



The State of New Hampshire  
**Department of Environmental  
Services**



*MM*  
54

**Robert R. Scott, Commissioner**

July 23, 2018

His Excellency, Governor Christopher T. Sununu  
and The Honorable Council  
State House  
Concord, NH 03301

**JUL24'18 PM12:50 DAS**

**REQUESTED ACTION**

Approve Daniel W. Ayer Revocable Trust's request to perform the following work on the Cocheco River in Dover. File # 2018-00515. This project will not have significant impact on or adversely affect the values of the Cocheco River.

Impact 1,020 square feet of tidal wetland to replace an existing tidal docking structure. The new structure will be constructed from an existing 4 foot x 4 foot landing and stairs (located landward of the highest observable tide line) and consist of a 3 foot x 36 foot ramp, a 12 foot x 12 foot seasonal landing float and six 8 foot x 16 foot seasonal floats configured parallel to shore. The overall structure length seaward of the highest observable tide line is 46 feet, providing eight slips on 502.5 feet of frontage on the Cocheco River.

The New Hampshire Department of Environmental Services (NHDES) imposed the following conditions as part of this approval:

1. All work shall be in accordance with plans by MJS Engineering dated January 31, 2018, and revised through May 22, 2018 and received by the NHDES on May 23, 2018.
2. No less than 5 state business days prior to starting work authorized by this permit, the permittee shall notify the NHDES Wetlands Bureau Pease office and the local conservation commission in writing of the date on which work under this permit is expected to start.
3. This permit shall not be effective until recorded at the Strafford County Registry of Deeds office by the permittee. A copy of the recorded permit shall be submitted to the NHDES Wetlands Bureau prior to construction.
4. Any future work in jurisdiction as specified in RSA 482-A on this property will require a new application and approval by the NHDES Wetlands Bureau.
5. No person undertaking any activity shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards in RSA 485-A and New Hampshire Administrative Rule Env-Wq 1700.
6. This tidal docking structure will be constructed from an existing 4 foot x 4 foot landing and stairs (located landward of the highest observable tide line) and consisting of a 3 foot x 36 foot ramp, a 12 foot x 12 foot seasonal landing float and six 8 foot x 16 foot seasonal floats configured parallel to shore with an overall structure length seaward of the highest observable tide line of 46 feet, providing eight slips on 502.5 feet of frontage on the Cocheco River, shall be the only docking structure on this water frontage.
7. There shall be no removal of mature trees along the shoreline of the river on this property associated with the construction of the dock and access way.

[www.des.nh.gov](http://www.des.nh.gov)

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095  
NHDES Main Line: (603) 271-3503 • Subsurface Fax: (603) 271-6683 • Wetlands Fax: (603) 271-6588  
TDD Access: Relay NH 1 (800) 735-2964

8. Construction of the dock shall occur from a barge equipped with a crane, at low tide, to reduce potential impacts to the river bank and the estuarine intertidal and subtidal wetlands.
9. Decking shall have at least 3/4-inch spacing between the decking planks to provide sufficient sunlight penetration and rainfall to underlying vegetation.
10. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and shall remain in place until the area is stabilized.
11. Work shall be conducted in a manner so as to minimize turbidity and sedimentation to surface waters and wetlands.
12. Work shall be conducted in a manner that avoids excessive discharges of sediments to fish spawning areas.
13. The seasonal structures, including but not limited to the gangway and float, shall be removed during the non-boating season and stored on the existing pier or in an upland location.
14. All construction-related debris shall be properly disposed of outside of the areas subject to RSA 482-A.
15. Within three days of final grading or temporary suspension of work in an area that is in or adjacent to wetlands or surface waters, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tack or netting and pinning on slopes steeper than 3:1.

#### EXPLANATION

The NHDES Wetlands Bureau approved this project on June 21, 2018. The NHDES supported its decision with the following findings:

1. This is a Major Project per New Hampshire Administrative Rule Env-Wt 303.02(a), projects in sand dunes, tidal wetlands, or bogs, except for the repair of existing structures pursuant to New Hampshire Administrative Rule Env-Wt 303.04(v).
2. The need for the proposed impacts has been demonstrated by the applicant per New Hampshire Administrative Rule Env-Wt 302.01.
3. The applicant has provided evidence which demonstrates that this proposal is the alternative with the least adverse impact to areas and environments under the department's jurisdiction per New Hampshire Administrative Rule Env-Wt 302.03.
4. The original parcel, including approximately 42 acres with approximately 2,500 feet of water frontage on the Cocheco River, was subdivided into an open-space subdivision plus a 13 acre conservation parcel with 1,400 feet of water frontage now held by New Hampshire Fish and Game. The remainder of the subdivision (approximately 29 acres with 1,055 feet of water frontage) is dedicated as open-space waterfront parcels, including the proposed tidal docking structure, shared by residents of the inland portion of the subdivision.
5. Pursuant to New Hampshire Administrative Rule Env-Wt 204.05, in correspondence dated February 17, 2018, the applicant requested a waiver to New Hampshire Administrative Rule Env-Wt 402.21, Modification of Existing Structures. The existing tidal docking structure on the subject frontage (depicted as "Pier #2" on the approved plan set) was permitted by the NHDES Wetlands permit #2003-02241.
6. In accordance with New Hampshire Administrative Rule Env-Wt 402.14, Exceptions to Frontage Criteria, the proposed structure will accommodate eight boat slips on 502.5 feet of water frontage, which would otherwise typically qualify for only seven boat slips.

