

# TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709 www.exeternh.gov

## PUBLIC NOTICE EXETER CONSERVATION COMMISSION

The Exeter Conservation Commission will meet in the Novak Room of the Town Office Building, Exeter on **Tuesday, January 13<sup>th</sup>, 2015 at 7:00 P.M.** 

## Call to Order:

- 1. Introduction of Members Present
- 2. Public Comment

## **Action Items**

- 1. Squamscott River Sediment Remediation (Mark McCabe)
- 2. Proposed Epping Road Corridor Wetland Zoning Amendments (Darren Winham)
- 3. Tan Lane Parking Lot Improvements Minimum Impact Expedited Wetland Permit Application, Map 72, Lot 209 (*Jeff Clifford*)
- 4. Raynes Farm Long Range Development Plan Update (Don Briselden)
- 5. Forest Management Plan Implementation (Don Briselden)
- 6. Approval of Minutes: December 9<sup>th</sup>, 2014
- 7. Next Meeting Date and Agenda Items

Jay Gregoire, Chair Exeter Conservation Commission Posted January 12<sup>th</sup>, 2015 Exeter Town Office, Exeter Public Library, and Town Departments.



Prepared by: AECOM Chelmsford, MA

January 2015

# New Hampshire Department of Environmental Services Standard Dredge and Fill Permit Application

# US Army Corps of Engineers Programmatic General Permit Application

Northern Utilities Squamscott River Sediment Remediation Exeter, New Hampshire



412	NHDES
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THE STATE OF NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES LAND RESOURCES MANAGEMENT **WETLANDS BUREAU** 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095 Phone: (603) 271-2147 Fax: (603) 271-6588 http://des.nh.gov/organization/divisions/water/wetlands



# **PERMIT APPLICATION**

Administrative Use Only	Administrative Use Only	Adm	iinistrative Use Only	File Che Amo Initia	No.: eck No.: ount: als:
1. REVIEW TIME: Indicate your Review Time below.	Refer to Guidance Document A for	instructions.			
🛛 Standard Review (Mini	mum, Minor or Major Impact)		Expedited	d Review (	Minimum Impact)
2. PROJECT LOCATION: Separate applications must be file	d with each municipality that jurisdic	ctional impacts	will occur in.		
ADDRESS: Swasey Parkway /	13 Newfields Road			TOWN/CI	TY: Exeter
TAX MAP: 64 / 49	BLOCK: 45 / 15	LOT:			UNIT:
USGS TOPO MAP WATERBODY NA	ME: Squamscott River	□ NA	STREAM WATERSHED SIZE: 128 sq miles		SIZE: <b>128 sq miles</b> 🛛 NA
LOCATION COORDINATES (If known	): E 1175852 N 177507			atitude/Lono	gitude 🔲 UTM 🖾 State Plane
<b>3. PROJECT DESCRIPTION:</b> Provide a brief description of the p of your project. DO NOT reply "Se	project outlining the scope of work.	Attach additionable	al sheets as r	needed to p	provide a detailed explanation
Northern Utilities will remove approximately 300 cubic yards of contaminated sediment from an area of the Squamscott River adjacent to Swasey Parkway as a proactive ecological restoration effort. The removal will eliminate the source of sheen and odor adjacent to a storm water outfall. The sediment impacts are the result of a prior release from a former manufactured gas plant site that operate in Exeter during the period between 1864 and 1955. The impacted sediment will be transported by barge to a temporary processing area at the Exeter DPW facility where it will be prepared for transport/disposal at a permitted off-site facility. A more detailed description of the process is provided in Attachment B, with illustrations including maps and plans provided in Attachments I and					
4. RELATED PERMITS, ENFOR	CEMENT, EMERGENCY AUTHOR	IZATION, SHO	RELAND, AL	TERATIO	N OF TERRAIN, ETC
Project to be conducted und	er the US Army Corps of Engi	neers New H	ampshire P	rogramm	natic General Permit
5. NATURAL HERITAGE BUREAU & DESIGNATED RIVERS: See the Instructions & Required Attachments document for instructions to complete a & b below.					
a. Natural Heritage Bureau File I	D: NHB 14-4445 <u>.</u>				
<ul> <li>b. ⊠ Designated River the project is in ¼ miles of: Lower Exeter – Squamscott Rivers ; and date a copy of the application was sent to Local River Advisory Committee: Month: <u>1</u> Day: <u>14</u> Year: <u>2015 estimated.</u></li> <li>□ NA</li> </ul>					

6. APPLICANT INFORMATION (Desired permit holder)						
LAST NAME, FIRST NAME, M.I.: Murphy, Thomas. Mana	ager Environr	nental	Compliand	e and Busi	ness	Continuity
TRUST / COMPANY NAME: Northern Utilities/ Unitil Co	rp. MA	ILING AD	DRESS: 6 L	iberty Lane	West	1
TOWN/CITY: Hampton				STATE: <b>NH</b>		ZIP CODE: <b>03842</b>
EMAIL or FAX: murphyt@unitil.com		PHONE	: 603.379.	3829		
ELECTRONIC COMMUNICATION: By initialing here:,	I hereby authoriz	e DES to	communicate	e all matters rela	ative to	this application electronically
7. PROPERTY OWNER INFORMATION (If different that	an applicant)					
LAST NAME, FIRST NAME, M.I.: Perry, Jennifer, DPW D	irector					
TRUST / COMPANY NAME: Town of Exeter	MA	ILING AD	DRESS: 13	Newfields F	Road	
TOWN/CITY: Exeter				STATE: <b>NH</b>		ZIP CODE: <b>03833</b>
EMAIL or FAX: jperry@exeternh.gov			PHONE: 60	3.773.6157		
ELECTRONIC COMMUNICATION: By initialing here,	I hereby authorize	e DES to	communicate	all matters rela	tive to t	this application electronically
8. AUTHORIZED AGENT INFORMATION						
LAST NAME, FIRST NAME, M.I.: McCabe, Mark			COMPANY I	NAME: AECOI	М	
MAILING ADDRESS: 250 Apollo Drive			I			
TOWN/CITY: Chelmsford				STATE: <b>MA</b>		ZIP CODE: 01824
EMAIL or FAX: mark.mccabe@aecom.com	PH	IONE: <b>9</b>	78.905.231	1		
ELECTRONIC COMMUNICATION: By initialing here M.M.	nereby authorize	DES to co	ommunicate a	Il matters relativ	ve to th	is application electronically
9. PROPERTY OWNER SIGNATURE:	r clarification of	the held	w statemen	ts		
By signing the application, I am certifying that:		the belo	w statemen	13		
<ol> <li>I authorize the applicant and/or agent indicated on t upon request, supplemental information in support</li> <li>I have reviewed and submitted information &amp; attach</li> </ol>	his form to act i of this permit an ments outlined	n my be oplication in the In	half in the pi n. structions ar	rocessing of th	nis app ttachn	olication, and to furnish
<ol> <li>All abutters have been identified in accordance with</li> <li>I have read and provided the required information o</li> <li>I have read and understand Env. Wt 202.02 and have</li> </ol>	utlined in Env-V	Vt 302.0	4 for the app	olicable projec	t type.	
<ol> <li>6. Any structure that I am proposing to repair/replace v grandfathered per Env-Wt 101.47</li> </ol>	was either previ	ously pe	ermitted by the	ne Wetlands E	Bureau	or would be considered
<ul> <li>7. I have submitted a copy of the application materials</li> <li>8 Lauthorize DES and the municipal conservation corr</li> </ul>	to the NH State	e Histori	c Preservatio	on Officer.	ct	
9. I have reviewed the information being submitted and	d that to the be	st of my	knowledge t	he information	n is tru	e and accurate.
<ol> <li>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.</li> </ol>						
11. I am aware that the work I am proposing may require additional state, local or federal permits which I am responsible for obtaining.						
<ol> <li>The mailing addresses I have provided are up to date and appropriate for receipt of DES correspondence. DES will not forward returned mail.</li> </ol>						
					,	,
		h -			/	1
Property Owner Signature	Print name legib	У		D	Date	

## **MUNICIPAL SIGNATURES**

10. CONSERVATION C	COMMISSION SIGNATURE	
The signature below certifies that the municipal conservation 1. Waives its right to intervene per RSA 482-A:11; 2. Believes that the application and submitted plans accurat 3. Has no objection to permitting the proposed work.	n commission has reviewed this application tely represent the proposed project; and	, and:
Authorized Commission Signature	Print name legibly	Date
DIRECTIONS FOR CONSERVATION COMMISSION		
1. Expedited review ONLY requires that the conservation	commission's signature is obtained in the	space above.
2. The Conservation Commission signature should be obtained <b>prior</b> to the submittal of the original application and four copies to the town/city clerk for mailing to the DES.		
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 reviewed in the standard review time frame.		

## 11. 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	Town/City	Date

### DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3,I

- 1. For applications where "Expedited Review" is checked on page 1, sign and accept the applications **only** if the Conservation Commission signature has been received;
- 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.
- 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 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.

#### 12. IMPACT AREA:

For each jurisdictional area that will be/has been impacted, provide square feet and, if applicable, linear feet of impact <u>Permanent</u>: impacts that will remain after the project is complete.

<u>Temporary</u>: impacts not intended to remain (and will be restored to pre-construction conditions) after the project is complete. <u>After-the-fact (ATF)</u>: work completed prior to receipt of this application by DES. Check box to indicate ATF.

JURISDICTIONAL AREA	PERMANENT Sq. Ft. / Lin. Ft.		TEMPORAF Sq. Ft. / Lin.	۲۲ Ft.
Forested wetland		🗌 ATF		
Scrub-shrub wetland		🗌 ATF		
Emergent wetland		🗌 ATF		
Wet meadow		🗌 ATF		
Intermittent stream		🗌 ATF		
Perennial Stream / River	/	🗌 ATF	/	
Lake / Pond	/	🗌 ATF	/	
Bank - Intermittent stream	/	🗌 ATF	/	
Bank - Perennial stream / River	/	🗌 ATF	/	
Bank - Lake / Pond	/	🗌 ATF	/	
Tidal water	1,600 / 80	🗌 ATF	/	
Salt marsh		🗌 ATF	800	
Sand dune		🗌 ATF		
Prime wetland		🗌 ATF		
Prime wetland buffer		🗌 ATF		
Undeveloped Tidal Buffer Zone (TBZ)		🗌 ATF		
Previously-developed upland in TBZ		🗌 ATF		
Docking - Lake / Pond		🗌 ATF		
Docking - River		🗌 ATF		
Docking - Tidal Water		🗌 ATF		
TOTAL	1,600 / 80		800 / 16	

13. 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)	<b>1,600</b> sq. ft.	X \$0.20 =	\$ 320
Temporary (seasonal) docking structure:	<b>800</b> sq. ft.	X \$1.00 =	\$ 800
Permanent docking structure:	sq. ft.	X \$2.00 =	\$
Projects proposing shoreline structures	s (including docks	) add \$200  =	\$
		Total =	\$ 1,120
The Application Fee is the above calculated Tota	al or \$200, whichev	er is greater =	\$

**Attachment A** 

**Application Fee** 

**Attachment B** 

**Project Description** 

Project Summary Northern Utilities Sediment Remediation Squamscott River Outfall Exeter, New Hampshire

## Introduction

The Exeter Gas Light Company, a predecessor of Northern Utilities, Inc. (Northern), operated a manufactured gas plant (MGP) at the intersection of Water and Green Streets in Exeter during the period between 1864 and 1955. The facility provided fuel for lighting and heat to the community, and was decommissioned with the introduction of interstate natural gas pipelines. While Northern never conducted manufactured gas operations at this property, as the current owner, Northern assumed the environmental liability and completed an environmental cleanup of the property during the period between 2001 and 2002. A Certificate of Completion was issued for the work by the New Hampshire Department of Environmental Services (NHDES).

In August 2008, representatives of the Town of Exeter (Town) notified Northern of the presence of sheen and odor adjacent to a storm water outfall in the Squamscott River (the Site). A preliminary investigation indicated the presence of MGP residuals in the sediments resulting from a historic discharge into the municipal line from the former MGP. Northern has successfully controlled the potential for sheen/odor with interim measures during the development of a Remedial Action Plan (RAP) to address the associated MGP impacts in sediment.

