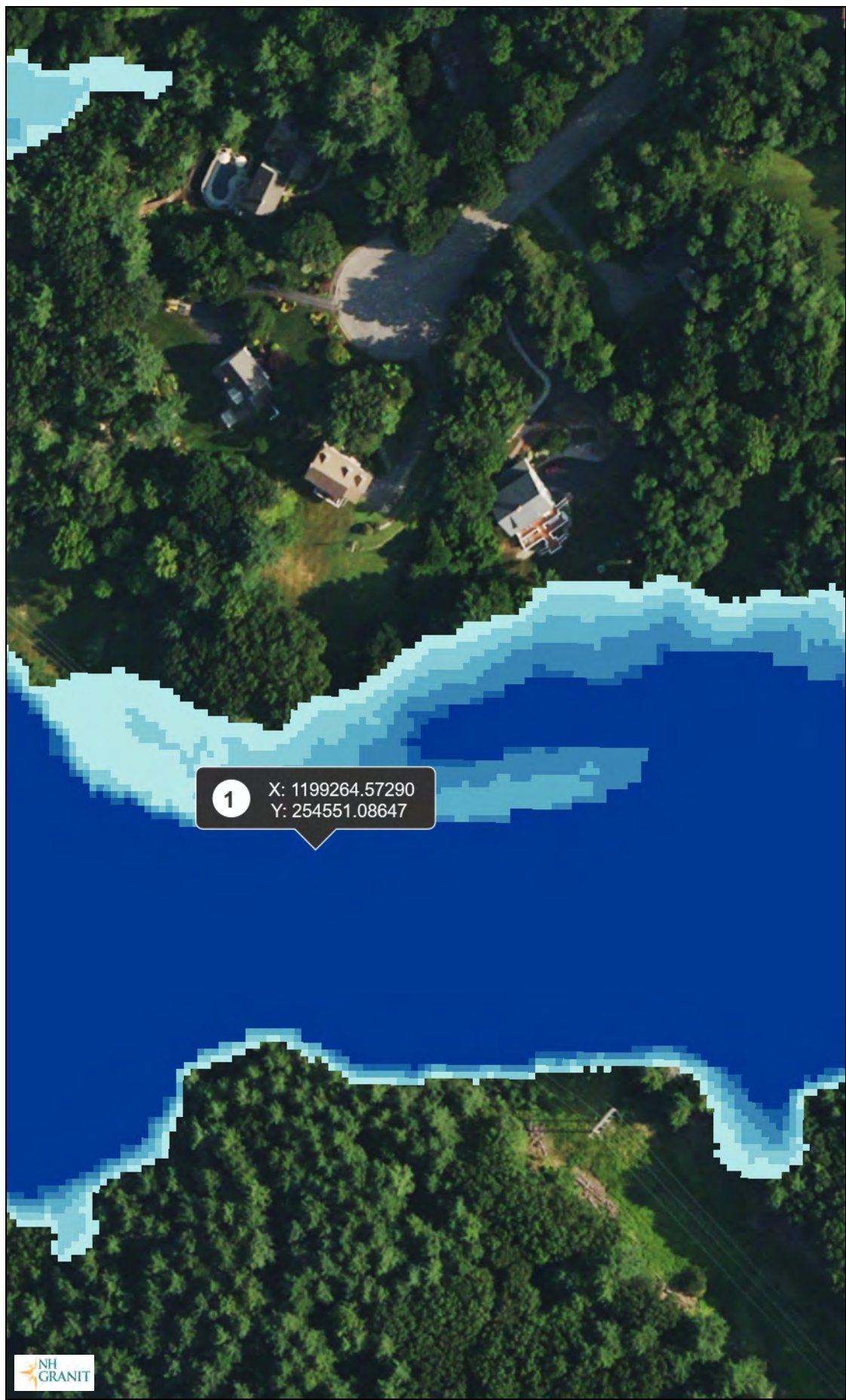


Notes

6 foot SLR



Map by NH GRANIT



Legend

MHHW + 8-ft SLR

- 0 - 2
- 2 - 4
- 4 - 6
- 6 - 8
- 8 - 10
- 10 +

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager

High Resolution 60cm Imager

High Resolution 30cm Imager

Citations

60cm Resolution Metadata

Map Scale

1: 1,624

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Map Generated: 10/6/2022



Notes

8 foot SLR



Extreme Precipitation Tables

Northeast Regional Climate Center

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

Smoothing	Yes
State	
Location	
Longitude	70.745 degrees West
Latitude	43.071 degrees North
Elevation	0 feet
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		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.04	1yr	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	1yr
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	4.79	500yr	3.02	4.40	5.79	7.72	10.23	13.47	16.13	500yr	11.92	15.51	17.68	19.77	21.47	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	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	1yr
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	1.90	25yr	1.35	1.86	2.10	2.75	3.52	4.74	5.87	25yr	4.20	5.64	6.62	7.77	8.66	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	1.96	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		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.29	0.44	0.54	0.72	0.89	1.09	1yr	0.77	1.06	1.26	1.74	2.20	2.97	3.17	1yr	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	1.96	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	3.83	100yr	2.57	3.74	4.39	6.18	7.81	12.11	13.17	100yr	10.72	12.66	14.41	15.74	17.13	100yr
200yr	0.93	1.40	1.77	2.57	3.58	4.68	200yr	3.09	4.57	5.36	7.61	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

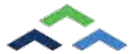
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Prepared By:

**Ambit Engineering, Inc. Haley Ward
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Portsmouth, New Hampshire 03801**



AMBIT ENGINEERING, INC.
A DIVISION OF HALEY WARD, INC. 

Date: August 29, 2023



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APPENDICES

- Appendix A Wetland Function-Value Evaluation Form
- Appendix B Photo Log
- Appendix C NH Natural Heritage Bureau Letter



INTRODUCTION

The applicant is performing a tidal docking structure installation at 10 Gerry's Lane, Dover, New Hampshire. The project site is identified on Dover Tax Map N as Lot 22-C-8 and is approximately 1.46 acres in size. As currently designed, the proposed project would require impacts to tidal wetlands and the 100' previously developed Tidal Buffer Zone (TBZ).

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 Cocheco 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 surveys and review of existing information. Ambit Engineering, Inc. (Ambit) conducted site visits in September 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 effects 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*. 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 aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

- **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 and the Cocheco 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 tidal wetland does provide fish and shellfish habitat, is associated with the Cocheco River and the Atlantic Ocean; 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 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. This project proposes a stabilization solution including a vegetative component to stabilize the shoreline resulting in a more “soft” design.

Wildlife Habitat

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

Recreation (Consumptive and Non-Consumptive)

The greater tidal wetland and Cocheco River provide 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 tidal wetland and the Cocheco 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 Cocheco 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 Cocheco River provides aesthetically pleasing coastal views that are viewable from surrounding uplands as well as from the water, making this a principal value.

Endangered Species Habitat

An online inquiry with the NHB resulted in the possible occurrence of eastern grasswort and seaside brookweed. The site has been surveyed for both species and both plant communities have been survey located and depicted on the plan set. The project design has been altered to avoid impacts to both plant communities through coordination with the NH Natural Heritage Bureau. Given that the site provides habitat for two state endangered species, this is a principal value.



PROPOSED IMPACTS

This report is accompanying a New Hampshire Department of Environmental Services (NHDES) Minor Impact Wetland Permit Application request to permit 446 sq. ft. of permanent impact to tidal wetland, and 20 sq. ft. of permanent impact to the previously developed 100' Tidal Buffer Zone for the construction of a tidal dock on the subject parcel.

SUMMARY AND CONCLUSIONS

The jurisdictional tidal wetland is part of a large marine system and provides twelve 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, nutrient removal/retention, sediment/toxicant retention, wildlife habitat, recreation, education/scientific value, uniqueness/heritage, visual quality aesthetics and endangered species habitat. While the entire marine system provides these principal functions and values, the proposed impacts associated with the shoreline stabilization installation 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 project 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 project 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.

The proposed dock placement along the shoreline has been designed to impact the least amount of saltmarsh which occurs along the properties shoreline. Additionally, to avoid impacts to the state endangered plant species which are present along the shoreline, the pile sets used to support the fixed pier structure have been placed to avoid direct impact to the plant communities, the pier elevation was increased to allow more sunlight to the substrate and the use of Thru-Flow decking will be used where the pier is placed over the plant communities to allow more sunlight underneath the structure. These conservation measures were the result of coordination with NH Natural heritage Bureau to ensure reduction of potential impacts to the sensitive species to the greatest extent possible.