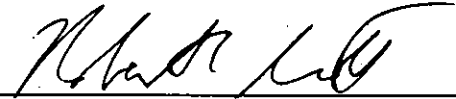
7. A conventional subdivision on this property could have yielded eight waterfront lots, each presumably eligible for individual tidal docking structures and each with multiple slips. Alternatively, the primary lot was subdivided in such a way as to conserve the natural waterfront, reduce the potential number of structures and slips on this reach of the Cocheco River, and reduce the overall environmental impact.
8. In accordance with New Hampshire Administrative Rule Env-Wt 204.04, a waiver will be granted if the project will not have an adverse impact to the environment or natural resources of the state, public health, or public safety, and the strict compliance with the rule will provide no benefit to the public and will cause an operation or economic hardship to the applicant.
9. Consistent with New Hampshire Administrative Rule Env-Wt 204.04, the Department finds that the alternative configuration proposed will minimize adverse environmental impact to the surface water and shoreline and, therefore, waives the standard configuration requirements set forth by New Hampshire Administrative Rules Env-Wt 402.13 and 402.21.
10. The dock is the minimum length necessary to provide full tide access at this location and to a water depth which will prevent the float and vessel from sitting on the mud at low tide.
11. The decking of the dock will have a minimum of have 3/4-inch spacing between the decking planks. Further, the applicant will be utilizing a barge and crane to complete construction of the dock from the water to minimize impacts to the wetland resource.
12. The applicant has demonstrated by plan and example that each factor listed in New Hampshire Administrative Rule Env-Wt 302.04(a) and (c), Requirements for Application Evaluation, has been considered in the design of the project.
13. NH Natural Heritage Bureau (NHB) has record of a sensitive species and an exemplary natural community within the vicinity of the project (NHB18-0468).
14. In correspondence dated February 13, 2018, the NHB stated that the project is not expected to adversely impact the sensitive species or the exemplary natural community.
15. In correspondence dated February 08, 2018, the US Fish and Wildlife Service (iPaC Consultation Code: 05E1NE00-2018-SLI-0941) identified the Northern Long Eared Bat and Small Whorled Pogonia, both federally threatened, to be within the vicinity of the project.
16. On June 19 2018, the results of the NHDES staff field inspection found that the site is accurately represented in the application.
17. In accordance with RSA 482-A:8, NHDES finds that the requirements for a public hearing do not apply as the permitted project is not of substantial public interest, and will not have a significant impact on or adversely affect the values of the estuarine resource, as identified under RSA 482-A:1.
18. In correspondence dated June 21, 2018, the Pease Development Authority, Division of Ports and Harbors, determined that the project would not have a negative effect on navigation in the channel.
19. In correspondence dated March 23, 2018, the Dover Conservation Commission stated no opposition to the project as proposed.
20. In correspondence dated February 22, 2018, signed authorization was provided by the applicant to allow their agent to act on their behalf throughout the permitting process.
21. No comments of concern were received by the NHDES from local governing organizations.

His Excellency, Governor Christopher T. Sununu  
and The Honorable Council

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Application file documents are being forwarded to the Governor and Executive Council in connection with their consideration of this matter pursuant to RSA 482-A:3,II.(a) as it is a major project in public waters of the state.

We respectfully submit this request for your consideration.



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Robert R. Scott  
Commissioner



# WETLANDS PERMIT APPLICATION

Water Division/ Wetlands Bureau  
Land Resources Management



Check the status of your application: [www.des.nh.gov/onestop](http://www.des.nh.gov/onestop)

RSA 485-A:17 FEB 27 2018 LAND RESOURCES MANAGEMENT	<b>COMPLETE</b> FEB 27 2018	2018-00515 Project No: 15931 Amount: 9,632.00 Status: Final
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**1. REVIEW TIME:** Indicate your Review Time below. To determine review time, refer to Guidance Document A for instructions.

Standard Review (Minimum, Minor or Major Impact)
  Expedited Review (Minimum Impact only)

**2. MITIGATION REQUIREMENT:**

If mitigation is required a Mitigation Pre-Application meeting must occur prior to submitting this Wetlands Permit Application. To determine if Mitigation is Required please refer to the Determine if Mitigation is Required Frequently Asked Question.