## Site Setting

The findings from a phased investigation of the Site indicate that mobile coal tar, i.e. product, is the source of the sheen on the sediments/ surface water, and that the ecological risk from MGP residuals is limited to sediments that are visibly impacted by this material. Product impacts in the river are limited to an area of approximately 1,400 sq. ft. of sediment to a general depth of 5 ft. below top of sediment (btos). Less concentrated MGP impacts, as evidenced by sheen upon disturbance, staining, and elevated levels of MGP constituents of interest, were documented outside of this area in both surface and subsurface sediments.

The impacted area of the Squamscott River is located adjacent to Swasey Parkway (Figure I-1), a popular recreational area that is heavily landscaped with grass and historic trees. The river is separated from the Parkway by a rip rap embankment that has an elevation of approximately 10 vertical feet. The impacted area of sediment has only limited accessibility from the land side during low tide and is covered by shallow water (up to 3 ft.) during other periods.

## **Remedial Goals**

The goal for the remediation effort will be to meet water quality criteria in the Squamscott River, and eliminate the potential for risk from the MGP residuals. Achieving the Remedial Goal for the Site will require that a proactive ecological restoration of the area be conducted to eliminate the migration of product to the surface of the sediment and control associated potential exposure pathways. It is assumed that the remaining impacts, i.e., sediment exhibiting significant staining or generating sheen only upon disturbance, will be mitigated by natural biological processes once the product has been removed.

## Remedy

The Town staff has expressed a desire for Northern to implement a final remedy for the Site and a preference to minimize the disturbance to the Swasey Parkway. In support of the Town's interests, Northern has proposed conducting the Site activities from the water to eliminate the need for staging heavy equipment and transporting material through the Parkway. The RAP document that recommended the water-side approach was approved by NHDES Hazardous Waste Remediation Bureau in September 2014. A summary of the approach, as presented in the RAP, is provided below. It should be noted that the figures provided in this summary are intended for informational purposes, and that detailed design drawings will be developed as part of a Technical Specifications package once the permitting process is complete and site surveys have been developed.

Sediment dredging will be conducted using equipment based on shallow draft barges. The removal activities will be conducted within a sheet pile barrier (approximately 200 linear feet) that will be keyed into the bank of the river to provide the primary control of silt and sheen. The sheets will be installed using a vibratory technique to minimize disruption to the surrounding community. Secondary sorbent boom and silt curtain controls will be placed outside of the work area. An illustration of the proposed layout of the dredge site is provided in Figure K-1. Approximately 60 linear feet of bank and 1,600 sq. ft. of river will be disturbed by the activity. A cross section of the dredge area is illustrated in Figure K-2. The excavation will be conducted in the 'wet' using GPS-equipped equipment to effectively control the depth of excavation to a consistent elevation (1-3 ft. below the observed impacts) across the dredge area. Figure K-3 provides an illustration of the outfall (currently assumed to be 2 ft. btos). The area will be backfilled to create a channel from the mouth of the outfall out into the river. Backfill material will be a silty sand that is consistent with the native material (37% fines. 60% sand, 3% gravel). The channel will be sloped (2h:1v) for stability and lined with rip rap (approximately 10 ft. from the mouth of the outfall) to minimize erosion.

Dredged material (approximately 300 cubic yards [cy]) will be transported in covered roll-off boxes on shallow draft barges to the Exeter Department of Public Works (DPW) facility (approximately 1 mile down river) for subsequent handling prior to disposal. A temporary dock (approximately 50 ft. in length and up to 16 ft. in width) will be constructed at the DPW site to facilitate the off-loading of the roll-off boxes from the barges by crane. The proposed location of the temporary dock and relative location of the dewatering pad are illustrated in Figure K-4. The dock will be placed in an area that will minimize disturbance to the salt marsh vegetation. Plans for restoration of the disturbed area will be developed as part of the Technical Specifications and will be provided to NHDES for review once the location is finalized.

The covered roll-offs will be transported to temporary dewatering/ stockpile area (K-5). The excavated sediment material will be offloaded by excavator to the treatment area (bermed/lined) for final dewatering, i.e. free draining and addition of drying agent such as kiln dust or quick lime, and sampling to facilitate off-site disposal at a thermal desorption facility. Effluent from sediment dewatering activities will be collected in a sump and treated in a portable unit located at the DPW facility. The treated effluent will be discharged to the Exeter Publically Owned Treatment Works (POTW) under an Industrial Wastewater Indirect Discharge Permit. Note that a similar approach for transporting material to the DPW facility and conditioning of dredged sediment was used for a maintenance dredging program conducted by Phillips Exeter Academy in 2003.

The tidal influence and relatively shallow water in the area adjacent to the outfall will affect the schedule for conducting the remediation since access to the Site will be limited during low tide. Highly disruptive work such as the installation/removal of sheet pile will be scheduled to maximize the use of the "daytime" work shifts and limit the inconvenience to local residents. Excavation will also be conducted during daytime hours using a barge-mounted clam shell excavator. The excavator barge will stabilized adjacent to the bank using spuds to allow excavation/transfer of

material to transportation barges during both low and high tides. Depending on the tide cycle, the barges (practical capacity of approximately 75 cy) will only be able to be "cycled" between the Site and DPW facility 1 or 2 times per day, limiting the excavation rate to approximately 100 cy per day.

Communications with the Natural Heritage Bureau and the State Historical Preservation Office have confirmed that the location and timing of the project are not expected to have a detrimental impact on the area. NHDES is currently reviewing the schedule for the project, particularly whether the work in the river could be initiated prior to the current dredge "window" of November 15 to March 15 to limit the potential effect on rainbow smelt runs in the area. Work is planned to start on the earliest allowable date to minimize the effect of weather conditions on the project schedule. It is estimated that work in the river, including backfilling to restore the surface of the sediment, can be completed within a 30-day period, with additional off-site work related to the management of excavated sediment and collected water completed within an additional 45-days.

Attachment C

**Required Signature** 

The following signatures are provided with the Applications - Property Owner - Item 9

- Conservation Commission Item 10
- Town Clerk Item 11

**Attachment D** 

## **Pre-Application Notes**

## McCarthy, Ryan

From:	Richardson, Frank [Frank.Richardson@des.nh.gov]
Sent:	Wednesday, September 17, 2014 15:21
То:	Rydel, Paul; McCabe, Mark
Cc:	Gatherum, Tom; Murphy, Thomas; McCarthy, Ryan
Subject:	RE: Exeter Squamscott River Project

Meeting Confirmed.

Monday October 13, 2014 @ 10:00am Pease Field Office Room D

Frank D. Richardson, Ph.D. Senior Wetlands Inspector Southeast Region Supervisor NH DES Wetlands Bureau Pease Field Office 222 International Drive, Suite 175 Portsmouth, NH 03801 Tel. (603) 559-1513 Fax (603) 559-1510

From: Rydel, Paul
Sent: Wednesday, September 17, 2014 2:12 PM
To: 'McCabe, Mark'; Richardson, Frank
Cc: Gatherum, Tom; Murphy, Thomas; McCarthy, Ryan
Subject: RE: Exeter Squamscott River Project

Great – it's on my calendar.

Paul Rydel, P.G. New Hampshire Department of Environmental Services Hazardous Waste Remediation Bureau

direct: 603.271-3116 paul.rydel@des.nh.gov

Statement of confidentiality: The contents of this message may be confidential. Any unauthorized disclosure, reproduction, use or dissemination (either whole or in part) is prohibited. If you are not the intended recipient of this message, please notify the sender immediately and delete the message from your system.

From: McCabe, Mark [mailto:Mark.McCabe@aecom.com] Sent: Wednesday, September 17, 2014 1:01 PM To: Richardson, Frank; Rydel, Paul Cc: Gatherum, Tom; Murphy, Thomas; McCarthy, Ryan Subject: RE: Exeter Squamscott River Project

Frank and Paul, It looks like October 13 will work.

Attendees:

- Northern Utilities/Unitil Tom Gatherum and Tom Murphy
- AECOM Ryan McCarthy and Mark McCabe

I'll pull together a project summary that you can circulate prior to the meeting. As additional background, note that Phillips Exeter Academy went through the permitting process for maintenance dredging in this area of the river in 2003.

Regards, Mark

## Mark McCabe

Environment D: 978.905.2311 C:508.423.9018 mark.mccabe@aecom.com

### AECOM

250 Apollo Drive Chelmsford, MA 01824 Phone: 978.905.2100 Fax: 978.905.2101 www.aecom.com

From: Richardson, Frank [mailto:Frank.Richardson@des.nh.gov]
Sent: Tuesday, September 16, 2014 3:27 PM
To: McCabe, Mark; Rydel, Paul
Subject: RE: Exeter Squamscott River Project
Importance: High

Paul & Mark,

I just discovered a room schedule conflict. There are no rooms available on Tues. Oct 14 and for the rest of that week due to an oil spill training exercise.

However, Monday Oct. 13 (Columbus Day) is available (it's not a State of New Hampshire holiday)

I also moved us to Room D which is larger.

All meeting times remain the same ... 10:00 to 12:00 each day. Weds. 10/08/14; Fri. 10/10/14 & Mon. 10/13/14

Frank

Frank D. Richardson, Ph.D. Senior Wetlands Inspector Southeast Region Supervisor NH DES Wetlands Bureau Pease Field Office 222 International Drive, Suite 175 Portsmouth, NH 03801 Tel. (603) 559-1513 Fax (603) 559-1510

From: McCabe, Mark [mailto:Mark.McCabe@aecom.com] Sent: Tuesday, September 16, 2014 3:00 PM **To:** Richardson, Frank; Rydel, Paul **Subject:** RE: Exeter Squamscott River Project

Frank and Paul,

I'll check with the project managers from Northern Utilities to determine their availability and prepare a project summary to fill in some of the details.

Thank you for organizing this.

Regards, Mark

## Mark McCabe

Environment D: 978.905.2311 C:508.423.9018 mark.mccabe@aecom.com

### AECOM

250 Apollo Drive Chelmsford, MA 01824 Phone: 978.905.2100 Fax: 978.905.2101 www.aecom.com



AECOM 250 Apollo Drive Chelmsford, MA 01824 978.905.2100 tel 978.905.2101 fax

## **Meeting Minutes**

Client:	Northern Utilities
Project Name:	Exeter/ Squamscott River Dredging
AECOM Project Number:	60139731
Date:	10/13/14
Location:	NHDES Pease Field Office, Portsmouth, NH
Meeting Purpose:	Pre-Application Meeting
Prepared By:	Ryan McCarthy

In Attendance			
Name	Company	Telephone	E-mail Address
Frank Richardson	NHDES - Wetlands	603-559-1513	Frank.Richardson@des.nh.us
Mark McCabe	AECOM	978-905-2311	Mark.McCabe@aecom.com
Tom Gatherum	Unitil Service Corp.	603-227-4545	Gatherum@unitil.com
Ryan McCarthy	AECOM	978-905-2312	Ryan.McCarthy@aecom.com
Paul Rydel	NHDES – HWRB	603-271-3116	Paul.Rydel@des.nh.us

Action Item Number	Action Item	Responsibility
0001	Coordination with NH Fish and Game	AECOM
0002	Coordination with Exeter DPW given concurrent construction schedules	AECOM
0003	Conduct SHPO file review	AECOM
0004	Coordination with New Hampshire Heritage Bureau	AECOM
0005	Get project on agenda for 1/14/15 NH Dredge Management Task Force meeting	AECOM

#### Summary

AECOM and Unitil met at NHDES's Pease Field office to formally "kick off" the proposed Squamscott River sediment remediation project and begin to better understand the required permitting activities. Frank Richardson (NHDES) gave a very detailed description of each of the necessary steps and provided contact information for many of the key contacts within the state. Mr. Richardson also described a vehicle by which this project could receive an expedited permit review. Overall, a very positive meeting and AECOM/ Unitil left the meeting with a clear understanding of how to proceed.

## McCarthy, Ryan

From:	McCabe, Mark
Sent:	Tuesday, October 21, 2014 11:44
То:	Patterson, Cheri
Cc:	Murphy, Thomas; Gatherum, Tom; McCarthy, Ryan; Rydel, Paul; Richardson, Frank; Dionne,
	Michael
Subject:	RE: Squamscott River Sediment project

Cheri,

As we discussed this morning, we'll meet at the gazebo along the Swasey Parkway at 1 PM on Friday, November 14<sup>th</sup> to catch low tide in the river. We can then look at the "take out" area at the DPW yard. I'll contact Town staff to let them know that we're coming.