Based on our assessment of the current functions and values, the proposed tidal docking design & placement and the conservation measures described above; 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 current 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 Cocheco River.		File number: 3402.27	
		Wetland identifier: Wetland A	
		Latitude:X:1,199,262.68 75	Longitude:Y:254,556. 5254
		Preparer(s): Ambit Engineering, Inc.	
		200 Griffin Road	
		Date: August 29, 2023	

Function/Value	Capability Y 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 the Cocheco 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 the Cocheco 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 immediate tidal wetland contains dense vegetation and a source of sediments and toxicants, therefore a principal function.	Y
 Nutrient Removal	X		The immediate tidal wetland contains dense vegetation and a source of nutrients, therefore a principal function.	Y
 Production Export	X		Because the 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. The project proposes to stabilize the shoreline with a more structurally stable design.	Y
 Wildlife Habitat	X		The greater tidal wetland and the Cocheco River provides a variety of coastal and marine habitat, therefore would be considered a principal function.	Y
 Recreation	X		The adjacent 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 tidal wetland and the Cocheco 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 the Cocheco River are unique to the seacoast area. Additionally, there are pre and post-colonial historical components associated with the Cocheco River and the surrounding areas making this a principal value.	Y
 Visual Quality/Aesthetics	X		The Cocheco 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 the occurrences of a sensitive species near the project area. Ambit Engineering performed a survey and confirmed the presence of two state endangered species.	Y
Other				



APPENDIX B

PHOTO LOG

Site Photograph #1

September 2022



Site Photograph #2

September 2022



Site Photograph #3

September 2022



Site Photograph #4

September 2022





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: 3/9/2023 (valid until 03/09/2024)

Re: Review by NH Natural Heritage Bureau

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

NHB ID: NHB23-0655 Town: Dover Location: 10 Gerry's Lane
Description: The project proposes a tidal docking structure consisting of a 4' x 30' fixed wood pier, a 3' x 42' gangway and a 10' x 20' float secured by helical moorings and chains to provide recreational boating access to the Cocheco River.

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

Comments **NHB:** Please send NHB representative photos during the growing season and proposed conditions plans. NHB may request surveys for the rare plants listed on the DataCheck Letter.
F&G: No comments at this time.

Natural Community	State ¹	Federal	Notes
Low brackish riverbank marsh	--	--	
Plant species	State ¹	Federal	Notes
eastern grasswort (<i>Lilaeopsis chinensis</i>)	E	--	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.
seaside brookweed (<i>Samolus parviflorus</i>)	E	--	Occurs on river and streambanks, as well as estuarine and seashore habitats. Threats include direct destruction of the plants and major alterations of their habitat.

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.

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.

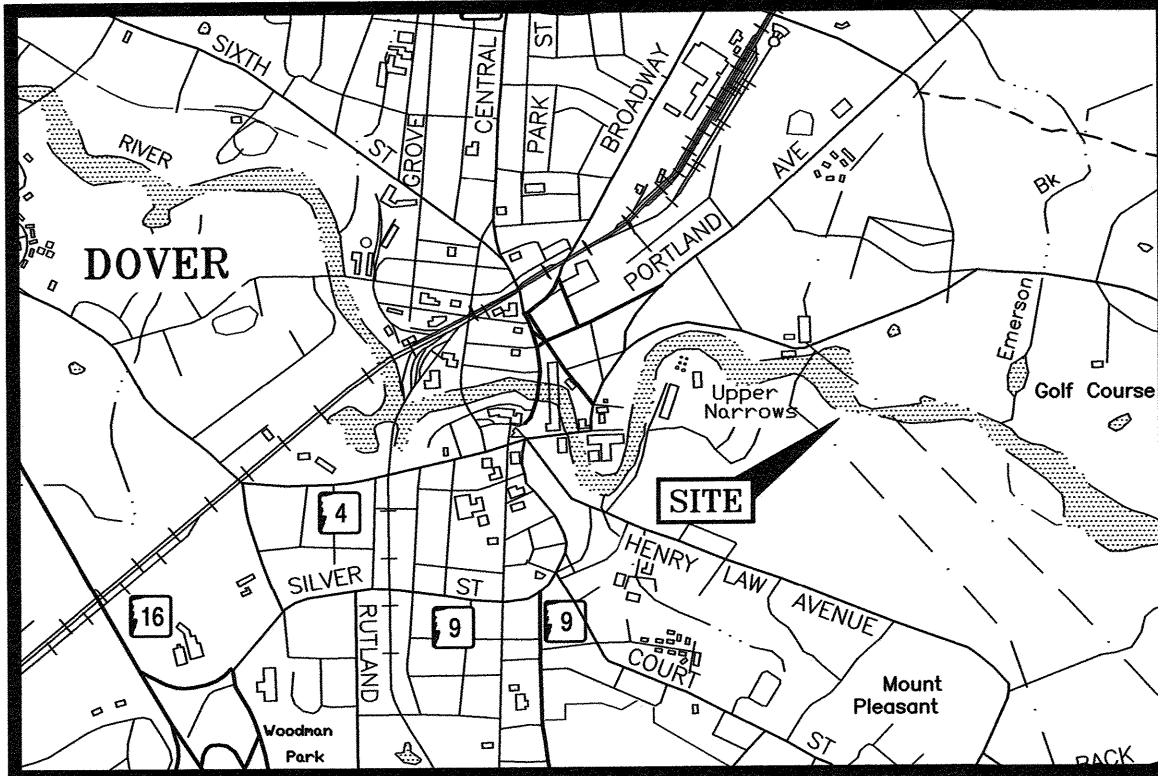
IMPORTANT: NHFG Consultation

If this NHB Datacheck letter DOES NOT include ANY 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 rule, 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.



LOCATION MAP

SCALE 1"=2,000'

LEGEND:

N/F	NOW OR FORMERLY
RP	RECORD OF PROBATE
SCRD	STRAFFORD COUNTY REGISTRY OF DEEDS
11/21	MAP 11 / LOT 21
O	IRON ROD/IRON PIPE FOUND
---	BOUNDARY
---	MEAN HIGH WATER LINE
---	MEAN LOW WATER LINE
---	NH DES HIGHEST OBSERVABLE TIDE LINE
---	FRESHWATER WETLAND LINE
100	CONTOUR
97x3	SPOT ELEVATION
---	WOODS / TREE LINE
---	MARSH GRASS
---	FRESH WATER WETLAND
EL.	ELEVATION
INV.	INVERT
TBM	TEMPORARY BENCHMARK
TYP.	TYPICAL

ADDITIONAL ABUTTERS:

N 28-C-3	N 28-C-4
N/F WILLIAM S. & KRISTINE M. BABER 5 GERRY'S LANE DOVER, NH 03820 2116/303	N/F SCOTT M. & BETSY H. BREEN 7 GERRY'S LANE DOVER, NH 03820 3266/624
N 23	K 4-C
N/F PUBLIC SERVICE CO. OF NH P.O. BOX 330 MANCHESTER, NH 03105-0330	N/F CITY OF DOVER 288 CENTRAL AVENUE DOVER, NH 03820

PLAN REFERENCE:

1) SUBDIVISION PLAN GERRY'S LANDING COCHECO STREET DOVER, NEW HAMPSHIRE. PREPARED BY CIVIL CONSULTANTS ENGINEERING & PLANNING. SCALE: 1"=100'. DATED 4 OCT. 1989. REGISTRY OF DEEDS STRAFFORD COUNTY PLAN 37A-88.