Mitigation Pre-Application Meeting Date: Month: \_\_\_ Day: \_\_\_ Year: \_\_\_  
 N/A - Mitigation is not required

**3. PROJECT LOCATION:**

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

ADDRESS: **McKone Lane** TOWN/CITY: \_\_\_\_\_  
 TAX MAP: **N** BLOCK: \_\_\_\_\_ LOT: **18-OPN5** UNIT: \_\_\_\_\_  
 USGS TOPO MAP WATERBODY NAME: **Cocheco River**  NA STREAM WATERSHED SIZE:  NA  
 LOCATION COORDINATES (If known): **X:1,202,939 Y:252,516**  Latitude/Longitude

**4. PROJECT DESCRIPTION:**

Provide a brief description of the project outlining the scope of work. Attach additional sheets as needed to provide a detailed explanation of your project. DO NOT type "See Attached" in the space provided below.

Amend existing tidal dock permit 2003-02241 for the purpose of adding additional boat slips. The parcel was recently subdivided and the dock is part of a home owner's association. This application is to add six 8'x16' seasonal floats (768 sf) and to provide a total of 8 boat slips.

**5. SHORELINE FRONTAGE:**

NA This does not have shoreline frontage. SHORELINE FRONTAGE: **(600'+415')/2=1015'**  
 Shoreline frontage is calculated by determining the average of the distances of the actual natural navigable shoreline frontage and a straight line drawn between the property lines, both of which are measured at the normal high water line.

**6. RELATED NHDES LAND RESOURCES MANAGEMENT PERMIT APPLICATIONS ASSOCIATED WITH THIS PROJECT:**

Please indicate if any of the following permit applications are required and, if required, the status of the application. To determine if other Land Resources Management Permits are required, refer to the Land Resources Management Web Page.

Permit Type	Permit Required	File Number	Permit Application Status
Alteration of Terrain Permit Per RSA 485-A:17	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED
Individual Sewerage Disposal per RSA 485-A:2	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED
Subdivision Approval Per RSA 485-A	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED
Shoreland Permit Per RSA 483-B	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED

**7. NATURAL HERITAGE BUREAU & DESIGNATED RIVERS:**

See the Instructions & Required Attachments document for instructions to complete a & b below.

a. Natural Heritage Bureau File ID: **NHB 18 - 0468**  
 b.  Designated River the project is in ¼ miles of: \_\_\_\_\_; and  
 date a copy of the application was sent to the **Local River Management Advisory Committee**: Month: \_\_\_ Day: \_\_\_ Year: \_\_\_  
 N/A

**8. APPLICANT INFORMATION (Desired permit holder)**LAST NAME, FIRST NAME, M.I.: **Ayer, Daniel**TRUST / COMPANY NAME: **Daniel W. Ayer Revocable Trust**

MAILING ADDRESS:

TOWN/CITY: **Dover**STATE: **NH**ZIP CODE: **03820**

EMAIL or FAX:

PHONE:

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

**9. PROPERTY OWNER INFORMATION (If different than applicant)**

LAST NAME, FIRST NAME, M.I.:

TRUST / COMPANY NAME:

MAILING ADDRESS:

TOWN/CITY:


STATE:

ZIP CODE:

EMAIL or FAX:

PHONE:

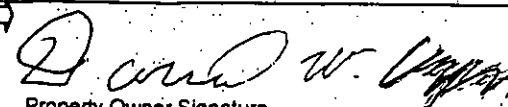
ELECTRONIC COMMUNICATION: By initialing here \_\_\_\_\_, I hereby authorize NHDES to communicate all matters relative to this application electronically.

**10. AUTHORIZED AGENT INFORMATION**LAST NAME, FIRST NAME, M.I.: **Slevert, Michael**COMPANY NAME: **MJS Engineering, PC**MAILING ADDRESS: **P.O. Box 359**TOWN/CITY: **Newmarket**STATE: **NH**ZIP CODE: **03857**EMAIL or FAX: **mjs@mjs-engineering.com**PHONE: **(603) 659-4979**ELECTRONIC COMMUNICATION: By initialing here , I hereby authorize NHDES to communicate all matters relative to this application electronically.**11. PROPERTY OWNER SIGNATURE**

See the Instructions &amp; Required Attachments document for clarification of the below statements

By signing the application, I am certifying that:

1. I authorize the applicant and/or agent indicated on this form to act in my behalf in the processing of this application, and to furnish upon request, supplemental information in support of this permit application.
2. I have reviewed and submitted information & attachments outlined in the Instructions and Required Attachment document.
3. All abutters have been identified in accordance with RSA 482-A:3, I and Env-Wt 100-900.
4. I have read and provided the required information outlined in Env-Wt 302.04 for the applicable project type.
5. I have read and understand Env-Wt 302.03 and have chosen the least impacting alternative.
6. Any structure that I am proposing to repair/replace was either previously permitted by the Wetlands Bureau or would be considered grandfathered per Env-Wt 101.47.
7. I have submitted a Request for Project Review (RPR) Form ([www.nh.gov/nhdhr/review](http://www.nh.gov/nhdhr/review)) to the NH State Historic Preservation Officer (SHPO) at the NH Division of Historical Resources to identify the presence of historical/ archeological resources while coordinating with the lead federal agency for NHPA 106 compliance.
8. I authorize NHDES and the municipal conservation commission to inspect the site of the proposed project.
9. I have reviewed the information being submitted and that to the best of my knowledge the information is true and accurate.
10. I understand that the willful submission of falsified or misrepresented information to the New Hampshire Department of Environmental Services is a criminal act, which may result in legal action.
11. I am aware that the work I am proposing may require additional state, local or federal permits which I am responsible for obtaining.
12. The mailing addresses I have provided are up to date and appropriate for receipt of NHDES correspondence. NHDES will not forward returned mail.



Property Owner Signature

Daniel W. Ayer  
Print name legibly

2/20/18  
Date

**MUNICIPAL SIGNATURES**

**12. CONSERVATION COMMISSION SIGNATURE**

The signature below certifies that the municipal conservation commission has reviewed this application and

1. Waives its right to intervene per RSA 482-A:11
2. Believes that the application and submitted plans accurately represent the proposed project and
3. Has no objection to permitting the proposed work.


	Print name legibly	Date
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**DIRECTIONS FOR CONSERVATION COMMISSION**

1. Expedited review ONLY requires that the conservation commission's signature is obtained in the space above.
2. Expedited review requires the Conservation Commission signature be obtained prior to the submittal of the original application to the Town/City Clerk for signature.
3. The Conservation Commission may refuse to sign. If the Conservation Commission does not sign this statement for any reason, the application is not eligible for expedited review and the application will be reviewed in the standard review time frame.

**13. TOWN/CITY CLERK SIGNATURE**

As required by Chapter 482-A:3 (amended 2014) I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.

 Town/City Clerk Signature	Print name legibly Karen S. Lovato	Town/City Dover	Date 2/10/18
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**DIRECTIONS FOR TOWN/CITY CLERK**

Per RSA 482-A:31

1. For applications where Expedited Review is checked on page 1, if the Conservation Commission signature is not present, NHDES will accept the permit application, but it will NOT receive the expedited review time.
2. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
3. 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.
4. 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, and
5. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

**DIRECTIONS FOR APPLICANT**

1. Submit the single 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.



**14. IMPACT AREA**

For each jurisdictional area that will be/has been impacted, provide square feet and, if applicable, linear feet of impact.  
 Permanent impacts that will remain after the project is complete.  
 Temporary impacts not intended to remain (and will be restored to pre-construction conditions) after the project is complete.

JURISDICTIONAL AREA	PERMANENT Sq. Ft. / Lin. Ft.	TEMPORARY Sq. Ft. / Lin. Ft.
Forested wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Scrub-shrub wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Emergent wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Wet meadow	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Intermittent stream	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Perennial Stream / River	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Lake / Pond	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Bank - Intermittent stream	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Bank - Perennial stream / River	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Bank - Lake / Pond	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Tidal water	/ <input type="checkbox"/> ATF	/ <input type="checkbox"/> ATF
Salt marsh	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Sand dune	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Prime wetland	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Prime wetland buffer	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Undeveloped Tidal Buffer Zone (TBZ)	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Previously-developed upland in TBZ	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Docking - Lake / Pond	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Docking - River	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
Docking - Tidal Water	<input type="checkbox"/> ATF	768 <input type="checkbox"/> ATF
Vernal Pool	<input type="checkbox"/> ATF	<input type="checkbox"/> ATF
<b>TOTAL</b>	/	768 /

**15. APPLICATION FEE: See the Instructions & Required Attachments document for further instruction.**

Minimum Impact Fee: Flat fee of \$ 200

Minor or Major Impact Fee: Calculate using the below table below

Permanent and Temporary (non-docking) \_\_\_\_\_ sq. ft. X \$0.20 = \$ \_\_\_\_\_