Regards, Mark

Mark McCabe Environment D: 978.905.2311 C:508.423.9018 mark.mccabe@aecom.com

#### AECOM

250 Apollo Drive Chelmsford, MA 01824 Phone: 978.905.2100 Fax: 978.905.2101 www.aecom.com

From: Patterson, Cheri [mailto:Cheri.Patterson@wildlife.nh.gov]
Sent: Monday, October 20, 2014 2:08 PM
To: McCabe, Mark
Cc: Murphy, Thomas; Gatherum, Tom; McCarthy, Ryan; Rydel, Paul; Richardson, Frank; Dionne, Michael
Subject: RE: Squamscott River Sediment project

Mark,

Both Mike and I reviewed the project summary and we would like a pre-permit review and site visit. Mike and I are available November 12<sup>th</sup> from 11-2 or November 14<sup>th</sup> from 10-2. Will any of these dates work for you?

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

"NH Fish and Game Department: Connecting you to life outdoors"

Did you know...The NH Fish and Game Department protects, conserves and manages more than 500 species of wildlife, including 63 mammals, 18 reptiles, 22 amphibians, 313 birds, and 122 fish. For more information visit: <u>http://wildlife.state.nh.us/Wildlife/wildlife\_plan.htm</u>

From: McCabe, Mark [mailto:Mark.McCabe@aecom.com]
Sent: Monday, October 13, 2014 3:17 PM
To: Patterson, Cheri
Cc: Murphy, Thomas; Gatherum, Tom; McCarthy, Ryan; Rydel, Paul; Richardson, Frank
Subject: Squamscott River Sediment project

Cheri,

AECOM is working with Northern Utilities to design a small environmental remediation project for an area of impacted sediment in the Squamscott River in Exeter. We had a pre-permit meeting with Paul Rydel (NHDES Site Manager and Frank Richardson this morning and they suggested that a pre-permit meeting with your office might be beneficial. Please let me know if there are some convenient times for a meeting and I'll get something scheduled with the project managers from Northern Utilities. I've attached a project summary to provide some background for the proposed work.

We look forward for meeting with you.

Regards, Mark

## Mark McCabe

Environment D: 978.905.2311 C:508.423.9018 mark.mccabe@aecom.com

### AECOM

250 Apollo Drive Chelmsford, MA 01824 Phone: 978.905.2100 Fax: 978.905.2101 www.aecom.com



## **Meeting Minutes**

Client:	Northern Utilities
Project Name:	Exeter/ Squamscott River Dredging
AECOM Project Number:	60139731
Date:	11/14/14
Location:	Exeter, NH (Squamscott River Site and DPW)
Meeting Purpose:	Pre-Application Meeting
Prepared By:	Ryan McCarthy

In Attendance					
Name	Company	Telephone	E-mail Address		
Mark McCabe	AECOM	978-905-2311	Mark.McCabe@aecom.com		
Tom Murphy	Unitil Service Corp.	603-379-3829	Murphyt@unitil.com		
Ryan McCarthy	AECOM	978-905-2312	Ryan.McCarthy@aecom.com		
Cheri Patterson	NH F&G – Marine Div.	603-868-1095	Cheri.Patterson@wildlife.nh.gov		
Mike Dionne	NH F&G – Marine Div.	603-868-1095	Michael.Dionne@wildlife.nh.gov		
Sandy Amborn	AECOM	978-905-2491	Sandy.Amborn@aecom.com		

Action Item Number	Action Item	Responsibility
0001	Provide NH Fish and Game final package of design plans (including outfall reconstruction and unloading trestle).	AECOM
0002	Ensure construction of temporary unloading trestle does not adversely impact existing salt marsh.	AECOM
0003	Letter regarding modified work window.	NH F&G
0004	Get project on agenda for 1/14/15 NH Dredge Management Task Force meeting	AECOM

#### Summary

AECOM and Unitil met NH Fish and Game representatives at the Squamscott River site to discuss the proposed sediment remediation project and obtain a better understanding of the allowed in-water work window. Cheri Patterson (NH F&G) expressed concern about the proposed work potentially impacting the rainbow smelt run in December and suggested that the project be limited to November work in 2015. This would deviate from the current prescribed in-water work window (November 15<sup>th</sup> to March 15<sup>th</sup>) and allow the project to commence earlier in the season. Ms. Patterson asked that a final set of design plans be submitted to NH F&G for review. Once plans are approved, NH F&G will draft a letter granting an exception to the existing dredge window.

The meeting then moved to the Exeter DPW site to look at the area where the temporary unloading trestle will be constructed. Ms. Patterson request that the trestle construction minimize the impacts to healthy salt marsh vegetation, and be built through areas of invasive species. AECOM/ Unitil took this suggestion under

advisement and will seek to minimize detrimental impacts on the salt marsh vegetation present at the site. Overall, a very positive meeting and AECOM/ Unitil left the meeting with a clear understanding of how to proceed. Attachment E

Need and Minimization & Avoidance







## PERMIT APPLICATION - ATTACHMENT A MINOR & MAJOR 20 QUESTIONS

<u>Env-Wt 302.04 Requirements for Application Evaluation</u> - For any major or minor project, the applicant shall demonstrate by plan and example that the following factors have been considered in the project's design in assessing the impact of the proposed project to areas and environments under the department's jurisdiction. Respond with statements demonstrating:

#### 1. The need for the proposed impact.

Sediment in the project area has been impacted by residuals from a former Manufactured Gas Plant (MGP) site. The impacts are the result of the disposal of coal tar to the storm drain system during the operation of the MGP (1864 to 1855) and the subsequent depositon of the residuals in sediment from an outfall in the Squamscott River. The resduals have the potential to migrate to the surface resulting in sheen on surface water.

Although the potential for sheen generation is currently being controlled by absorbent mats placed on the surface of the sediment, a permanent remedy is warranted.

2. That the alternative proposed by the applicant is the one with the least impact to wetlands or surface waters on site.

The permanent removal of MGP residuals provides the best long-term benefit for the Squamscott River. The proposed approach will minimize the short-term impacts to the river and surrounding area by focusing the removal on those residuals having the potential to migrate to the surrface of the sediment. Lesser impacts, e.g. areas with staining and elevated constituent concentrations, should be addressed by natural biological processes once the mobile residuals have been removed.

3. The type and classification of the wetlands involved.

According to the the Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, 1979), the open water at the site would be classified as Riverine Tidal System with an unconsolidated bottom (R1UB1), and the vegetated area would be classified as a Riverine Tidal Persistent emergent wetland system (R12Em).

The footprint at the dredging site is part of the existing river bottom. Following dredging, the area will be backfilled to the existing grade with clean fill representaive of the grain size in the immediate vicinity.
The location where the temporary unloading trestle will be constructed in an area dominated by invasive species (e.g., Phragmites australis). This stategic siting will remove some invasive species from the area (due to some limited clearing activities necessary for construction) and preserve the surrounding healthy salt marsh vegetation.
5. The rarity of the wetland, surface water, sand dunes, or tidal buffer zone area.
Within New Hampshire's Rivers Management and Protection Program, the Squamscott River in Exeter received designated river status on 5/31/11. The Exeter-Squamscott River Local Advisory committee (ESRLAC) works across towns within the entire watershed to advocate for the river, monitor land use activity in the area, and protect water quality/ wildlife habitat. The Squamscott is a tributary to the Great Bay Estuary, which is over 6,000 acres in size. The Squamscott River flows for nine miles, from the Great Dam in Exeter out to Great Bay. The river makes a gradual transition form a freshwater ecosystem to a salty, estuarine ecosystem along the way.
6. The surface area of the wetlands that will be impacted.
Approximately 6,000 sq ft will be impacted in the dredge area. An additional 800 sq ft will be impacted by the construction of a temporary dock in a separate downstream area to facilitate access to the river.
<ol> <li>The impact on plants, fish and wildlife including, but not limited to:</li> </ol>
<ul> <li>7. The impact on plants, fish and wildlife including, but not limited to:</li> <li>a. Rare, special concern species;</li> <li>b. State and federally listed threatened and endangered species;</li> </ul>
<ul> <li>7. The impact on plants, fish and wildlife including, but not limited to:</li> <li>a. Rare, special concern species;</li> <li>b. State and federally listed threatened and endangered species;</li> <li>c. Species at the extremities of their ranges;</li> </ul>
<ul> <li>7. The impact on plants, fish and wildlife including, but not limited to:</li> <li>a. Rare, special concern species;</li> <li>b. State and federally listed threatened and endangered species;</li> <li>c. Species at the extremities of their ranges;</li> <li>d. Migratory fish and wildlife;</li> </ul>
<ul> <li>7. The impact on plants, fish and wildlife including, but not limited to: <ul> <li>a. Rare, special concern species;</li> <li>b. State and federally listed threatened and endangered species;</li> <li>c. Species at the extremities of their ranges;</li> <li>d. Migratory fish and wildlife;</li> <li>e. Exemplary natural communities identified by the DRED-NHB; and</li> <li>f. Vernal pools.</li> </ul> </li> </ul>

Additionally, AECOM queried the USFWS Information, Planning, and Conservation (IPaC) decision support system for known occurrances of threatened and endangered species that may occur in the county (Rockingham) where the project is located. According to that database, two threatened species (Piping Plover and Small Whorled pogonia) and one endangered species (Roseate tern) are known to exist in Rockingham County. Additionally, it said that there are no critical habitats within the project area. The letter from USFWS is included in the permit package.

8. The impact of the proposed project on public commerce, navigation and recreation.
The dredge area and temporary dock are realtively small and will not impact navigation. The completion of the project will improve the recreational use of Swasey Parkway adjacent to the Squamscott River.
9. The extent to which a project interferes with the aesthetic interests of the general public. For example, where an applicant proposes the construction of a retaining wall on the bank of a lake, the applicant shall be required to indicate the type of material to be used and the effect of the construction of the wall on the view of other users of the lake.
The project will present a short-term inconvenience (e.g., limited noise and odor impacts) for residents in the immediate vicinity of the dredge area. Potential inconveneince will be mitigated by an effort to limit site activities to daylight hours and the use of odor-supressing foam to control fugitive emissions. All work will be conducted from the water-side to minimize the impact to Swasey Parkway.
10. The extent to which a project interferes with or obstructs public rights of passage or access. For example, where the applicant proposes to construct a dock in a narrow channel, the applicant shall be required to document the extent to which the dock would block or interfere with the passage through this area.
As stated above, the scale of the project should not obstruct public use of the Squamscott River, and the design of the project is intended to limit the effect on Swasey Parkway.
11. The impact upon abutting owners pursuant to RSA 482-A:11, II. For example, if an applicant is proposing to rip-rap a stream, the applicant shall be required to document the effect of such work on upstream and downstream abutting properties.
The project will provide limited nuisance noise and odor impacts to abutting property owners. The project schedule will be designed to maximixe activities during daylight hours and fugitive emission controls will be routinely used in the dredge area. An air monitoring program will be conducted to evaluate air quality in the immediate vicinity of the dredge and material handling areas to ensure that site activite do not pose a potential health risk.

12. The benefit of a project to the health, safety, and well being of the general public.
The current condition does not pose a human health risk since the area of impact is not readily accessible.
However, the intermittent migration of coal tar to the surface of the sediment result in sheen and odor that can pose an aesthetic issue for people using Swasey Parkway. The completion of the project will eliminate these issues.
13. The impact of a proposed project on quantity or quality of surface and ground water. For example, where an applicant proposes to fill wetlands the applicant shall be required to document the impact of the proposed fill on the amount of drainage entering the site versus the amount of drainage exiting the site and the difference in the quality of water entering and exiting the site.
The project will improve the quality of surface water by eliminating the source of sheen in the area adjacent to the storm water outfall.
14. The potential of a proposed project to cause or increase flooding, erosion, or sedimentation.
The surface of the sediment will be restored to current conditions so there should be no increase in the potential for flooding. The outfall of the storm drain has been covered by deposited sediment. The project will expose the outfall and improve its functionality. The restored outfall structure will include an area of rip rap to disperse the energy from storm water flow to minimize the potential for erosion.
15. The extent to which a project that is located in surface waters reflects or redirects current or wave energy which might cause damage or hazards.
The project is not anticipated to have an effect on flow in the river.