WETLAND NOTES:

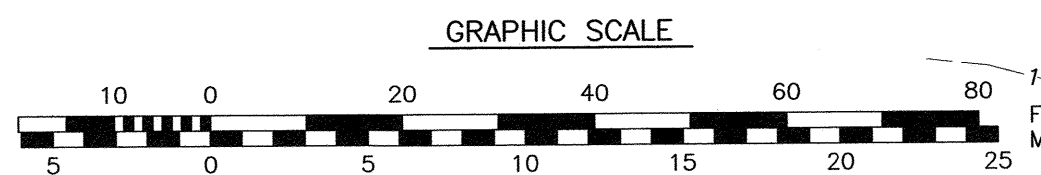
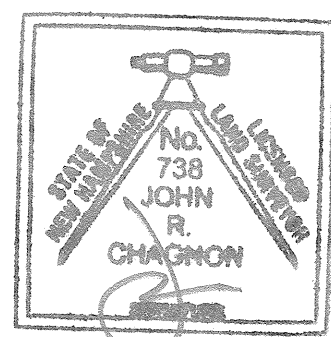
- HIGHEST OBSERVABLE TIDE LINE & WETLAND LINES DELINEATED BY STEVEN D. RIKER, CWS ON 9/23/22 IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 - U.S. ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 (JAN. 1987), AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012.
 - FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 8.2, USDA-NRCS, 2018 AND (FOR DISTURBED SITES) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4. NEIWPCC WETLANDS WORK GROUP (2019).
 - NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST (REGION 1). USFWS (MAY 1988).
 - CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. USFW MANUAL FWS/OBS-79/31 (1997).
 - "IDENTIFICATION AND DOCUMENTATION OF VERNAL POOLS IN NEW HAMPSHIRE" (1997). NEW HAMPSHIRE FISH AND GAME DEPARTMENT.
- WETLANDS & HOTL WERE FIELD LOCATED BY AMBIT ENGINEERING, INC.

"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."

JOHN R. CHAGNON, LLS #738

DATE

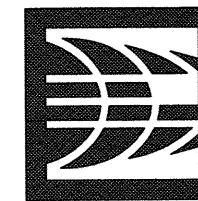
9.6.23



COCHECO RIVER

MUD FLAT (E2US3N)

MLLW



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:

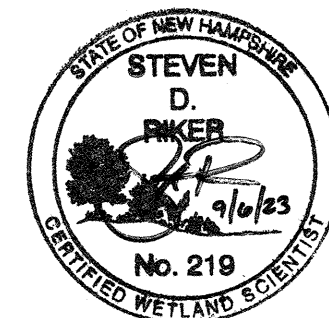
- PARCEL IS SHOWN ON THE CITY OF DOVER'S ASSESSOR'S MAP N AS LOT 22-C-8.
- OWNER OF RECORD:
ROBERT A. PRUYN REVOCABLE TRUST
ROBERT A. PRUYN, TRUSTEE
10 GERRY'S LANE
DOVER, NH 03820
4356/641
- PARCEL IS PARTIALLY IN A SPECIAL FLOOD HAZARD AREA (ZONE A) AS SHOWN ON FIRM PANEL 33017C0330E. EFFECTIVE DATE SEPTEMBER 30, 2015.
- EXISTING LOT AREA:
63,602 S.F. ± (TO MHW)
1.460 ACRES ± (TO MHW)
- PARCEL IS LOCATED IN THE RURAL RESIDENTIAL (R-40) ZONING DISTRICT.
- DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA:	40,000 S.F.
FRONTAGE:	150 FEET
SETBACKS:	FRONT 40 FEET SIDE 25 FEET REAR 30 FEET
MAXIMUM STRUCTURE HEIGHT: 35 FEET	
- THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON A PORTION OF ASSESSOR'S MAP N LOT 22-C-8 IN THE CITY OF DOVER.
- VERTICAL DATUM IS MEAN LOWER LOW WATER (MLLW). MLLW REFERENCED TO NOAA STATION 8420411 DOVER, COCHECO RIVER, NEW HAMPSHIRE, MLLW BEING 3.93' LOWER THAN 0.0 NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.
- THIS IS NOT A BOUNDARY SURVEY. BOUNDARY LINES AS SHOWN ARE BASED ON THE REFERENCE PLANS LISTED HEREON. NO DEED RESEARCH OR BOUNDARY DETERMINATION WAS MADE TO CONFIRM OR REFUTE MATTERS SHOWN ON SAID PLANS FOR THE PURPOSES OF THIS PLAN. EASEMENTS, RESERVATIONS, ETC. THAT MAY EXIST ARE NOT SHOWN OR NOTED HEREON.

PRUYN RESIDENCE
10 GERRY'S LANE
DOVER, N.H.

NO.	DESCRIPTION	DATE
2	REMOVE SHED	9/6/23
1	ADD PROTECTED SPECIES LOCATION	6/8/23
0	ISSUED FOR COMMENT	12/16/22

REVISIONS



SCALE: 1" = 20' NOVEMBER 2022

EXISTING CONDITIONS
PLAN

C1

SEQUENCE OF CONSTRUCTION

- 1) MOBILIZATION OF A CRANE BARGE, PUSH BOAT, WORK SKIFF, MATERIALS AND PREFABRICATED COMPONENTS SUCH AS THE GANGWAY AND FLOAT TO THE SITE VIA APPROVED ACCESS.
- 2) MOBILIZATION OF EQUIPMENT TRUCKS TO THE SITE.
- 3) THE BARGE WILL BE POSITIONED ALONGSIDE THE PROPOSED LOCATION OF THE NEW DOCK AND WATERWARD OF ANY EMERGENT VEGETATION TO MINIMIZE IMPACTS
- 4) INSTALLATION OF THE SUB STRUCTURE WILL BE PERFORMED FROM A CRANE BARGE OR SKIFF TO REDUCE THE AMOUNT OF FOOT TRAFFIC IN THE INTERTIDAL AREA.
- 5) ALL WORK WILL BE PERFORMED AT LOW TIDE TO MINIMIZE SEDIMENTATION.
- 6) PILINGS WILL BE MECHANICALLY DRIVEN BY A CRANE ELIMINATING ANY EXCAVATION FOR INSTALLATION OF THE PILINGS. PILING ARE DRIVEN TO REFUSAL.
- 7) PILINGS ARE CUT AND BEAM CAPS ARE INSTALLED AND THE SUPER STRUCTURE OF THE PIER IS BUILT. MATERIALS ARE LIFTED FROM THE BARGE AND SET INTO POSITION BY THE CRANE.
- 8) ONCE THE PIER IS COMPLETE, THE GANGWAY AND FLOAT ARE BROUGHT INTO POSITION AND INSTALLED.

DISCHARGES, AVOIDANCE, MINIMIZATION AND MITIGATION

DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE U.S. AND ANY SECONDARY IMPACTS SHALL BE AVOIDED AND MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE. PERMITTEES MAY ONLY FILL THOSE JURISDICTIONAL WETLANDS AND WATERWAYS THAT THE CORP AND NHDES AUTHORIZES TO BE FILLED AND IMPACT THOSE AREAS THAT THE CORPS AND AND NHDES AUTHORIZES AS SECONDARY IMPACTS. IF NOT SPECIFICALLY AUTHORIZED BY USACOE AND AND NHDES, ANY UNAUTHORIZED FILL OR SECONDARY IMPACT TO WETLANDS MAY BE CONSIDERED AS A VIOLATION OF THE CWA.

UNLESS SPECIFICALLY AUTHORIZED USACOE AND AND NHDES, NO WORK SHALL DRAIN A WATER OF THE U.S. BY PROVIDING A CONDUIT FOR WATER ON OR BELOW THE SURFACE.

HEAVY EQUIPMENT IN FRESH WATER WETLANDS

HEAVY EQUIPMENT OTHER THAN FIXED EQUIPMENT (DRILL RIGS, FIXED CRANES, ETC.) WORKING IN WETLANDS SHALL NOT BE STORED, MAINTAINED OR REPAIRED IN WETLANDS, UNLESS IT IS LESS ENVIRONMENTALLY DAMAGING OTHERWISE, AND AS MUCH AS POSSIBLE SHALL NOT BE OPERATED WITHIN THE INTERTIDAL ZONE. WHERE CONSTRUCTION REQUIRES HEAVY EQUIPMENT OPERATION IN WETLANDS, THE EQUIPMENT SHALL EITHER HAVE LOW GROUND PRESSURE (<3 PSI), OR SHALL NOT BE LOCATED DIRECTLY ON WETLAND SOILS AND VEGETATION; IT SHALL BE PLACED ON SWAMP MATS THAT ARE ADEQUATE TO SUPPORT THE EQUIPMENT IN SUCH A WAY AS TO MINIMIZE DISTURBANCE OF WETLAND SOIL AND VEGETATION. SWAMP MATS ARE TO BE PLACED IN THE WETLAND FROM THE UPLAND OR FROM EQUIPMENT POSITIONED ON SWAMP MATS IF WORKING WITHIN A WETLAND. DRAGGING SWAMP MATS INTO POSITION IS PROHIBITED. OTHER SUPPORT STRUCTURES THAT ARE LESS IMPACTING AND ARE CAPABLE OF SAFELY SUPPORTING EQUIPMENT MAY BE USED WITH WRITTEN CORPS AND NHDES AUTHORIZATION. SIMILARLY, NOT USING MATS DURING FROZEN, DRY OR OTHER CONDITIONS MAY BE ALLOWED WITH WRITTEN CORPS AND NHDES AUTHORIZATION. AN ADEQUATE SUPPLY OF SPILL CONTAINMENT EQUIPMENT SHALL BE MAINTAINED ON SITE. CORDUROY ROADS AND SWAMP/CONSTRUCTION MATS ARE CONSIDERED AS FILL WHETHER THEY'RE INSTALLED TEMPORARILY OR PERMANENTLY.