Temporary (seasonal) docking structure: **768** sq. ft. X \$1.00 = **\$ 768**

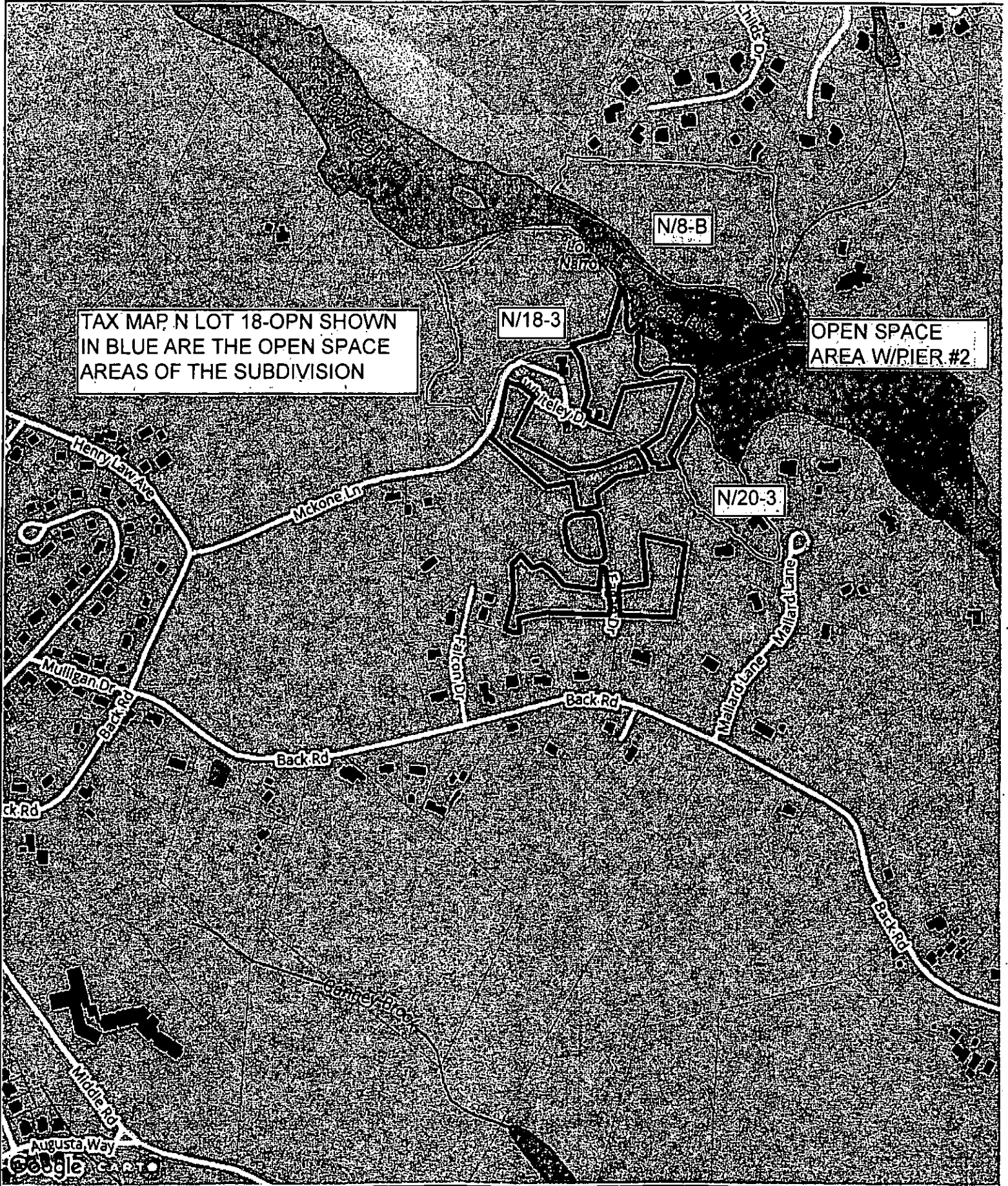
Permanent docking structure: \_\_\_\_\_ sq. ft. X \$2.00 = \$ \_\_\_\_\_

Projects proposing shoreline structures (including docks) add \$200 = **\$ 200**

Total = **\$ 968**

The Application Fee is the above calculated Total or \$200, whichever is greater = **\$ 968**





TAX MAP, N LOT 18-OPN SHOWN IN BLUE ARE THE OPEN SPACE AREAS OF THE SUBDIVISION

OPEN SPACE AREA W/PIER #2

N/8-B

N/18-3

N/20-3

# Map by NH GRANIT



## Legend

- State
- County
- City/Town
- Interstates
- Turnpikes
- US Routes
- State Routes
- Local Roads

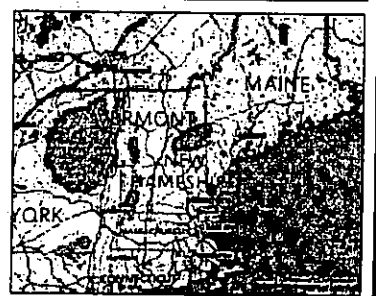
**R E C E I V E D**  
FEB 27 2013  
NHDES  
LAND RESOURCES MANAGEMENT

Map Scale  
1:24,000



© NH GRANIT, [www.granit.unh.edu](http://www.granit.unh.edu)  
Map Generated: 2/21/2017

Notes



**Memo**



NH NATURAL HERITAGE BUREAU  
NHB DATACHECK RESULTS LETTER

**To:** Mike Schlosser, MJS Engineering, PC  
5 Railroad Street  
Newmarket, NH 03857

**From:** Amy Lamb, NH Natural Heritage Bureau  
**Date:** 2/12/2018 (valid for one year from this date)

**Re:** Review by NH Natural Heritage Bureau

NHB File ID: NHB18-0468

Town: Dover

Location: Tax Maps: Tax Map N Lot 18-OPN5

Description: Amend existing tidal dock permit 2003-02241 for the purpose of adding additional boat slips. The proposed temporary impact is for adding seasonal floats only. There are no proposed permanent dock structures.