16.	6. The cumulative impact that would result if all parties owning or abutting a portion of the affected wetland or wetland						
	complex were also permitted alterations to the wetland proportional to the extent of their property rights. For example,						
	an applicant who owns only a portion of a wetland shall document the applicant's percentage of ownership of that						
	wetland and the percentage of that ownership that would be impacted.						

The impacts have been effectively delineated. Additional alterations are not anticipated.

17. The impact of the proposed project on the values and functions of the total wetland or wetland complex.

The project will improve the value and function of the Squamscott River.

18. The impact upon the value of the sites included in the latest published edition of the National Register of Natural Landmarks, or sites eligible for such publication.

Per the New Hampshire Division of Historical Resources this project is not anticiapted to have impacts on any historically significant sites.

19. The impact upon the value of areas named in acts of congress or presidential proclamations as national rivers, national wilderness areas, national lakeshores, and such areas as may be established under federal, state, or municipal laws for similar and related purposes such as estuarine and marine sanctuaries.

Within New Hampshire's Rivers Management and Protection Program, the Squamscott River in Exeter received designated river status on 5/31/11. The Exeter-Squamscott River Local Advisory committee (ESRLAC) works across towns within the entire watershed to advocate for the river, monitor land use activity in the area, and protect water quality/ wildlife habitat. The Squamscott is a tributary to the Great Bay Estuary, which is over 6,000 acres in size. The Squamscott River flows for nine miles, from the Great Dam in Exeter out to Great Bay. The river makes a gradual transition form a freshwater ecosystem to a salty, estuarine ecosystem along the way.

20. The degree to which a project redirects water from one watershed to another.

The project is not anticipated to have an effect on the redirection of water between watersheds.

### Additional comments

The remedial approach has been developed in concert with the Town of Exeter Department of Public Works and approved by the NHDES Waste Management Division.

Attachment F

**NHB** Review

## Memo

	NH NATURAL HERITAGE BUREAU
	NHB DATACHECK RESULTS LETTER

To: Ryan McCarthy, AECOM 1000 Elm Street 1000 Elm St. Suite 802 Manchester, NH 03101 From: Melissa Coppola, NH Natural Heritage Bureau **Date:** 11/17/2014 (valid for one year from this date) **Re:** Review by NH Natural Heritage Bureau NHB File ID: NHB14-4445 Town: Exeter Location: Tax Maps: Map 64 lot 45 and Map 49 lot 15 Description: Proposed remedial dredging of MGP impacted sediment (approx. 1400sq ft.) located in the Squamscott River adjacent to the Swazey Parkway in downtown Exeter. Construction of a temporary unloading area/trestle at the Exeter DPW facility for sediment processing /off-site transportation. cc: Kim Tuttle As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results. **Comments:** Plant spacios Endanal Ma4

T fait species	State	I cuci ai	Totes			
Spongy-leaved Arrowhead (Sagittaria montevidensis ssp. spongiosa)		1	Primarily vulnerable to changes to the hydrology of its habitat, especially alteration that change water levels. It may also be susceptible to increased pollutants and nutrients carried in stormwater runoff.			
Vertebrate species	State <sup>1</sup>	Federal	Notes			
American Eel (Anguilla rostrata)	SC		Contact the NH Fish & Game Dept (see below).			
Northern Black Racer ( <i>Coluber constrictor constrictor</i> )	Т		Contact the NH Fish & Game Dept (see below).			
Osprey (Pandion haliaetus)	SC		Contact the NH Fish & Game Dept (see below).			

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

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

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

## Memo



NH NATURAL HERITAGE BUREAU NHB DATACHECK RESULTS LETTER

species. An on-site survey would provide better information on what species and communities are indeed present.





Known locations of rare species and exemplary natural communities Note: Mapped locations are not always exact. Occurrences that are not in the vicinity of the project are not shown.



## New Hampshire Natural Heritage Bureau - Plant Record

## Spongy-leaved Arrowhead (Sagittaria montevidensis ssp. spongiosa)

Legal Sta	itus		Conserv	vation St	tatus		
Federal: State:	Not listed Listed Endar	ngered	Global: State:	Apparen Criticall	ntly secure but with cause for concern ly imperiled due to rarity or vulnerability		
Descripti	on at this Lo	ocation					
Conservat Comment	tion Rank: s on Rank:	Good quality, condition and l	andscape	context	('B' on a scale of A-D).		
Detailed I General A	Description: Area:	2003: Very common (hundre 2003: Tidal <b>brackish marsh</b> ( <i>Schoenoplectus tabernaemo</i> alluvium, with fresh-water co <i>latifolia</i> ), and mild water pep	ds of plan with smoo <i>ntani</i> ), an ordgrass ( <i>i</i> per ( <i>Pers</i> )	ts) in sev oth cordg d three-s Spartina icaria hy	veral areas. grass ( <i>Spartina alterniflora</i> ), softstem bulrush quare rush ( <i>Schoenoplectus pungens</i> ). In <i>pectinata</i> ), common arrowhead ( <i>Sagittaria</i> <i>vdropiperoides</i> ).		
General C Managem Comment	Comments: lent s:		1 - 1				
Location							
Survey Si Managed	te Name: S By:	quamscott River at Exeter					
County: Town(s): Size:	Rockinghar Exeter 1.9 acres	n	USGS q Lat, Lor Elevatio	uad(s): g: n:	Exeter (4207088) 425901N, 0705649W		
Precision:	Within	(but not necessarily restricted	to) the a	ea indica	ated on the map.		
Direction	s: 2003: 2	003: 250 m south of Jady Hill Ave. along the east shore of the Squamscott River in Exeter.					
Dates doo	cumented						
First repo	rted: 2	003-07-25	Last rep	orted:	2003-07-25		

## New Hampshire Natural Heritage Bureau - Animal Record

#### Legal Status **Conservation Status** Federal: Not listed Global: Apparently secure but with cause for concern State: SC State: Rare or uncommon **Description at this Location** Conservation Rank: Not ranked Comments on Rank: Detailed Description: 2008: Area 13324: 15 observed. General Area: General Comments: Management Comments: Location Survey Site Name: Great Brook-Exeter River Managed By: County: Rockingham USGS quad(s): Exeter (4207088) Town(s): Exeter Lat, Long: 425851N, 0705638W 1.9 acres Size: Elevation: Precision: Within (but not necessarily restricted to) the area indicated on the map. Directions: 2008: Exeter River **Dates documented** First reported: 2008-08-29 Last reported: 2008-08-29

American Eel (Anguilla rostrata)

## New Hampshire Natural Heritage Bureau - Animal Record

#### Legal Status **Conservation Status** Federal: Not listed Global: Apparently secure but with cause for concern State: SC State: Rare or uncommon **Description at this Location** Conservation Rank: Not ranked Comments on Rank: Detailed Description: 2008: Area 13325: 9 observed. General Area: General Comments: Management Comments: Location Survey Site Name: Great Brook-Exeter River Managed By: Gilman Park County: Rockingham USGS quad(s): Exeter (4207088) Town(s): Exeter Lat, Long: 425826N, 0705634W Size: 1.9 acres Elevation: Precision: Within (but not necessarily restricted to) the area indicated on the map. Directions: 2008: Exeter River **Dates documented** First reported: 2008-08-29 Last reported: 2008-08-29

### American Eel (Anguilla rostrata)

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.
## New Hampshire Natural Heritage Bureau - Animal Record

#### Legal Status **Conservation Status** Federal: Not listed Global: Apparently secure but with cause for concern State: SC State: Rare or uncommon **Description at this Location** Conservation Rank: Historical records only - current condition unknown. Comments on Rank: Detailed Description: 1984: Area 13238: 11 observed. General Area: General Comments: Management Comments: Location Survey Site Name: Little River - Exeter River Managed By: County: Rockingham USGS quad(s): Exeter (4207088) Town(s): Exeter Lat, Long: 425900N, 0705816W 1.9 acres Size: Elevation: Precision: Within (but not necessarily restricted to) the area indicated on the map. Directions: 1984: Little River **Dates documented** First reported: 1984-10-23 Last reported: 1984-10-23

#### American Eel (Anguilla rostrata)

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

# New Hampshire Natural Heritage Bureau - Animal Record

## Northern Black Racer (Coluber constrictor constrictor)

Legal Status	Conservation Status			
Federal: Not listed		Global: D	emon	strably widespread, abundant, and secure
State: Listed Threat	tened	State: In	nperil	ed due to rarity or vulnerability
Description at this Lo	cation			
Conservation Rank: Comments on Rank:	Not ranked			
Detailed Description: General Area: General Comments:	2012: Area 13078: 1 adult ob 2012: Area 13078: Residentia	served. 11 yard.		
Management Comments:				
Location				
Survey Site Name: T Managed By:	he Oaklands			
County: Rockinghan Town(s): Exeter Size: .4 acres	n	USGS qua Lat, Long: Elevation:	d(s):	Exeter (4207088) 425953N, 0705650W
Precision: Within	(but not necessarily restricted	to) the area	indica	ated on the map.
Directions: 2012: A	Area 13078: 20 Newfields Roa	d, Exeter.		
Dates documented				
First reported: 20	012-06-23	Last repor	ted:	2012-06-23

# New Hampshire Natural Heritage Bureau - Animal Record

#### Legal Status **Conservation Status** Federal: Not listed Global: Demonstrably widespread, abundant, and secure State: SC State: Not ranked (need more information) **Description at this Location** Conservation Rank: Not ranked Comments on Rank: Detailed Description: 2005: Area 8283: 2 fledged.2004: Area 8283: 1 fledged. General Area: General Comments: Management Comments: Location Survey Site Name: Brookside Sanctuary Managed By: County: Rockingham USGS quad(s): Exeter (4207088) Town(s): Exeter Lat, Long: 425914N, 0705649W Size: .4 acres Elevation: Precision: Within (but not necessarily restricted to) the area indicated on the map. Directions: **Dates documented** First reported: 2004 Last reported: 2005

**Osprey** (Pandion haliaetus)

## McCarthy, Ryan

From:	Tuttle, Kim [Kim.Tuttle@wildlife.nh.gov]
Sent:	Wednesday, November 19, 2014 9:01
То:	McCarthy, Ryan
Cc:	Dionne, Michael; Patterson, Cheri
Subject:	NHB14-4445 (Exeter/ Squamscott River)

Ryan,

The NHFG Nongame and Endangered Species Program has reviewed NHB 14-4445 for the proposed remedial dredging of MGP impacted sediment (approx. 1400sq ft.) located in the Squamscott River adjacent to the Swazey Parkway in downtown Exeter and construction of a temporary unloading area/trestle at the Exeter DPW facility for sediment processing /off-site transportation. The following species were identified in the NHB database check in the vicinity of the project:

American Eel (Anguilla rostrata) SC --Northern Black Racer (Coluber constrictor constrictor)T --Osprey (Pandion haliaetus) SC --1Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern

We do not expect impacts to any of the above named species based on the locations and timing of the project. We do not have any additional recommendations beyond those submitted by NHFG Marine Fisheries including that the project begin November 1<sup>st</sup> so rainbow smelt runs will not be affected in December. Please feel free to contact me if you have any questions regarding this review.

Sincerely,

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

From: McCarthy, Ryan [mailto:Ryan.McCarthy@aecom.com]
Sent: Monday, November 17, 2014 4:22 PM
To: Tuttle, Kim
Cc: Patterson, Cheri; Dionne, Michael
Subject: FW: NHB review: NHB14-4445 (Exeter/ Squamscott River)

Hi Kim,

Based on the results in the attached Heritage review, do we need to provide NH Fish and Game any additional information?

We met on site with Cheri and Mike last Friday so they are in the loop regarding this project (and copied here).