TIME OF YEAR WORK WINDOW AND NOISE RESTRICTIONS

- I. PILES INSTALLED IN-THE-DRY OR DURING LOW WATER, OR
- II. MUST BE DRILLED AND PINNED TO LEDGE, OR
- III. VIBRATORY HAMMERS USED TO INSTALL ANY SIZE AND QUANTITY OF WOOD, CONCRETE OR STEEL PILES, OR
- IV. IMPACT HAMMERS LIMITED TO ONE HAMMER AND <50 PILES INSTALLED/DAY WITH THE FOLLOWING: WOOD PILES OF ANY SIZE, CONCRETE PILES ≤18-INCHES DIAMETER, STEEL PILES 12-INCHES DIAMETER IF THE HAMMER IS ≤3000 LBS. AND A WOOD CUSHION IS USED BETWEEN THE HAMMER AND STEEL PILE.

FOR II-IV ABOVE:

- I. IN-WATER NOISE LEVELS SHALL NOT >187dB SEL RE L_{pA} OR 206dB PEAK RE L_{pA} AT A DISTANCE >10M FROM THE PILE BEING INSTALLED, AND
- II. IN-WATER NOISE LEVELS >155dB PEAK RE L_{pA} SHALL NOT EXCEED 12 CONSECUTIVE HOURS ON ANY GIVEN DAY AND A 12 HOUR RECOVERY PERIOD (I.E., IN-WATER NOISE BELOW 155dB PEAK RE L_{pA}) MUST BE PROVIDED BETWEEN WORK DAYS.

WORK SITE RESTORATION

- I. UPON COMPLETION OF CONSTRUCTION, ALL DISTURBED WETLAND AREAS SHALL BE PROPERLY STABILIZED. ANY SEED MIX SHALL CONTAIN ONLY PLANT SPECIES NATIVE TO NEW ENGLAND.
- II. THE INTRODUCTION OR SPREAD OF INVASIVE PLANT SPECIES IN DISTURBED AREAS IS PROHIBITED.
- III. IN AREAS OF AUTHORIZED TEMPORARY DISTURBANCE, IF TREES ARE CUT THEY SHALL BE CUT AT GROUND LEVEL AND NOT UPROOTED IN ORDER TO PREVENT DISRUPTION TO THE WETLAND SOIL STRUCTURE AND TO ALLOW STUMP SPROUTS TO REVEGETATE THE WORK AREA, UNLESS OTHERWISE AUTHORIZED.
- IV. WETLAND AREAS WHERE PERMANENT DISTURBANCE IS NOT AUTHORIZED SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND ELEVATION, WHICH UNDER NO CIRCUMSTANCES SHALL BE HIGHER THAN THE PRE-CONSTRUCTION ELEVATION. ORIGINAL CONDITION MEANS CAREFUL PROTECTION AND/OR REMOVAL OF EXISTING SOIL AND VEGETATION, AND REPLACEMENT BACK TO THE ORIGINAL LOCATION SUCH THAT THE ORIGINAL SOIL LAYERING AND VEGETATION SCHEMES ARE APPROXIMATELY THE SAME, UNLESS AUTHORIZED.

SEDIMENTATION AND EROSION CONTROL

ADEQUATE SEDIMENTATION AND EROSION CONTROL MANAGEMENT MEASURES, PRACTICES AND DEVICES, SUCH AS PHASED CONSTRUCTION, VEGETATED FILTER STRIPS, GEOTEXTILE SILT FENCES, STORMWATER DETENTION AND INFILTRATION SYSTEMS, SEDIMENT DETENTION BASINS, OR OTHER DEVICES SHALL BE INSTALLED AND PROPERLY MAINTAINED TO REDUCE EROSION AND RETAIN SEDIMENT ON-SITE DURING AND AFTER CONSTRUCTION. THEY SHALL BE CAPABLE OF PREVENTING EROSION, OF COLLECTING SEDIMENT, SUSPENDED AND FLOATING MATERIALS, AND OF FILTERING FINE SEDIMENT. THE DISTURBED AREAS SHALL BE STABILIZED AND THESE DEVICES SHALL BE REMOVED UPON COMPLETION OF WORK. THE SEDIMENT COLLECTED BY THESE DEVICES SHALL BE REMOVED AND PLACED AT AN UPLAND LOCATION, IN A MANNER THAT WILL PREVENT ITS LATER EROSION INTO A WATERWAY OR WETLAND. ALL EXPOSED SOIL AND OTHER FILLS SHALL BE PERMANENTLY STABILIZED AT THE EARLIEST PRACTICABLE DATE.

SPAWNING AREAS.

DISCHARGES OF DREDGED OR FILL MATERIAL, AND/OR SUSPENDED SEDIMENT PRODUCING ACTIVITIES IN FISH AND SHELLFISH SPAWNING OR NURSERY AREAS, OR AMPHIBIAN AND MIGRATORY BIRD BREEDING AREAS, DURING SPAWNING OR BREEDING SEASONS SHALL BE AVOIDED. IMPACTS TO THESE AREAS SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE DURING ALL TIMES OF THE YEAR. INFORMATION ON SPAWNING HABITAT FOR SPECIES MANAGED UNDER THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT (I.E., EFH FOR SPAWNING ADULTS) CAN BE OBTAINED FROM THE NMFS WEBSITE AT: WWW.NMFS.NOAA.GOV/HCD.

STORAGE OF SEASONAL STRUCTURES.