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

**Comments:** Recent aerial photography does not show an existing dock within the mapped area. Please clarify the location of the proposed work; there is an existing dock to the northwest of the mapped area (see map below).

**Natural Community**

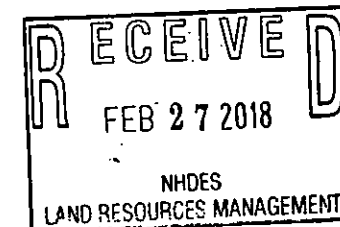
Low brackish riverbank marsh

State Federal Notes

Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff.

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

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.



## 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: Great Bay Megasite

County: Strafford  
Town(s): Dover  
Size: 94.2 acres

Elevation: 20 feet

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**

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First reported: 1988-09-13

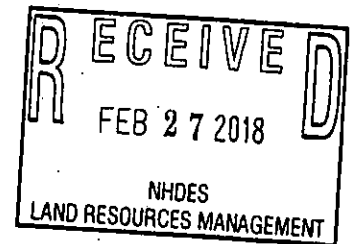
Last reported: 2004-09-23

**LIST OF OWNERS OF ABUTTING PROPERTY**

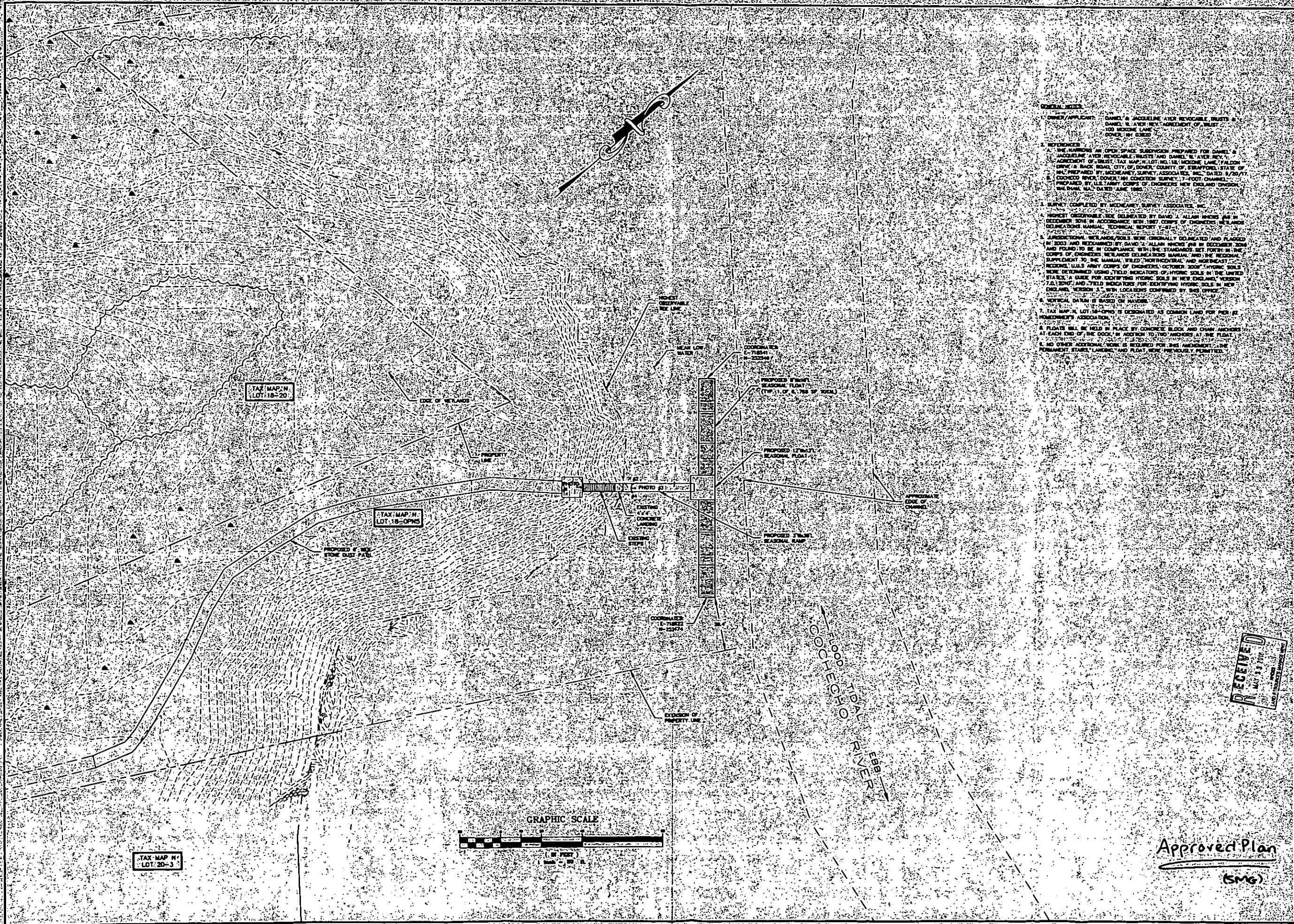
(This includes property directly across the street or streams from the land under consideration. List must also include any and all preparers of plans, studies, etc...)