Thanks in advance,

#### Cheers,

Ryan

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Ryan S. McCarthy Project Manager, Environment D 978.905.2312 M 603.770.4945 ryan.mccarthy@aecom.com

#### AECOM

1000 Elm Street, Suite 802, Manchester, NH 03101 T 603.622.2811 F 603.622.8480 www.aecom.com

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From: Coppola, Melissa [mailto:Melissa.Coppola@dred.nh.gov] Sent: Monday, November 17, 2014 16:09 To: McCarthy, Ryan Subject: NHB review: NHB14-4445

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

Best, Melissa

Melissa Coppola NH Natural Heritage Bureau Environmental Information Specialist Division of Forest & Lands- Natural Heritage Bureau PO Box 1856 Concord, NH 03302-1856 603-271-2215 ext. 323



# **United States Department of the Interior**

FISH AND WILDLIFE SERVICE New England Ecological Services Field Office 70 COMMERCIAL STREET, SUITE 300 CONCORD, NH 3301 PHONE: (603)223-2541 FAX: (603)223-0104 URL: www.fws.gov/newengland



Consultation Code: 05E1NE00-2015-SLI-0165 Event Code: 05E1NE00-2015-E-00252 Project Name: Squamscott River Dredge December 16, 2014

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

To Whom It May Concern:

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

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

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

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

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

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

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan

(http://www.fws.gov/windenergy/eagle\_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

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

http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

Attachment



Project name: Squamscott River Dredge

# **Official Species List**

## **Provided by:**

New England Ecological Services Field Office 70 COMMERCIAL STREET, SUITE 300 CONCORD, NH 3301 (603) 223-2541\_ http://www.fws.gov/newengland

**Consultation Code:** 05E1NE00-2015-SLI-0165 **Event Code:** 05E1NE00-2015-E-00252

Project Type: Dredge / Excavation

**Project Name:** Squamscott River Dredge **Project Description:** Remedial dredge/ proactive habitat restoration at contaminated sediment site in Squamscott River in Exeter, NH

**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



Project name: Squamscott River Dredge

Project Counties: Rockingham, NH

http://ecos.fws.gov/ipac, 12/16/2014 07:12 AM



Project name: Squamscott River Dredge

# **Endangered Species Act Species List**

There are a total of 3 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)	
Piping Plover ( <i>Charadrius melodus</i> ) Population: except Great Lakes watershed	Threatened	Final designated		
Roseate tern ( <i>Sterna dougallii</i> <i>dougallii</i> ) Population: northeast U.S. nesting pop.	Endangered			
Flowering Plants				
Small Whorled pogonia (Isotria medeoloides)	Threatened			



Project name: Squamscott River Dredge

# Critical habitats that lie within your project area

There are no critical habitats within your project area.

http://ecos.fws.gov/ipac, 12/16/2014 07:12 AM

Attachment G

# **NH PGP Requirements**

Please mail the completed form and required material to:

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

REC	E	VED
NOV	06	2014

Lot #

DHR Use Only	
R&C #	6243
Log In Date	11 16 ,14
Rosponse Date	11, 13,14
	11 14 14
Sent Date	<u><u> </u></u>

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

This is a new submittal This is additional information relating to DHR Review & Compliance (R&C) #:	
GENERAL PROJECT INFORMATION	
Project Title Squamscott River Remedial Dredging	

Project Location Squamscott River

City/Town Exeter Tax Map #64 Lot 45 and #49 Lot 15

NH State Plane - Feet Geographic Coordinates:Easting 1175852Northing 177507(See RPR Instructions and R&C FAQs for guidance.)

Lead Federal Agency and Contact (*if applicable*) NH DES (Agency providing funds, licenses, or permits) Permit Type and Permit or Job Reference #

State Agency and Contact (if applicable) Paul Rydel (NHDES)

Permit Type and Permit or Job Reference #

#### APPLICANT INFORMATION

Applicant Name Northern Utilities/ Tom Murphy

Mailing Address 6 Liberty Lane W Phone Number 603 772 0775

City Hampton State NH Zip 03842 Email murphyt@unitil.com

## CONTACT PERSON TO RECEIVE RESPONSE

Name/Company Ryan McCarthy/ AECOM

Mailing Address 1000 Elm Street, Suite 802 Phone Number 9789052312

City Manchester State NH Zip 03101 Email ryan.mccarthy@aecom.com

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

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION				
Project Boundaries and Description				
<ul> <li>Attach the relevant portion of a 7.5' USGS Map (photocopied or computer-generated) indicating the defined project boundary. (See RPR Instructions and R&amp;C FAQs for guidance.)</li> <li>Attach a detailed narrative description of the proposed project.</li> <li>Attach a site plan. The site plan should include the project boundaries and areas of proposed excavation.</li> <li>Attach photos of the project area (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.) (Informative photo captions are requested.)</li> <li>A DHR file review must be conducted to identify properties within or adjacent to the project area. Provide file review results in Table 1 or within project narrative description. (Blank table forms are available on the DHR website.)</li> <li>File review conducted on 11 / 7 / 14</li> </ul>				
Architecture				
Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the project area? 🛛 Yes 🗌 No If no, skip to Archaeology section. If yes, submit all of the following information:				
Approximate age(s): The outfall is at least 50 years old. Pavilion was re-built in 2007.				
<ul> <li>Photographs of <i>each</i> resource or streetscape located within the project area, with captions, along with a photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.)</li> <li>If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of windows if window replacement is proposed.)</li> </ul>				
Archaeology				
Does the proposed undertaking involve ground-disturbing activity? 🛛 Yes 🗌 No If yes, submit all of the following information:				
<ul> <li>Description of current and previous land use and disturbances.</li> <li>Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.)</li> </ul>				
Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process.				
DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only				
Insufficient information to initiate review. Additional information is needed in order to complete review.				
🖸 No Potential to cause Effects 🗌 No Historic Properties Affected 🗌 No Adverse Effect 🗌 Adverse Effect				
Comments:				
If plans change or resources are alscovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.				
Authorized Signature: //uhr (Arenet DS/SPD Date: 11-13-14				

New Hampshire Division of Historical Resources / State Historic Preservation Office March 2013



## New England District

## Programmatic General Permit (PGP) Appendix B - Required Information and Corps Secondary Impacts Checklist

In order for the Corps of Engineers to properly evaluate your application, applicants must submit the following information along with the DES Wetlands Bureau application or permit notification forms. Some projects may require more information. For a more comprehensive checklist, go to <u>www.nae.usace.army.mil/regulatory</u>, "Forms/Publications" and then "Application and Plan Guideline Checklist." Check with the Corps at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the State of New Hampshire DES Wetlands Bureau application and Permit by Notification forms.

## All Projects:

- Corps application form (ENG Form 4345) as appropriate.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible black and white (no color) plans no larger than 11"x17" with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
- Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. Don't use local datum. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean low lower water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
- Horizontal state plane coordinates in U.S. survey feet based on the [insert state grid system] for the [insert state] [insert zone] NAD 83.
- Show project limits with existing and proposed conditions.
- Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
- Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the ordinary high water in inland waters and below the high tide line in coastal waters.
- Delineation of all waterways and wetlands on the project site, including vernal pools:
- Use Federal delineation methods and include Corps wetland delineation data sheets. See GC 2; Endnotes 1, 6, 7 and 15 in Appendix A; and www.nero.noaa.gov/hcd for eelgrass survey guidance.
- Appendix A, (e) Moorings, contains eelgrass survey requirements for the placement of moorings.
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.



US Army Corps of Engineers ® New England District

#### New Hampshire Programmatic General Permit (PGP) Appendix B - Corps Secondary Impacts Checklist (for inland wetland/waterway fill projects in New Hampshire)

Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
 All references to "work" include all work associated with the project construction and operation. Work

includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.

3. See PGP, GC 5, regarding single and complete projects.

4. Contact the Corps at (9/8) 318-8832 with any questions.		
1. <u>Impaired Waters</u>	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See		
http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm	X	
to determine if there is an impaired water in the vicinity of your work area.*		
2. <u>Wetlands</u>	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	X	
2.2 Are there proposed impacts to SAS, shellfish beds, special wetlands and vernal pools (see		
PGP, GC 26 and Appendix A)? Applicants may obtain information from the NH Department of		
Resources and Economic Development Natural Heritage Bureau (NHB) website,		
www.nhnaturalheritage.org, specifically the book Natural Community Systems of New		
Hampshire.		
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology,		X
sediment transport & wildlife passage?		
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent		
to streams where vegetation is strongly influenced by the presence of water. They are often thin		X
lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream		
banks. They are also called vegetated buffer zones.)		
2.5 The overall project site is more than 40 acres.		X
2.6 What is the size of the existing impervious surface area?	N/A	
2.7 What is the size of the proposed impervious surface area?	N/A	
2.8 What is the % of the impervious area (new and existing) to the overall project site?	N/A	<b>\</b>
3. <u>Wildlife</u>	Yes	No
3.1 Has the NHB determined that there are known occurrences of rare species, exemplary natural		
communities, Federal and State threatened and endangered species and habitat, in the vicinity of	Ň	
the proposed project? (All projects require a NHB determination.)		
3.2 Would work occur in any area identified as either "Highest Ranked Habitat in N.H." or		
"Highest Ranked Habitat in Ecological Region"? (These areas are colored magenta and green,		
respectively, on NH Fish and Game's map, "2010 Highest Ranked Wildlife Habitat by Ecological		
Condition.") Map information can be found at:	X	
• PDF: www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm.		
• Data Mapper: <u>www.granit.unh.edu</u> .		
• GIS: <u>www.granit.unh.edu/data/downloadfreedata/category/databycategory.html.</u>		

3.3 Would the project impact more than 20 acres of an undeveloped land block (upland,		
wetland/waterway) on the entire project site and/or on an adjoining property(s)?		
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or		X
industrial development?		$\widehat{}$
3.5 Are stream crossings designed in accordance with the PGP, GC 21?		N/A
4. <u>Flooding/Floodplain Values</u>	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?	X*	
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of		X
flood storage?		$\overline{}$
5. <u>Historic/Archaeological Resources</u>		
For a minor or major impact project - a copy of the Request for Project Review (RPR) Form		
(www.nh.gov/nhdhr/review) shall be sent to the NH Division of Historical Resources as required	X	
on Page 5 of the PGP**	]	
*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement	nt	

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

\* - There will be no net loss of capacity at dredge site. Contaminated sediments will be dredged, backfill will be placed, and restored to original grade.





70° 58' 07.5"

70° 56' 15"

# **FLOOD HAZARD INFORMATION**

# **SEE FIS REPORT FOR ZONE DESCRIPTIONS** THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTP://MSC.FEMA.GOV



# NOTES TO USERS

<sup>3</sup>40<sup>000m</sup>E

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above. For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in the community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). This information was derived from digital orthophotography at a 1-foot resolution from photography dated 2010.

# SCALE



# PANEL LOCATOR

<sup>3</sup>41<sup>000m</sup>E



A m	NATIONAL FLOOI FLOOD INSURAN	) INSU CE RA
<b>FIN</b>	ROCKINGHAM CONTROLOGIES (ALL JURISDICTIONS)	JUNTY E
rance	PANEL <b>402</b> OF <b>681</b>	
ISU	Panel Contains:	
	COMMUNITY	NUM
National Flood	EXETER, TOWN OF STRATHAM, TOWN OF	3301 3301
TORE NO	PRE	LIM 4/9/2
and and the second		



COMMUNITY	NUMBER	PANEL	SUFFIX	
EXETER, TOWN OF	330130	0402	F	
STRATHAM, TOWN OF	330197	0402	F	

**MINARY** 2014

> **VERSION NUMBER** 2.2.2.1

**MAP NUMBER** 33015C0402F

MAP REVISED



- Cadmium,

Roads(NHDOT)

- Chlorophyll *a*,
- Copper,
- Cyanobacteria,
- Dissolved Oxygen (% Sat or mg/L),
- Enterococcus,
- *E. coli*,
- Algal Growth,
- Fecal Coliform,
- Lead,
- Total Phosphorus,
- Sedimentation & Siltation,
- Zinc.

For more information on the 2006 Surface Water Quality Assessments see: <u>http://des.nh.gov/wmb/swqa/</u>



H:\Water Quality\305(B)-303(D) PROGRAM\2006\_Int\_Aprch\Info\_Rqsts\20061025\_PMC\_No\_Add\_Load



- State Boundary
- County Boundary
- Town Boundary
  - 2006 Assessment Unit ID Lines (1:100k NHD)
    - 2006 Assessment Unit ID Polygons(1:100k NHD)

One Mile Buffer on No Additional Loading AUIDs

This map is intended solely as a screening tool to assist you in identifying areas within 1 mile upstream in the watershed of an impaired waterbody. This map is not intended to show analytical results regarding pollutant loading or any other information related to sections 305(b) or 401 of the Clean Water Act or any other State or federal laws.

The coverages presented in this program are under constant revision as new sites or facilities are added. They may not contain all of the potential or existing sites or facilities. The Department is not responsible for the use or interpretation of this information, nor for any inaccuracies.