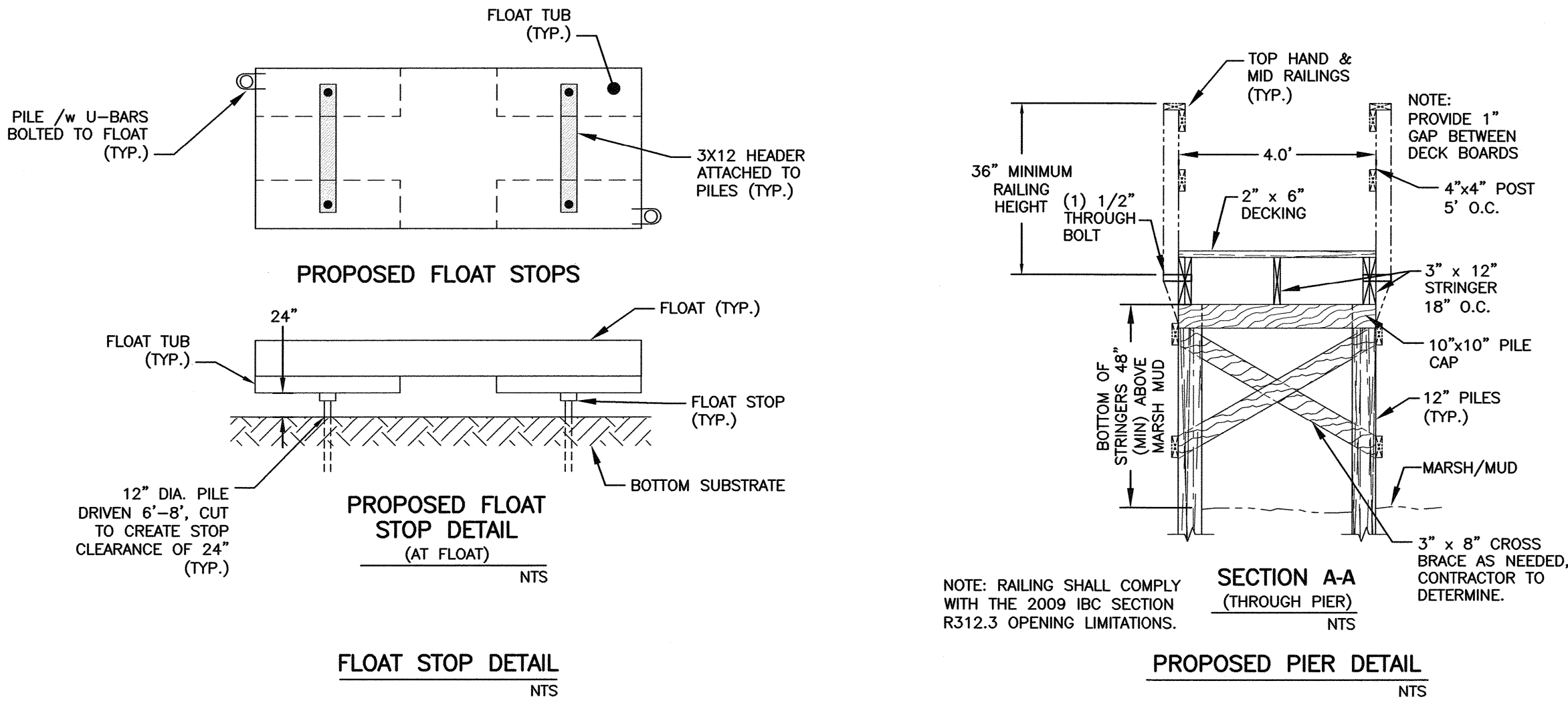
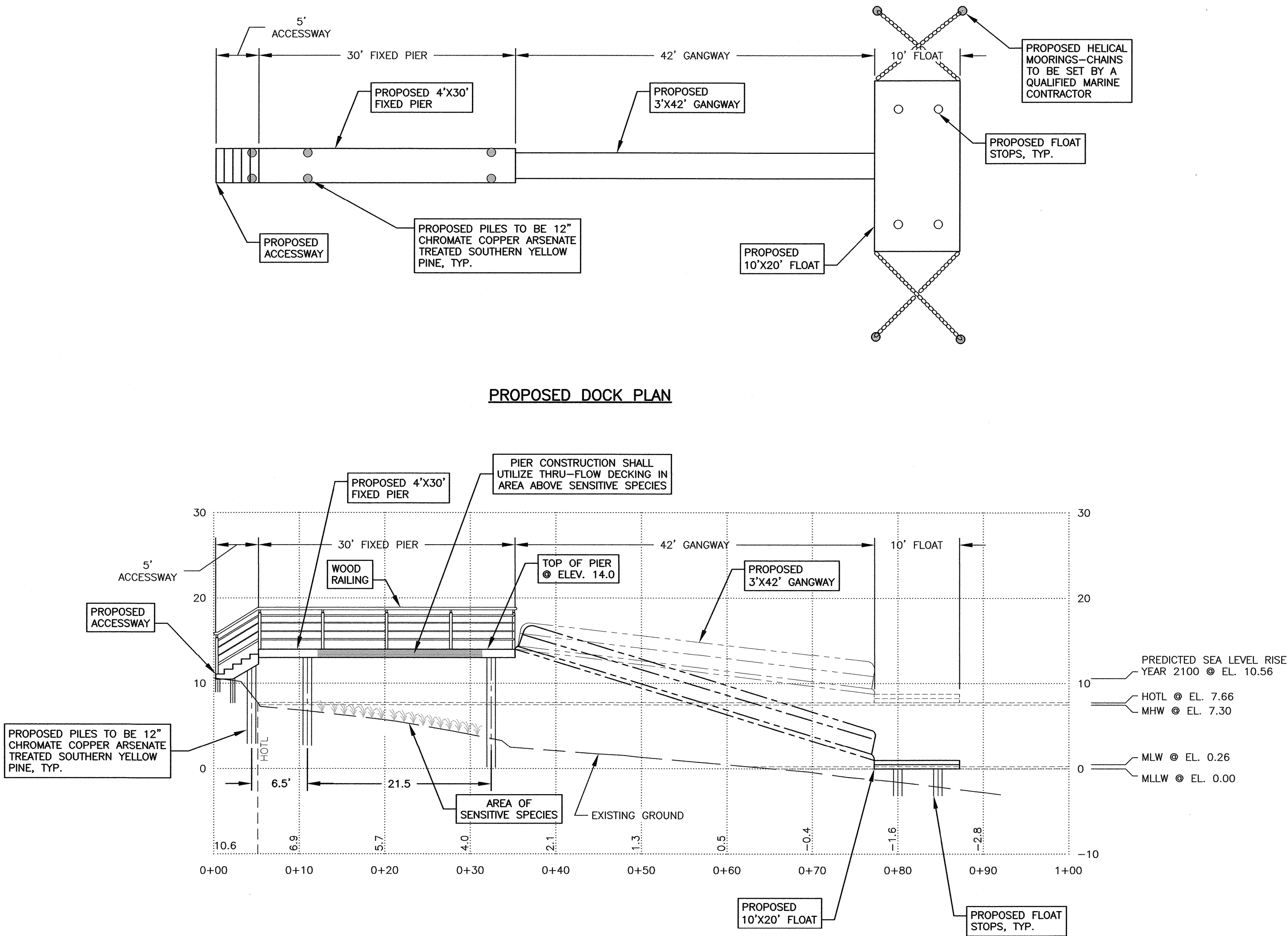
COASTAL STRUCTURES SUCH AS PIER SECTIONS, FLOATS, ETC., THAT ARE REMOVED FROM THE WATERWAY FOR A PORTION OF THE YEAR (OFTEN REFERRED TO AS SEASONAL STRUCTURES) SHALL BE STORED IN AN UPLAND LOCATION, LOCATED ABOVE HIGHEST OBSERVABLE TIDE LINE (HOTL) AND NOT IN TIDAL WETLANDS. THESE SEASONAL STRUCTURES MAY BE STORED ON THE FIXED, PILE-SUPPORTED PORTION OF THE STRUCTURE THAT IS SEAWARD OF HOTL. THIS IS INTENDED TO PREVENT STRUCTURES FROM BEING STORED ON THE MARSH SUBSTRATE AND THE SUBSTRATE SEAWARD OF MHW.

ENVIRONMENTAL FUNCTIONS AND VALUES

THE PERMITTEE SHALL MAKE EVERY REASONABLE EFFORT TO 1) CARRY OUT THE CONSTRUCTION OR OPERATION OF THE WORK AUTHORIZED BY USACOE AND NHDES HEREIN IN A MANNER THAT MINIMIZES ADVERSE IMPACTS ON FISH, WILDLIFE AND NATURAL ENVIRONMENTAL VALUES, AND 2) PROHIBIT THE ESTABLISHMENT OR SPREAD OF PLANT SPECIES IDENTIFIED AS NON-NATIVE INVASIVE SPECIES BY ANY FEDERAL OR STATE AGENCY. SEE THE SECTION ON INVASIVE SPECIES AT [HTTP://WWW.NAE.USACE.ARMY.MIL/REGULATORY/](http://WWW.NAE.USACE.ARMY.MIL/REGULATORY/) FOR CONTROL METHODS.

INSPECTIONS

THE PERMITTEE SHALL ALLOW THE CORPS AND NHDES TO MAKE PERIODIC INSPECTIONS AT ANY TIME DEEMED NECESSARY IN ORDER TO ENSURE THAT THE WORK IS BEING OR HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT. THE CORPS AND NHDES MAY ALSO REQUIRE POST-CONSTRUCTION ENGINEERING DRAWINGS FOR COMPLETED WORK, AND POST-DREDGING SURVEY DRAWINGS FOR ANY DREDGING WORK.