**PLEASE PROVIDE NAME & MAILING ADDRESS**

<p><b>ABUTTER:</b> MAP N/LOT 18-3 &amp; 8-B</p> <p>STATE OF NEW HAMPSHIRE FISH &amp; GAME DEPARTMENT 11 HAZEN DRIVE CONCORD, NH 03301</p>	
<p><b>ABUTTER:</b> MAP N/LOT 20-3</p> <p>PAUL &amp; LUANN MAROLD DOVER, NH 03820</p>	







**GENERAL NOTES:**

1. OWNER: DANIEL & JACQUELINE AYER REVOCABLE TRUSTS & DANIEL W. AYER REV. AGREEMENT OF TRUST, 100 MEDINE LANE, DORSET, NH 03824
2. REFERENCES:
  - A. THE NARRROWS OPEN SPACE SUBDIVISION PREPARED FOR DANIEL & JACQUELINE AYER REVOCABLE TRUSTS AND DANIEL W. AYER REV. AGREEMENT OF TRUST, TAX MAP N LOT NO. 18, MEDINE LANE, FALCON DRIVE & BACK ROAD, CITY OF DORSET, COUNTY OF STRAFFORD, STATE OF NH, PREPARED BY MCKEANAY SURVEY ASSOCIATES, INC. DATED 1/26/17
  - B. GOCHO RIVER, DORSET, NH CONDUIT SURVEY, 7-FOOT CHANNEL, PREPARED BY U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DIVISION, 384 BAY ST. DATED JUNE 1985
3. SURVEY COMPLETED BY MCKEANAY SURVEY ASSOCIATES, INC.
4. HIGHEST OBSERVABLE TIDE DELINEATED BY DAVID J. ALLAN HIGGS (AS IN DELINEATION 2014) IN ACCORDANCE WITH 1987 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT 1-87
5. JURISDICTIONAL WETLANDS/SOILS WERE ORIGINALLY DELINEATED AND FLAGGED IN 2014 AND RETESTED BY DAVID J. ALLAN HIGGS (AS IN DELINEATION 2014) AND FOUND TO BE IN COMPLIANCE WITH THE STANDARDS SET FORTH IN THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE MANUAL, FIELD INSTRUMENTAL AND NORTHEAST REGIONAL U.S. ARMY CORPS OF ENGINEERS OCTOBER 2007 (HYDRIC SOILS WERE DETERMINED USING FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES; A GUIDE FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 7.0, 2007) AND FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 1.1, WITH LOCATIONS DETERMINED BY THIS OFFICE.
6. VERTICAL DATUM IS BASED ON NAVD83.
7. TAX MAP N LOT 18-OPNS IS DESIGNATED AS COMMON LAND FOR PER 62 MEMORANDUM'S ASSOCIATION.
8. FLOATS WILL BE HELD IN PLACE BY CONCRETE BLOCK AND CHAIN ANCHORS AT EACH END OF THE DOCK IN ADDITION TO TWO ANCHORS AT THE FLOAT.
9. NO OTHER ADDITIONAL WORK IS REQUIRED FOR THIS MEMORANDUM'S ASSOCIATION PERMANENT STAIRS, LANDING, AND FLOAT WERE PREVIOUSLY PERMITTED.

DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	NO.	REVISIONS	DATE
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	1		
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	2		
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	3		
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	4		
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	5		
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	6		
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	7		
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	8		
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	9		
05/18/2018	AS SHOWN	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	DAVID J. ALLAN HIGGS	10		