# Map Prepared July 17, 2007.

555 Market Street, Suite 1 Portsmouth, NH 03801



December 18, 2014

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

Attn: Eben Lewis

Dear Eben,

We reviewed plans for the removal of impacted sediments in the Squamscott River in Exeter at property belonging to Northern Utilities. The project involves removing sediment at a site adjacent to Swasey Parkway, and removal at a temporary dock constructed at the Exeter DPW site downriver.

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

Sincerely,

Tracy R. Shattuck

Tracy R. Shattuck Chief Harbor Master

Cc: Ryan McCarthy AECOM 1000 Elm St Suite 802 Manchester, NH 03101

ph: 603-436-8500 fax: 603-436-2780 . www.peasedev.org

**Attachment H** 

**Designated River Check** 

# **DESIGNATED RIVERS of NEW HAMPSHIRE**

**NH Rivers Management & Protection Program** 

**Designated Rivers** 

- 1. Ammonoosuc River 8/10/07 & 9/13/09
- 2. Ashuelot River 6/07/93
- 3. Cocheco River 7/21/09
- 4. Cold River 7/20/99
- 5. Connecticut River 7/14/92
- 6. Contoocook and North Branch Rivers 6/28/91
- 7. Exeter and Squamscott Rivers 8/11/95 & 5/31/11
- 8. Isinglass River 6/30/02
- 9. Lamprey River 6/26/90 & 6/7/11 **A. Lamprey River B. North Branch River C.** Pawtuckaway River **D. North River E. Little River F. Piscassic River 10. Mascoma River 5/9/11** 11. Merrimack River (Lower) 6/26/90 12. Merrimack River (Upper) 6/26/90 13. Oyster River 6/2/11 14. Pemigewasset River 6/28/91 15. Piscataquog River 7/16/93 16. Saco River 6/26/90 17. Souhegan River 5/28/00 18. Swift River 6/26/90





Services



**NHDES Watershed Management Bureau - March 2012** 

# Exeter-Squamscott River Base Map



Attachment I

**USGS Map** 



**Attachment J** 

Photographs





Ν Photo Key 2 Town Of Exeter DPW and Settling Ponds AECOM Exeter, NH Squamscott River Sediments Feet Figure Number 0 25 50 100 PROJECT NO. SCALE DATE J-2 10/14 60139731 1:24000



Picture 1. View from Swasey Parkway looking east across the Squamscott River. The Powder House at Duck Point is located across the river and highlighted in yellow. The boom shows the *approximate* downstream extent of proposed dredge area.





Picture 2. View from Swasey Parkway looking east across the Squamscott River. The buried stormwater outfall/ plunge pool is highlighted in yellow. The absorbent mats at the site are also visible.





Picture 3. View from Swasey Parkway looking southeast towards downtown Exeter. The site is highlighted in yellow.





Picture 4. Looking southeast across Swasey Parkway at the Pavilion and the Squamscott River. The historic birch tree is highlighted in yellow.





Picture 5. View from the Exeter DPW (near the settlement ponds), looking south towards the Squamscott River. Site of the former trestle/ unloading area.





Picture 6. Looking northwest back towards the Exeter DPW and the site of the proposed temporary unloading area/ trestle.





Picture 7. Looking west at Exeter DPW laydown area. This is the proposed location of the sediment stockpile/ dewatering area.




Picture 8. Looking south across the Exeter DPW Settlement Ponds/ laydown area. The site of the proposed unloading/ trestle area is highlighted.



Attachment K

Plans







File: J: Water ProjectFiles P10 01776-NiSource 00805-075+076 NH 0&M Squamascott River CADD 60139731-C-04.dwg Layout: Dredge Area User: warrenr Plotted: Dec 11, 2014 - 12:53pm



File: J:\Water\ProjectFiles\P10\01776-NiSource\00805-075+076 NH 0&M\Squamascott River\CADD\60139731-C-03.dwg Layout: Unloading Dock User: warrenr Plotted: Dec 12, 2014 – 8:44am



File: J: Water ProjectFiles P10 01776-NiSource 00805-075+076 NH O&M Squamascott River CADD 60139731-C-03.dwg Layout: Dewatering stockpile area User: lambertt Plotted: Dec 16, 2014 - 2:42pm



Attachment L

Тах Мар







Tax maps obtained from www.mapsonline.net/exeternh/ per Town of Exeter Tax Assessor

Swa Tow Squ	izey Parl n Tax M amscott	kway aps Rive	AECOM		
0	25	50	Feet 100		Figure Number
	SCALE		DATE	PROJECT NO.	1 1
	1:24000		10/14	60139731	L-1

Document Path: J:\Water\ProjectFiles\P10\01776-NiSource\00805-075+076 NH O&M\Squamascott River\GIS\Projects\Permit Figs\Figure\_2\_Tax\_Map.mxd



Document Path: J:Water/ProjectFiles/P10/01776-NiSource/00805-075+076 NH O&M/Squamascott River/GIS/Figures/Permitting/Figure\_3\_Tax\_Map.mxd

Attachment M

# **Abutter Notification**



AECOM 250 Apollo Drive Chelmsford, MA 01824 978.905.2100 tel 978.905.2101 fax

# Memorandum

То	Project File	Page 1
СС	Mark McCabe (AECOM)	
Subject	Squamscott River Dredging Project - Abutters	
From	Ryan McCarthy (AECOM)	
Date	December 15, 2014	

The following properties have been identified as abutters to the proposed remedial dredging project in the Squamscott River in Exeter, NH.

Dredge Site – Squamscott River	Тах Мар	Lot #
Exeter, Town of 10 Front Street Exeter, NH 03833	64	45
Abutters	Тах Мар	Lot #
Phillips Exeter Academy 223 Water Street Exeter, NH	64	46
Unloading Site – Exeter DPW	Тах Мар	Lot #
Exeter, Town of 10 Front Street Exeter, NH 03833	49	15
Abutters	Тах Мар	Lot #
Fredericksen, Russell F. Fredericksen, Dianne L. 11 Newfield Road Exeter, NH 03833	49	16

# **Attachment N**

Permission for work within 20 feet

### **Epping Road Development proposed zoning changes**

## 9.1.3

G. The linear extent of the wetland buffers in the CT-1, C-3 and I Zoning Districts shall be determined by the Epping Road Development Wetland Buffer Width Determination Table on the basis of the functional values for the subject wetland as determined by a certified wetland scientist.Narrow, finger-like, wetlands that are less than thirty feet (30') in width, extending into upland areas, and not associated with perennial or intermittent streams, shall be evaluated as separate functional units, even though they are contiguous to a larger and wider wetland area.

	Eppin	g Road I	Develop	ment We	etland B	uffer Wi	dth Dete	erminati	on Table		
Points	1	2	3	4	5	6	7	8	9	10	
Buffer Width (ft)	0	10	15	20	25	30	35	40	45	75	
	Fu	nction/Val	ue			Points					
		FA, GW	ue			1					
	N	R, PE, SR, V	/H			1					
		SS, FH				3					
		ESH, VP			Ma	iximum But	ffer				
Кеу											
FA =			Floo	dflow Alter	ration						
GW =		G	iroundwat	er Recharg	e/Discharg	ge					
NR =			Nu	trient Rem	oval						
PE =			Pi	roduct Expo	ort						
SR =			Sediment	t/Toxicant	Retention						
WH =			W	ildlife Habi	itat						
SS =		S	horeline/	Sediment S	Stabilizatio	n					
FH =			Fish/	Shellfish H	abitat						
ESH =			Endange	ered Specie	s Habitat						
VP =				Vernal Poo	ol						

Does not apply



Civil Site Planning Environmental Engineering

133 Court Street Portsmouth, NH 03801-4413

December 30, 2014

NHDES Wetlands Bureau 29 Hazen Drive P.O. Box 95 Concord, NH 03302-0095

Subject: Tan Lane Parking Lot Improvements Tax Map 72, Lot 209 Tan Lane Exeter, New Hampshire P4547

Dear Inspector:

Altus is submitting on behalf of the applicant (*Phillips Exeter Academy*), a NHDES Minimum Impact Expedited Permit Application for improvements to an existing parking lot on their campus in Exeter. The parking lot is located at Tax Map 92 Lot 209, off Tan Lane, north and west of the *Doctor's House*; the playground of the *Main Street School* abuts to the west.

The existing lot, a combination of paved and gravel surfaces, has an inefficient layout, limited pedestrian connectivity to campus facilities, limited lighting, and no stormwater management facilities. Site improvements will include expanding and reconfiguring the paved parking area, constructing new paved walkways for improved pedestrian access, lighting, and stormwater best management practices. The proposed parking lot improvements will directly impact a small, low valued, 239 sf wetland with fill.

Enclosed for your review and approval are a Minimum Impacted Expedited Application and a \$200 check for the application fee.

Please call if you have any questions or require additional information.

Sincerely,

Jeffrey K Clifford, P.E. Vice-President

cc: Roger F. Wakeman, P.E., Phillips Exeter Academy Mark Leighton, P.E., Phillips Exeter Academy

RMB/jkc/4547.NHDES.ltr.doc



THE STATE OF NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES LAND RESOURCES MANAGEMENT **WETLANDS BUREAU** 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095 Phone: (603) 271-2147 Fax: (603) 271-6588 http://des.nh.gov/organization/divisions/water/wetlands



# PERMIT APPLICATION

				North Spirit Spirit Spirit 1 (1)			
1. REVIEW TIME: Indicate your Review Time below.	Refer	to Guidance Document A for	instruct	ons.			
Standard Review (Minin	num, l	Minor or Major Impact)			Expedited	Review (I	Minimum Impact)
2. PROJECT LOCATION: Separate applications must be filed	d with	each municipality that jurisdic	ctional in	npacts	will occur in.		
ADDRESS: Tan Lane						TOWN/CI	TY: Exeter
TAX MAP: <b>72</b>		BLOCK:		LOT:	209		UNIT:
USGS TOPO MAP WATERBODY NAM	AE: UI	nnamed Wetlands			STREAM WAT	ERSHED S	SIZE: 🛛 NA
LOCATION COORDINATES (If known) UTM State Plane	): 42-	58'-30"N 70-57'-13"W			I		🛛 Latitude/Longitude 🔲
3. PROJECT DESCRIPTION: Provide a brief description of the p of your project. DO NOT reply "Se	roject e Atta	outlining the scope of work. ached" in the space provided	Attach a below.	ddition	al sheets as n	eeded to p	provide a detailed explanation
The project consist of an exp where none previouosly exis with an area of 239 sf and 19	eansie ted, v 06 sf.	on of existing gravel/pav via permeable pavers wit The proposed improver	red par th unde ments v	king a erdrain will im	rea and pro . There are pact the 239	vide stor two (2) s ) sf wetla	mwater improvements mall isolated wetlands ands.
4. RELATED PERMITS, ENFORCE	CEME	NT, EMERGENCY AUTHOR	IZATIO	N, SHO	RELAND, AL	TERATIO	N OF TERRAIN, ETC
N/A							
5. NATURAL HERITAGE BUREA See the Instructions & Required A	AU & I ttachn	DESIGNATED RIVERS: nents document for instruction	ns to coi	nplete	a & b below.		
a. Natural Heritage Bureau File I	D: N	NHB <u>14</u> - <u>4223</u> .					
<ul> <li>Designated River the proje date a copy of the applicat</li> <li>NA</li> </ul>	ct is ii ion wa	n ¼ miles of: <b>Squamscott F</b> as sent to Local River Advisor	River ry Comn	nittee: N	Month: <u>12</u> D	; ar ay: <b>3/</b> Y	nd ear: <u>2014</u> -