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



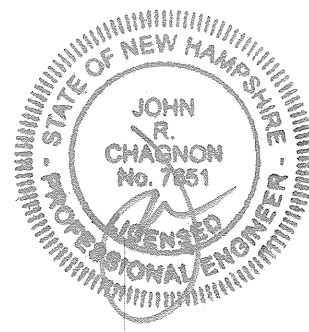
NOTES:

- 1) 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.
- 2) 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.
- 3) 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).
- 4) NUMBER OF PILES TO BE DRIVEN FOR DOCKING STRUCTURE NOT TO EXCEED 10 AS DEPICTED ON PROPOSED DOCK ELEVATION. ALSO NOTE TIME OF YEAR AND NOISE RESTRICTIONS FOR DRIVING OF PILES.

PRUYN RESIDENCE
10 GERRYS LANE
DOVER, N.H.

NO.	DESCRIPTION	DATE
2	ADD THRU-FLOW DECKING	6/28/23
1	RELOCATE PILE SET	6/19/23
0	ISSUED FOR COMMENT	12/16/22

REVISIONS

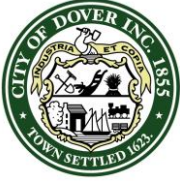


SCALE: AS SHOWN

NOVEMBER 2022

DOCK DETAILS

D1



CITY OF DOVER

CITY OF DOVER - RESOLUTION

Agenda Item#:

Resolution Number: **R - yyyy.mm.dd -**
Resolution Re: Recognizing Traditional Foraging Rights on City of Dover
Public Conservation Lands

WHEREAS: The lands on which the City of Dover, New Hampshire, now sit are the ancestral lands of the Pennacook-Abenaki people, with history of use by other Indigenous peoples as well who hunted and gathered upon the lands.

WHEREAS: The City adopted a land acknowledgement through an amendment to R-2021-05.26-080 which was amended through R-2022-06.22-135.

WHEREAS: Both Indigenous Leaders and the Conservation Commission recognize that foraging rights must respect the contemporary state of the natural landscape.

WHEREAS: The Conservation Commission adopted a foraging policy on October 10th, 2023 with support from the Committee for Racial Equity and Inclusion.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND DOVER CITY COUNCIL THAT:

It shall be the policy of the Dover Conservation Commission to recognize and support foraging rights as outlined in the guidelines presented in the background material.

AND, FURTHER BE IT RESOLVED;

That the Dover City Council, does hereby adopt **Resolution #** recognizing foraging rights on City of Dover public conservation lands.

Financing

Account	Description	Appropriation	Balance	Charge
xxxx-xxxxxx				
			Total	

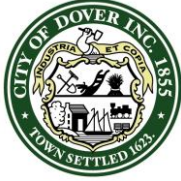
AUTHORIZATION

Approved as to Funding: Daniel R. Lynch
Finance Director

Sponsored by:

Approved as to Legal
Form and Compliance: Joshua M. Wyatt
City Attorney

Recorded by:
City Clerk

 CITY OF DOVER	CITY OF DOVER - RESOLUTION		Agenda Item#:
	Resolution Number: R - yyyy.mm.dd - Resolution Re: Recognizing Traditional Foraging Rights on City of Dover Public Conservation Lands		

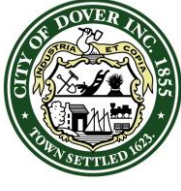
DOCUMENT HISTORY:

First Reading Date: _____ Approved Date: _____	Public Hearing Date: _____ Effective Date: _____
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DOCUMENT ACTIONS:

VOTING RECORD		
Date of Vote:	YES	NO
Mayor Robert Carrier		
Deputy Mayor Dennis Shanahan		
Councilor Michelle Muffett-Lipinski, Ward 1		
Councilor Robert Warach, Ward 2		
Councilor Deborah Thibodeaux, Ward 3		
Councilor Debra Hackett, Ward 4		
Councilor Fergus Cullen, Ward 6		
Councilor Linnea Nemeth, At Large		
Councilor Lindsey Williams, At Large		
Total Votes:		
Resolution does does not pass.		

DRAFT

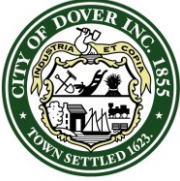
 CITY OF DOVER	CITY OF DOVER - RESOLUTION Agenda Item#: Resolution Number: R - yyyy.mm.dd - Resolution Re: Recognizing Traditional Foraging Rights on City of Dover Public Conservation Lands
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RESOLUTION BACKGROUND MATERIAL:

It shall be the policy of the Dover Conservation Commission to recognize and support public foraging rights on City owned conservation lands, subject to the following guidelines:

- a) This policy applies to shrubs, flowers, grasses, fungi and other productive non-animal species. Plants and fungi should be never be gathered more than the species can support, and such gathering should be done with reverence and respect. Foraging must be done in a non-destructive manner.
- b) Endangered species, threatened species, and species of conservation concern, whether plant, animal, fungi, or any other type of organism, shall remain within the natural landscape.
- c) Hunting, trapping, fishing and timber harvesting are not “foraging” within the meaning of these guidelines and are not authorized by this policy.
- d) In recognition that Indigenous peoples have incorporated use of non-native species into their cultural practices as part of adaptation to a changing landscape, this policy supports use of those species. Care should be taken to prevent the spread of those species by way of proper handling and storage.
- e) To facilitate an improved understanding of ongoing Indigenous connections with the landscape by the City of Dover, people acting on these foraging rights are invited to notify the City of Dover of their intent to forage and of any species collected.
- f) This policy does not convey an exclusive right to forage on City owned conservation lands. The policy does not supersede or modify any existing agreements, designations, or regulations concerning land within the City of Dover. Anyone foraging should first review the source of the City’s rights in the conservation land, as some conveying instruments or deeds contain use limitations or conditions. Foraging should not be undertaken if, and to the extent, doing so is inconsistent with the City’s property rights in any given conservation land.

The Conservation Commission shall periodically review and revise this policy as needed in consultation with Indigenous communities, City bodies, state and federal agencies, and the public at large.



CITY OF DOVER

CITY OF DOVER - RESOLUTION

Agenda Item#: 13.B.1.

Resolution Number: **R - 2022.06.22 - 135**

Resolution Re: Amended Promulgation of Land Acknowledgment

WHEREAS: The City of Dover recently established the ad hoc Committee on Racial Equity and Inclusion;

WHEREAS: The Committee acknowledges that the path to racial equity and inclusion begins with ensuring that the indigenous peoples that inhabited the land now known as Dover, NH thousands of years before the arrival of European settlers are recognized; and

WHEREAS: Land Acknowledgements are done to recognize and identify the first people who inhabited a place, to show respect, and to honor the land that is, and was, their homeland. It can be the first step towards reconciliation between the first people and the people who came to colonize a land that was already inhabited. Land Acknowledgements help prevent the colonial practice of erasure of the first peoples and invite true and accurate history to be taught and learned. Making a formal Land Acknowledgement fosters an atmosphere of respect, collaboration, and recognitions; and

WHEREAS: The Committee has consulted with representatives of the Abenaki, Pennacook, and Wabanaki peoples to prepare a statement that acknowledges and honors the people, past and present, who have stewarded the land we now call Dover, New Hampshire.

WHEREAS: The City promulgated a land acknowledgment by resolution on June 9, 2021 ([R-2021-05.26-080](#)), which would benefit from one technical correction set forth below:

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND DOVER CITY COUNCIL THAT:

The City of Dover amends R-2021-05.26-080 and hereby adopts the following as the City's Land Acknowledgement statement:

“This (event/meeting/facility) takes place/is located at Cocheco (CO-chi-co) within **N’dakinna** (n-DA-ki-na), now called Dover, New Hampshire, which is the unceded traditional ancestral homeland of the Abenaki (a-BEN-a-ki), Pennacook and Wabanaki Peoples, past and present. We acknowledge and honor with gratitude the land, waterways, living beings, and the **Aln8bak (Al-nuh-bak)**, the people who have stewarded **N’dakinna** (n-DA-ki-na) for many millennia.”

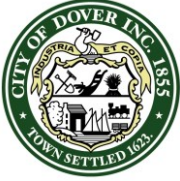
AUTHORIZATION

Approved as to Funding: Daniel R. Lynch
Finance Director

Sponsored by: Linnea Nemeth
Councilor At Large

Approved as to Legal
Form and Compliance: Joshua M. Wyatt
City Attorney

Recorded by: Susan M. Mistretta
City Clerk



CITY OF DOVER

CITY OF DOVER - RESOLUTION

Agenda Item#: 13.B.1.