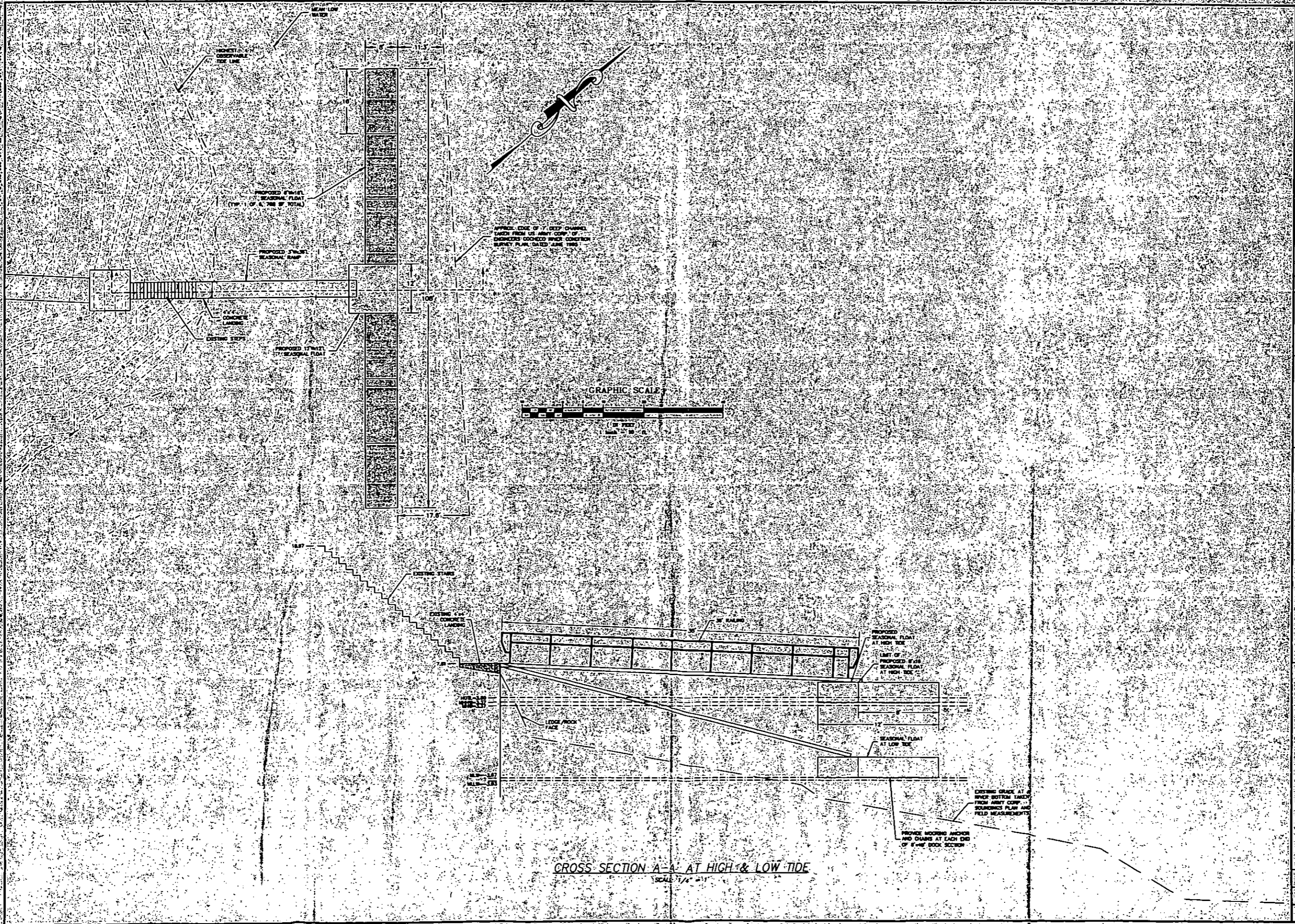
TIDAL DOCK AMENDMENT PLAN  
 Prepared for:  
 DANIEL & JACQUELINE AYER REVOCABLE TRUSTS & DANIEL W. AYER REV. AGREEMENT OF TRUST  
 100 MEDINE LANE, DORSET, NH 03824  
 THE NARRROWS OPEN SPACE SUBDIVISION  
 TAX MAP N LOT 18, 18-20, 18-OPNS & 18-19  
 100 MEDINE LANE, FALCON DRIVE & BACK ROAD, DORSET, NH

**M/S ENGINEERING, P.C.**  
 100 MEDINE LANE, DORSET, NH 03824  
 TEL: 603-888-1111 FAX: 603-888-1112  
 WWW.MSENGR.COM

Approved Plan  
 (SMG)

JOB: 18-055  
 SHEET: 1 OF 2  
 TDI





CROSS SECTION A-A AT HIGH & LOW TIDE  
SCALE 1/4" = 1'

DATE: 10/16/05		SCALE: 1/4" = 1'	DESIGNED BY: SJS	PROJECT NO: 05-10-055
DRAWN BY: SJS		APPROVED BY: SJS	PROJECT TITLE: TIDAL DOCK DETAILS	
<p>PREPARED FOR:          DANIEL &amp; JACQUELINE AYER REVOCABLE TRUST          DANIEL W. AYER, REV. AGREEMENT OF TRUST          THE "NARROWS" OPEN SPACE SUBDIVISION          1500 W. 15TH AVENUE, SUITE 200, DENVER, CO 80202</p>				
<p><b>MIS ENGINEERING, P.C.</b>          CIVIL, STRUCTURAL &amp; ENVIRONMENTAL          17 FALCONER ST., DENVER, CO 80202          PHONE: (303) 733-8888 FAX: (303) 733-8889          WWW: WWW.MISENGR.COM</p>				
NO. 16-055		SHEET 2 OF 2		
TD2				