6. APPLICANT INFORMATION (Desired permit holder)					
LAST NAME, FIRST NAME, M.I.: Roger F. Wakeman					
TRUST / COMPANY NAME: Phillips Exeter Academy	MA	ILING ADDRESS: 20	Main Street	:	
TOWN/CITY: Exeter			STATE: NH		ZIP CODE: 03833
EMAIL or FAX: rwakeman@exeter.edu		PHONE: 603-777	-3292		
ELECTRONIC COMMUNICATION: By initialing here: <b><u>RFW</u></b> , I h	nereby authorize	DES to communicate	all matters relat	ive to th	his application electronically
7. PROPERTY OWNER INFORMATION (If different than applicant)					
LAST NAME, FIRST NAME, M.I.: Same as above			- 100 Mich (100 - 114		
TRUST / COMPANY NAME:	MA	ILING ADDRESS:			
TOWN/CITY:			STATE:		ZIP CODE:
EMAIL or FAX:		PHONE:			
ELECTRONIC COMMUNICATION: By initialing here, I hereby authorize DES to communicate all matters relative to this application electronically				this application electronically	
8. AUTHORIZED AGENT INFORMATION					
LAST NAME, FIRST NAME, M.I.: Jeffrey K. Clifford, P.E. COMPANY NAME: Altus Engineering, Inc.					
MAILING ADDRESS: 133 Court Street					
TOWN/CITY: Portsmouth STATE: NH ZIP CODE: 03801				ZIP CODE: 03801	
EMAIL or FAX: jclifford@altus-eng.com	Pł	HONE: 603-433-23	35		
ELECTRONIC COMMUNICATION: By initialing here <u>JKC</u> , I he	ereby authorize I	DES to communicate a	all matters relativ	ve to thi	is application electronically
9. PROPERTY OWNER SIGNATURE: See the Instructions & Required Attachments document for	r clarification of	f the below stateme	nts		
By signing the application, I am certifying that:					
<ol> <li>I authorize the applicant and/or agent indicated on the upon request, supplemental information in support of a lawe reviewed and submitted information &amp; attached and authorize have been identified in accordance with A. I have read and provided the required information on the search and understand Env-Wt 302.03 and have any structure that I am proposing to repair/replace with a grandfathered per Env-Wt 101.47.</li> <li>I have reviewed the information being submitted and the information of the submitted and the submitted act, which in the willful submission of falsified Environmental Services is a criminal act, which in 11. I am aware that the work I am proposing may requobtaining.</li> <li>The mailing addresses I have provided are up to forward returned mail.</li> </ol>	his form to act of this permit a ments outlined RSA 482-A:3, utlined in Env-V re chosen the levas either prev to the NH Stat nmission to ins d that to the be d or misrepres nay result in le uire additional date and appr	in my behalf in the p pplication. I and Env-Wt 100-9 Wt 302.04 for the ap east impacting alter iously permitted by the Historic Preserval pect the site of the st of my knowledge tented information egal action. I state, local or fed	processing of the and Required A policable project native. the Wetlands I the Wetlands I tion Officer. proposed project the information to the New Hat eral permits w of DES corres	his app Attachr ct type Bureau ect. on is tru ampsh which I sponde	plication, and to furnish ment document. a or would be considered a or
= MC	Mark L	EIGHTON	1	212	312014
Property Owner Signature	Print name legit	bly		Date	

# **MUNICIPAL SIGNATURES**

	10. CONSERVATION COMMISSION SIGNATURE				
T 1 2 3	he signature below certifies that the municipal conservation Waives its right to intervene per RSA 482-A:11; Believes that the application and submitted plans accurate Has no objection to permitting the proposed work.	commission has reviewed this application, ely represent the proposed project; and	and:		
	)				
	Authorized Commission Signature	Print name legibly	Date		
	<b>DIRECTIONS FOR CONSERVATION COMMISSION</b> 1. Expedited review ONLY requires that the conservation 2. The Conservation Commission signature should be obt	commission's signature is obtained in the stained prior to the submittal of the original a	space above.		
	four copies to the town/city clerk for mailing to the DES.		pproduction and		
	3. The Conservation Commission may refuse to sign. If the	ne Conservation Commission does not sign	this statement		

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 reviewed in the standard review time frame.

## 11. TOWN / CITY CLERK SIGNATURE

As required by Chapter 482-A:3 (amended 1991), I hereby certify that the applicant has filed five application forms, five detailed plans, and five USGS location maps with the town/city indicated below and I have received and retained certified postal receipts (or copies) for all abutters identified by the applicant.

Town (Other Clark Other struct			
Town/City Clerk Signature	Drint name logibly	Town (City	D.1
		Town/City	Date

### DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3,I(d):

- 1. For applications where "Expedited Review" is checked on page 1, accept the application for mailing only if the Conservation Commission signature has been sought;
- Collect the postal receipts demonstrating that all abutters and the Local Advisory Committee were sent proper notice;
- 3. Collect any administrative fees, not to exceed \$10 plus the cost of postage by certified mail (RSA 482-A:3,I).
- 4. IMMEDIATELY sign the original application and four copies in the signature space provided above;
- Retain one copy of the application form, one complete set of attachments and the postal receipts demonstrating that all abutters and the Local River Advisory Committee were notified and make them reasonably accessible to the public;
- 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 in accordance with RSA 482-A:3, I; and
- IMMEDIATELY send the ORIGINAL application form, one complete set of attachments and filing fee, by CERTIFIED MAIL to the NHDES Wetlands Bureau at the address indicated on page 1 of this application. (DO NOT HOLD FOR CONSERVATION COMMISSION SIGNATURE).

#### 12. IMPACT AREA:

For each jurisdictional area that will be/has been impacted, provide square feet and, if applicable, linear feet of impact <u>Permanent</u>: impacts that will remain after the project is complete.

<u>Temporary</u>: impacts not intended to remain (and will be restored to pre-construction conditions) after the project is complete. <u>After-the-fact (ATF)</u>: work completed prior to receipt of this application by DES. Check box to indicate ATF.

JURISDICTIONAL AREA	PERMANEN Sq. Ft. / Lin. F	r Ft.	TEMPORARY Sq. Ft. / Lin. Ft	
Forested wetland		ATF		ATF
Scrub-shrub wetland	239	🗌 ATF		ATF
Emergent wetland		🗌 ATF		ATF
Wet meadow		ATF		ATF
Intermittent stream		ATF		ATF
Perennial Stream / River	1	🗌 ATF	1	ATF
Lake / Pond	1	🗌 ATF	1	ATF
Bank - Intermittent stream	/	ATF	1	ATF
Bank - Perennial stream / River	1	ATF	1	ATF
Bank - Lake / Pond	1	ATF	1	ATF
Tidal water	1	ATF	1	ATF
Salt marsh		🗌 ATF		
Sand dune		🗌 ATF		ATF
Prime wetland		🗌 ATF		ATF
Prime wetland buffer		ATF		ATF
Undeveloped Tidal Buffer Zone (TBZ)		🗌 ATF		ATF
Previously-developed upland in TBZ		ATF		ATF
Docking - Lake / Pond		ATF		ATF
Docking - River		ATF		ATF
Docking - Tidal Water		ATF		ATF
TOTAL	239 /		1	

13. 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:sq. ft. X \$1.00 =	\$
Permanent docking structure:sq. ft. X \$2.00 =	\$
Projects proposing shoreline structures (including docks) add \$200 =	=\$
Total =	\$
The Application Fee is the above calculated Total or \$200, whichever is greater =	= \$

# EXHIBIT A

# NHDES Expedited Review - Minimum Impact

# **PROJECT DESCRIPTION**

The project consists of improvements to an existing parking lot on the campus of Phillips Exeter Academy (PEA). The parking lot is located off Tan Lane, north and west of the *Doctor's House*; the playground of the *Main Street School* abuts to the west. The parking lot entrance is approximately 100 feet south of the intersection of Tan Lane and Main Street. The existing lot is a combination of paved and gravel surfaces with approximately 22-25 spaces. It has an inefficient layout, limited pedestrian connectivity to campus facilities, limited lighting, and no stormwater management facilities. Site improvements will include expanding and reconfiguring the paved parking area to accommodate 45 vehicles, a net gain of up to 20 spaces. The project also includes new paved walkways for improved pedestrian access, lighting, and stormwater best management practices. Overall site disturbance during construction will be approximately 34,000 sq. ft.

Pervious pavers are proposed to provide stormwater treatment and attenuate the peak runoff due to an increase impervious area of 12,933 sq. ft. In addition, an underdrained stone lined swale is proposed along the property line with the school property. The improvements will manage, treat and attenuate the site runoff.

Within the topographic depression there are two (2) small, low valued, wetlands (239 sf and 196 sf). The wetlands are very small and have no significant value or habitat. Norway maples, an invasive species, dominate the canopy in the wooded area where the wetlands area located. The proposed parking lot improvements will directly impact the 239 sf wetland with fill.

# **MINIMIZATION & AVOIDANCE**

Reconfiguration of the existing parking area will provide a more efficient parking area, allowing for additional spaces to address the parking needs for the campus. The drainage improvements, in particular, the pervious paver system will provide improved management and treatment of stormwater runoff. Based on the proximity of the wetland to the existing parking, impacts in the buffer are necessary, but have been minimized by the parking configuration selected, the grading and stormwater best management practices.

The majority of stormwater runoff from the proposed impervious area will be treated, cooled and attenuated via the pervious pavers before emptying into the wooded depression. The proposed improvement will provide additional parking and improve pedestrian connectivity with the campus.

GOVE ENVIRONMENTAL SERVICES, INC.



July 17, 2013

Subject: Wetland Delineation Report PEA Tan Lane

Dear Mr. Clifford:

Per your request, this letter is to verify that Gove Environmental Services, Inc., performed a site inspection to identify wetlands at Wetlands were evaluated utilizing the following standards:

- 1. US Army Corps of Engineers Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Technical Report ERDC/EL TR-09-19 (Oct 2009).
- 2. Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils, Version 7.0.
  - United States Department of Agriculture (2010).
- 3. North American Digital Flora: National Wetland Plant List, Version 2.2.1 (2009).
- 4. Classification of Wetlands and Deepwater Habitats of the United States. USFW Manual FWS/OBS-79/31 (1979).

The site inspection on July 17, 2013 during the site inspection, two areas of wetland were identified on the Site. The wetland areas were demarcated with consecutive series of pink "Wetland Delineation": 1-5 and 6-11

These two area are similar in make and are classified as PSS1E, seasonally saturated, scrubshrub wetlands. Dominant vegetation is highbush blueberry in the shrub layer with some small regenerating red maples. The herbaceous layer is dominated by swamp dewberry and grass. These two areas are small and isolated to the site and appear as small depressions in the landscape receiving significant runoff from the surrounding uplands, with little to no functions and values.

If I can be of further assistance, please feel free to contact me at (603) 778-0644.

Sincerely,

Luke D. Hurley, CWS Vice President Gove Environmental Services, Inc.



To: Ronald Beal 133 Court Street Portsmouth, NH 03801 Date: 10/31/2014

From: NH Natural Heritage Bureau

Re: Review by NH Natural Heritage Bureau of request dated 10/31/2014

VALID ONLY FOR NOTIFICTION OR MINIMUM EXPEDITED APPLICATIONS SUBMITTED TO THE NHDES WETLANDS BUREAU

NHB File ID: NHB14-4223

Applicant: Roger Wakeman

Location: Tax Map(s)/Lot(s): Map 72 Lot 209 Exeter

Project Description: Expand existing parking facility and provide connectivity to other campus facilities

The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

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.

This report is valid through 10/30/2015.





MAP OF NOTIFICATION POINTS FOR NHB FILE ID: NHB14-4223



# US Army Corps of Engineers ® New England District

# New Hampshire Programmatic General Permit (PGP) Appendix B - Corps Secondary Impacts Checklist (for inland wetland/waterway fill projects in New Hampshire)

Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
 All references to "work" include all work associated with the project construction and operation. Work

includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.