Resolution Number: **R - 2022.06.22 - 135**
Resolution Re: Amended Promulgation of Land Acknowledgment

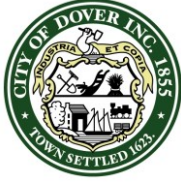
DOCUMENT HISTORY:

First Reading Date: 06/22/2022	Public Hearing Date: N/A
Approved Date: 06/22/2022	Effective Date: 06/22/2022

DOCUMENT ACTIONS:

Deputy Mayor Shanahan moved for its adoption; seconded by Councilor Williams.
Roll Call Vote: 8/1; Passed. Councilor Cullen was opposed.

VOTING RECORD		
Date of Vote: 06/22/2022	YES	NO
Mayor Robert Carrier	X	
Deputy Mayor Dennis Shanahan	X	
Councilor Michelle Muffett-Lipinski, Ward 1	X	
Councilor Robert Hinkel, Ward 2	X	
Councilor Deborah Thibodeaux, Ward 3	X	
Councilor Debra Hackett, Ward 4	X	
Councilor Fergus Cullen, Ward 6		X
Councilor Linnea Nemeth, At Large	X	
Councilor Lindsey Williams, At Large	X	
Total Votes:	8	1
Ordinance does pass.		

 CITY OF DOVER	CITY OF DOVER - RESOLUTION Agenda Item#: 13.B.1. Resolution Number: R - 2022.06.22 - 135 Resolution Re: Amended Promulgation of Land Acknowledgment
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RESOLUTION BACKGROUND MATERIAL:

The City Council Ad Hoc Committee on Racial Equity and Inclusion seeks to ensure that our community recognizes the history and legacy of the peoples that inhabited the land that we now call Dover, New Hampshire. One means to do this is public recognition of the indigenous peoples by way of an acknowledgement, such as the one included in this resolution.

The Committee on Racial Equity and Inclusion presents this Land Acknowledgement now as an important contribution to celebrating and honoring our history as we approach the 400th anniversary of the settling of this area.

The City Council mandate for the Committee is to develop an action plan containing recommendations outlining “existing and new steps to be taken to work to eliminate any potential relics of past systemic racism in municipal operations.” Included in this action plan will be steps to ensure equitable recognition of all peoples that have contributed to making Dover what it is today. These recommendations may include enhancing an existing memorial park, or a new commemoration in a public area.

For clarification, this resolution is not intended to formally create, waive, or impact anyone’s or the City’s real estate or other rights and obligations, but instead is a gesture meant to acknowledge and educate the public about history.

With respect to the current amendment, this land acknowledgment resolution mirrors the resolution passed in 2021 ([R-2021-05.26-080](#)), but the resolving clause here amends “on **N’dakinna**” to now say “within **N’dakinna**”, as the ancestral territory is larger than just the modern State of New Hampshire.



City of Dover Planning & Community
Development Department

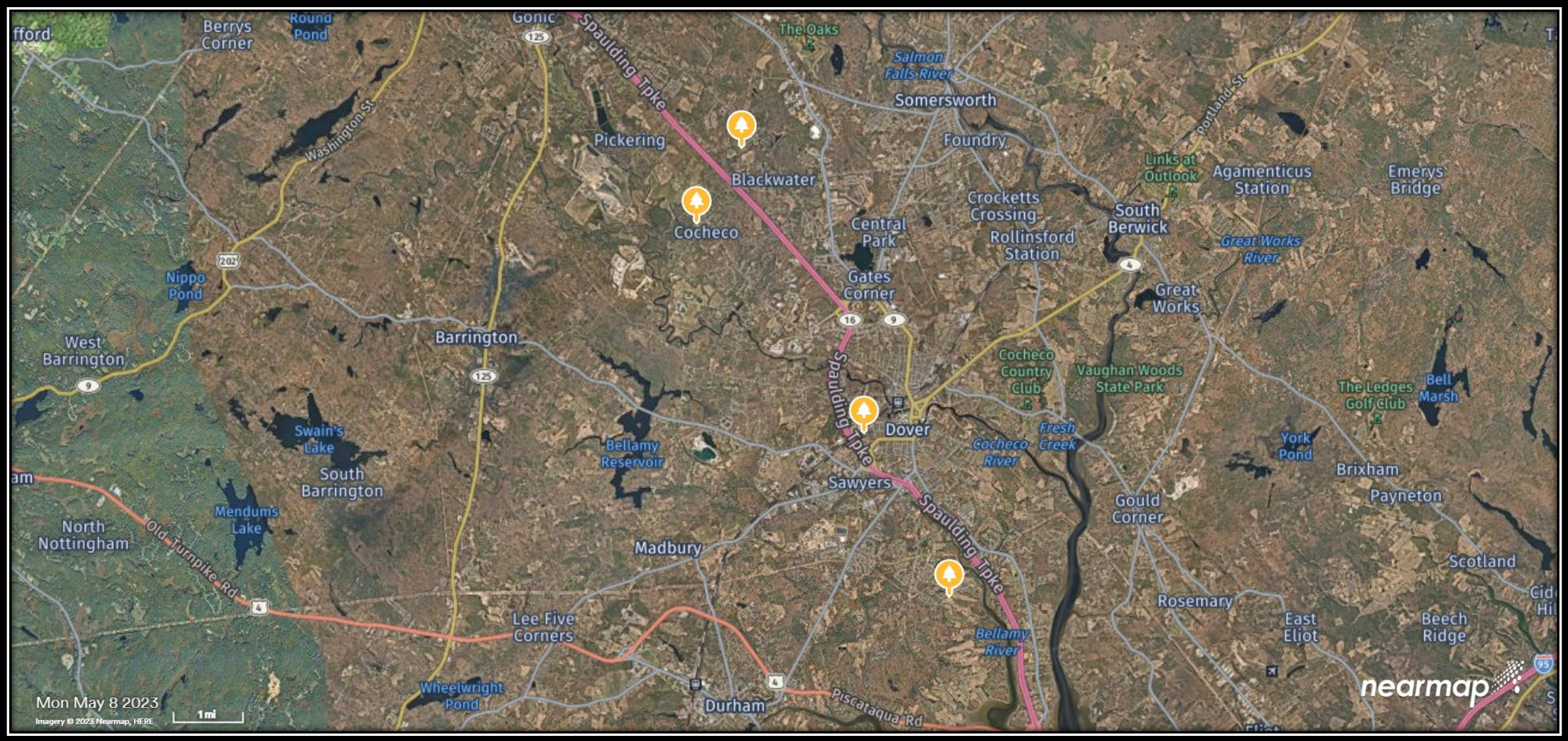
Update on Active Land Conservation Projects

Jackson Kaspari, Ph.D.
Resilience Manager

Conservation Commission Meeting
October 10th, 2023



Active Conservation Projects



Active Conservation Projects

Arch Street Property – Tax Map 11, Lot 14

Project Type	Fee Simple
Purchase Price	\$380,000 – Discounted
Closing Costs	\$6,480
Acreage	10
Total \$/Acre	\$38,648

Conservation Features:

- Close proximity to Dover Community Trail
- Significant wetland area
- Supporting wildlife landscape (deer, owls, hawk etc.)
- Prime farmland soils
- Public access



Next Step: OLC Members to report out on a recent site visit.

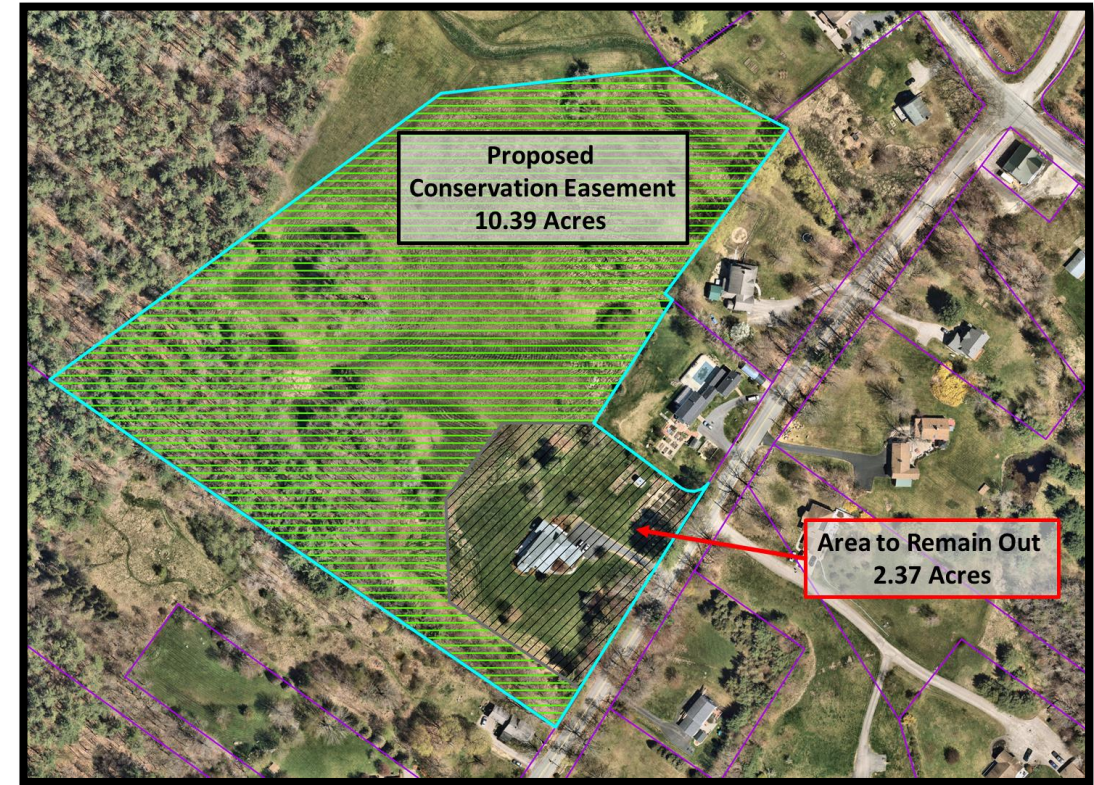
Active Conservation Projects

Ekola Property - Tax Map B, Lot 8A

Project Type	Conservation Easement
Purchase Price	\$0 – Donation
Estimated Closing Costs	\$21,000
Acreage	10.39
Total Cost/Acre	\$2,021

Conservation Features:

- Abutment of existing conservation easement
- Close proximity to Blackwater Brook
- Some of the highest ranked wildlife habitat in NH
- Prime farmland soils as well as soils of statewide importance



Next Step: Secure a surveyor to conduct an easement boundary survey.

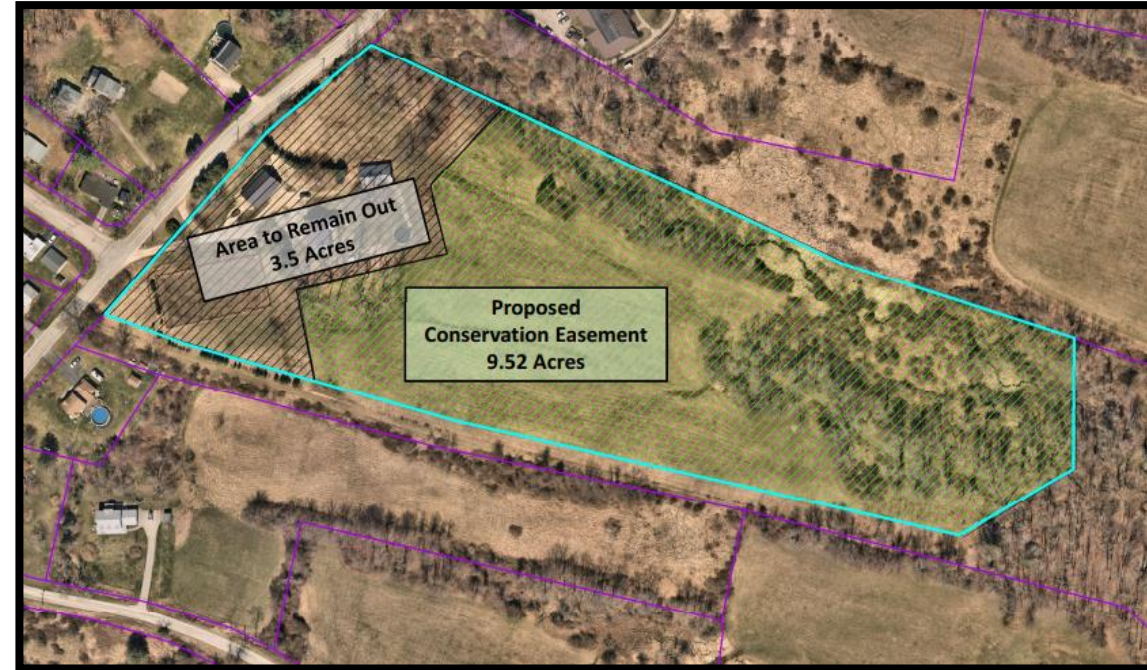
Active Conservation Projects

Stockbower Property- Tax Map J, Lot 3A

Project Type	Conservation Easement
Purchase Price	\$556,000 – Discounted
Estimated Closing Costs	\$11,000
Acreage	9.52
Total Cost/Acre	\$59,559

Conservation Features:

- Surrounded by existing conservation land
- Close proximity to the Bellamy River
- Some of the highest ranked wildlife habitat in NH
- Prime farmland soils as well as soils of statewide importance



Next Step: Obtain a mortgage subordination.

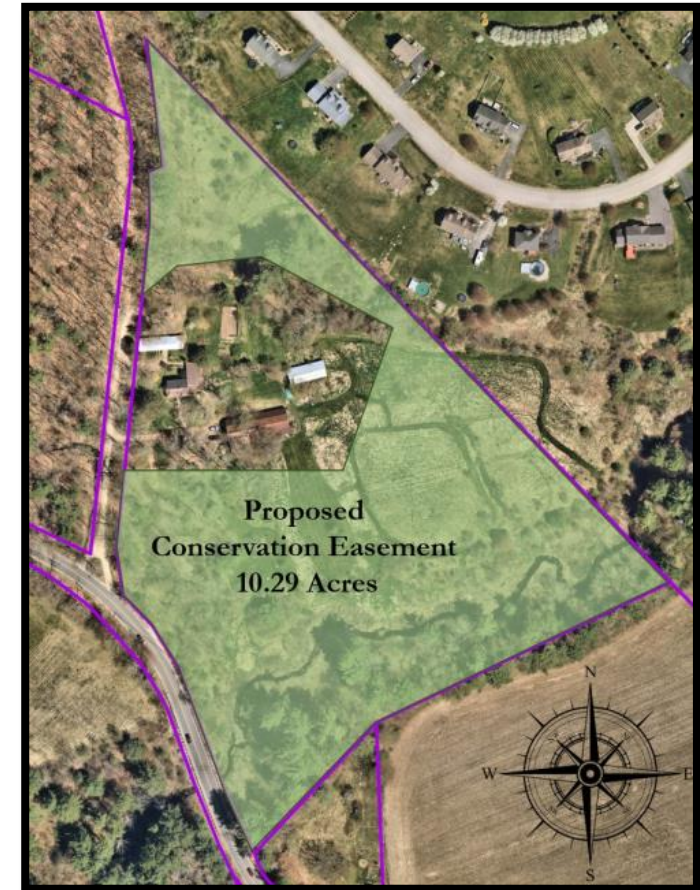
Active Conservation Projects

Lombard Property- Tax Map A, Lot 23-1

Project Type	Conservation Easement
Purchase Price	\$175,000 – Appraised Value
Estimated Closing Costs	\$25,000
Acreage	10.29
Total Cost/Acre	\$19,436

Conservation Features:

- Surrounded by existing conservation land
- Blackwater Brook runs through the property
- Some of the highest ranked wildlife habitat in NH
- Prime farmland soils as well as soils of statewide importance



Next Step: Draft Conservation Easement Deed

Active Conservation Projects

Summary

- ❖ Total acreage = 40.2
- ❖ Total Conservation Fund Request = \$1,174,480
- ❖ TDR is providing critical funding to make these projects possible!



**Special thanks to the Dover Conservation Commission
& Open Lands Committee!**



Thanks for your time!
Any questions?

Jackson Kaspari, Ph.D.

Resilience Manager

Planning & Community Development

Tel: (603) 516-6008

Email: j.kaspari@dover.nh.gov