3. See PGP, GC 5, regarding single and complete projects.

4. Contact the Corps at (978) 318-8832 with any questions.

1. <u>Impaired Waters</u>	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See		
http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm	x	
to determine if there is an impaired water in the vicinity of your work area.*		
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?		Х
2.2 Are there proposed impacts to SAS, shellfish beds, special wetlands and vernal pools (see		
PGP, GC 26 and Appendix A)? Applicants may obtain information from the NH Department of		
Resources and Economic Development Natural Heritage Bureau (NHB) website,		х
www.nhnaturalheritage.org, specifically the book Natural Community Systems of New		
Hampshire.		
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology,		
sediment transport & wildlife passage?		N/A
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent		
to streams where vegetation is strongly influenced by the presence of water. They are often thin		
lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream		N/A
banks. They are also called vegetated buffer zones.)		
2.5 The overall project site is more than 40 acres. (Parcel 8.0 ac. +/-; Limit of construction 32,000 s.f. +/-)		Х
2.6 What is the size of the existing impervious surface area?	11,153	S.F.
2.7 What is the size of the proposed impervious surface area?	20,327	S.F.
2.8 What is the % of the impervious area (new and existing) to the overall project site?	63%/3	5%
3. Wildlife	Yes	No
3.1 Has the NHB determined that there are known occurrences of rare species, exemplary natural		
communities, Federal and State threatened and endangered species and habitat, in the vicinity of		Х
the proposed project? (All projects require a NHB determination.)		
3.2 Would work occur in any area identified as either "Highest Ranked Habitat in N.H." or		
"Highest Ranked Habitat in Ecological Region"? (These areas are colored magenta and green,		
respectively, on NH Fish and Game's map, "2010 Highest Ranked Wildlife Habitat by Ecological		
Condition.") Map information can be found at:		x
• PDF: www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm.		71
• Data Mapper: <u>www.granit.unh.edu</u> .		
• GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html.		
	6 7	

3.3 Would the project impact more than 20 acres of an undeveloped land block (upland,		v
wetland/waterway) on the entire project site and/or on an adjoining property(s)?		
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or		v
industrial development?		
3.5 Are stream crossings designed in accordance with the PGP, GC 21?		N/A
4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		X
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of		
flood storage?		
5. Historic/Archaeological Resources		
For a minor or major impact project - a copy of the Request for Project Review (RPR) Form		
(www.nh.gov/nhdhr/review) shall be sent to the NH Division of Historical Resources as required		N/A
on Page 5 of the PGP**		

\*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.

\*\* If project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law..



Civil Site Planning Environmental Engineering

133 Court Street Portsmouth, NH 03801-4413

December 31, 2014

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

Re: Request for Project Review Assessor's Map 72, Lot 209 Tan Lane Exeter, NH Altus Project #P4547

Dear Reviewer,

On behalf of the Applicant (Phillips Exeter Academy) Altus Engineering, Inc. respectfully submits a Request for Project Review for the property. Enclosed please find the following items:

- Request for Project Review
- Project Narrative
- Photos
- USGS Map
- NRCS Soils Map
- Copy of Wetland Permit Application
- Site Plans
- Self-addressed Stamped Envelope

Please call me if you have any questions or need any additional information.

Sincerely,

e m D

Ronald M. Beal, PE Project Engineer

Enclosures

ecopy: Roger F. Wakeman, P.E., Phillips Exeter Academy Mark Leighton, P.E., Phillips Exeter Academy

RMB\jkc\4547.SHPO-cover-letter.doc



Civil Site Planning Environmental Engineering

133 Court Street Portsmouth, NH 03801-4413

December 30, 2014

ERLAC c/o Rockingham Planning Commission 156 Water Street Exeter, NH 30833

Subject: Tan Lane Parking Lot Improvements Tax Map 72, Lot 209 Tan Lane Exeter, New Hampshire P4547

Dear Reviewer:

Pursuant to State of New Hampshire *RSA Chapter 482-A*, this letter is to notify you, that *Phillips Exeter Academy* is submitting a Minimum Impact Expedited Application to NHDES for work located within <sup>1</sup>/<sub>4</sub> mile of the Squamscott River at the property identified on the Town of Exeter as Tax Map 92, Lot 209.

Please call if you have any questions.

Sincerely,

Kel n. E

Ronald M. Beal, PE Project Engineer

RMB\jkc\4547.ERLAC.ltr.wet.doc

CERTIFIED MAIL







Photo #1: Looking north at westerly edge of wetlands (July 2013)

Photo #2: Looking north at easterly edge of wetlands (July 2013)





#### PHILLIPS EXETER ACADEMY

#### 20 MAIN STREET

## TAN LANE PARKING LOT IMPROVEMENTS

## Map 72, Lot 209

#### **Exeter**, New Hampshire

Tax Map 72 Lot 187 Frederick Kollmorgen Rev. Trust 70 Front Street Exeter, NH 03833

Tax Map 72 Lot 188 Barbara S. Bohn 72 Front Street Exeter, NH 03833

Tax Map 72 Lot 191 Will & Camille Weete 78 Front Street Exeter, NH 03833

Tax Map 72 Lot 196 Mark & Sally Russ 79 Front Street Exeter, NH 03833

Tax Map 73 Lot 293 Exeter School District 30 Linden Street Exeter, NH 03833 **Owner/Applicant:** Tax Map 72 Lots 169, 186, 189, 190, 208, 209, 211 Phillips Exeter Academy 20 Main Street Exeter, NH 03833

Civil Engineer Altus Engineering, Inc. 133 Court Street Portsmouth, NH 03801

Land Surveyor Millennium Engineering, Inc. P.O. Box 745 13 Hampton Road Exeter, NH 03833

Landscape Architect Kyle Zick Landscape Architects, Inc. 36 Broomfield Street, Suite 302 Boston, MA 02108

Abutters List complied from Town of Exeter GIS - December 30, 2014



Civil Site Planning Environmental Engineering

133 Court Street Portsmouth, NH 03801-4413

December 30, 2014

Subject: Tan Lane Parking Lot Improvements Tax Map 79, Lot 209 Tan Lane Exeter, New Hampshire P4547

Dear Abutter:

Pursuant to State of New Hampshire *RSA Chapter 482-A*, this letter is to notify you, that Phillips Exeter Academy is submitting a Minimum Impact Expedited Application to the NHDES for work at the property identified on Town of Exeter as Tax Map 79, Lot 209. Your parcel abuts land owned by the Applicant.

The Applicant proposes to expand and reconfigure an existing gravel and paved parking area. The project will include new paved walkways for improved pedestrian access, lighting and stormwater best management practices. Within the topographic depression adjacent to the project, there are two (2) very small, low value wetlands (239 sf and 196 sf).

The area of wetlands impact is only 239 square feet. There will be no construction within 20-feet of your property line and therefore no action is required by you.

Plans are on file for your review at the Town of Exeter Clerk's office. Please feel free to contact us, the Applicant's engineering consultant, at (603) 433-2335, if you have any questions.

Sincerely,

Roull m B

Ronald M. Beal, PE Project Engineer

RMB\jkc\4568.abut.ltr.wet.doc

CERTIFIED MAIL





# EXETER CONSERVATION COMMISSION DECEMBER 9, 2014 MEETING MINUTES

### CALL TO ORDER:

The meeting convened at 7:00 PM in the Wheelwright Room of the Exeter Town Offices. Members present included: Jason Gregoire - Chair, Peter Richardson, William Campbell, Anne Surman – Board of Selectmen Representative, and Kristen Murphy – Natural Resource Planner.

#### ACTION ITEMS:

# 1. Review of the Shade Tree Management Proposal for the Exeter Country Club Conservation Easement Area.

Members from the Board of Directors Al Lampbert, Jonathan Leavitt, greens-keeper Patrick Pascucci, were present to discuss the proposal. Mr. Lampbert provided the Conservation Commission with an overview of the project. In order to facilitate air flow and sunlight hours to promote healthy grass growth, they are proposing to remove or limb trees in various locations throughout the course as identified in their proposal provided to members in their meeting packet. The proposal had been reviewed by Ms. Murphy who identified what level of review would be necessary for each task. Mr. Gregoire asked for a total number of trees proposed for removal but a total number was not known at this time. Mr. Lampbert explained they no longer intend to remove any trees that would trigger a Conditional Use Permit from the Planning Board or any action from the State Department of Environmental Services when asked if any actions were no longer a part of the proposal. The revised request is for trees in item 1 to be limbed, not removed, the roots of trees in item 5 that protrude into the greens will be pruned, only trees that pose a safety hazard in item 6 will be removed (approximately 2 trees). The overall goal is to select cut, remove dead and prune healthy trees. Mr. Campbell explained that he felt the intent of the proposal is good and that he would be more comfortable if a person from the Conservation Commission were onsite to review the individual trees for removal. Mr. Campbell moved that they approve the activities described in this proposal with review by Ms. Murphy or a representative of the Commission onsite. Future requests would return to the Commission for review. This was seconded by Mr. Richardson. Vote: Motion passed, unanimously.

# 2. Request by the Exeter Snowhounds for Permission to Utilize the Snowmobile Trails within lands managed by the Exeter Conservation Commission.

Ms. Murphy provided members with a map of the trails utilized in previous years by the Exeter Snowhounds. She explained that the past permission term had expired and the Snowhounds were requesting permission to re-approve use of these trails. The term of approval in the past had varied from 1 year to 5 years. The Snowhounds were supportive of whichever timeframe the Commission was comfortable with. There was a brief discussion about the Snowhounds concern over the sharp turn required in one section of the trail just south of the powerline as the trail turns toward the Elliott property but for this year, given the timing the request is only for use of the previously approved alignment. Mr. Campbell moved to approve the use of the trail within the previously approved alignment for a term of 5 years. Seconded by Ms. Surman. Vote: Motion passed, unanimously. Mr. Richardson requested to inform the Snowhounds the Commission was supportive of the re-alignment as that corner seemed dangerous.

#### **REGULAR BUSINESS**:

### 1. Committee Reports:

- a. Boundary Monitoring Ms. Murphy has scheduled an inspection of the Bunker property (owned by the Barkers) on Beech Hill Rd. on Wednesday December 10th.
- b. Trails Ms. Murphy reported that from discussions with Eben Lewis of NHDES, it may be possible to obtain authorization for the large bridges that cross prime wetlands in the Forest Ridge conservation area. She reported it could be accomplished with a Notification of Trail Maintenance
## These minutes are subject to possible corrections/revisions at a subsequent Conservation Commission meeting.

request provided it includes a request for exemption from the Prime Wetland regulations because the impacts to the bridge are already existing and authorizing them does not increase impacts. If the Commission was supportive, Ms. Murphy would draft up this request for addressing at a future meeting. Mr. Gregoire stated that he was supportive of this. Mr. Richardson explained that he was not supportive because without the use of those crossing structures, trail users could still connect the sections north and south of the powerline using the trail that runs along the powerline. Ms. Murphy explained that the wetland along the powerline section is actually larger than what is shown on the maps as a result of beaver activity. The Snowhounds use this section when the wetland is frozen. Mr. Richardson made a motion to approve preparing the Notification of Trails Maintenance form. Mr. Campbell seconded.

Mr. Gregoire discussed the request to repair a bridge in significant deterioration within the Forest Ridge conservation area, indicating on the map where this crossing is located. Bob Kelly believed the bridge could be repaired for less than \$200 in materials. Mr. Richardson moved to approve the expenditure of up to \$200 for repair of the above mentioned bridge. Mr. Campbell seconded. Vote: Motion passed, unanimously.

- c. Outreach nothing to report this month.
- 2. Minutes: Approval of minutes was tabled until the next meeting, noting the following revisions: Action Item 1 4<sup>th</sup> paragraph should read Mr. Costello maintained that there were "no" impacts found from runoff. Committee reports Trails last sentence should read Ms. Raub talked about "2-8foot sign posts".
- 3. Treasurers Report: Ms. Murphy reported that \$691.48 remain in the budget for the current year.
- 4. End of Year Purchase Requests: Ms. Murphy presented information from Don Briselden to the Commission regarding the Raynes repairs and the timber management update. Don suggested the Commission approve up to \$200 for temporary repair of the east side of barn and holes in the flooring. Mr. Campbell made a motion to approve \$200 for these repairs, seconded by Mr. Richardson. Vote: Motion passed, unanimously. Ms. Murphy presented an invoice for the voluntary dues payment to the Exeter Squamscott Local Advisory Committee (ESRLAC) of \$150. Mr. Richardson made a motion to approve this expense, seconded by Mr. Campbell. Vote: Motion passed, unanimously. Mr. Richardson motioned to purchase necessary small items with any remaining funds (examples include flagging, no hunting signs, etc) seconded by Mr. Campbell. Vote: Motion passed, unanimously.
- 5. Natural Resource Planners Report: Ms. Murphy suggested she provide a table of projects that are submitted to the Planning Department rather than take up meeting time discussing them. The group agreed with this approach. Ms. Murphy also mentioned the Town Report submission was coming due and if members had suggestions for information to discuss to please send it along to her. Mr. Gregoire suggested focusing on the Elliott property acquisition and the collaborative efforts associated with the acquisition process.

The next meeting is scheduled for January 18<sup>th</sup> at 7:00 PM.

By motion from Mr. Campbell and second by Mr. Richardson, the meeting was adjourned at 8:04 P.M.

Respectfully submitted,

Kristen Murphy Natural Resource Planner Planning & Building Department

ECC Minutes 12-9-14