STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION

DATE: June 29, 2021

FROM: Andrew O'Sullivan
Wetlands Program Manager

AT (OFFICE): Department of Transportation
Bureau of Environment

SUBJECT: Dredge & Fill Application
Columbia, 42827

TO: Karl Benedict, Public Works Permitting Officer
New Hampshire Wetlands Bureau
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Forwarded herewith is the application package prepared by NHDOT Bureau of Bridge Maintenance for the subject major impact project. The project is located along Bungy Road in the Town of Columbia, NH. Proposed work includes bridge repair to bridge 233/128 which carries Bungy Road over the East Branch of Simms Stream. Work will include replacement of riprap immediately in front of the northeast wing wall.

This project was reviewed at the Natural Resource Agency Coordination Meeting on October 16, 2019. Minutes were not finalized in the final record, however the recording was reviewed and minutes were prepared based on the recording from the meeting. A copy of this application and plans can be accessed on the Departments website via the following link: http://www.nh.gov/dot/org/projectdevelopment/environment/units/program-management/wetland-applications.htm.

NHDOT anticipates and request that this project be reviewed and permitted by the Army Corp of Engineers through the State Programmatic General Permit process. A copy of the application has been sent to the Army Corp of Engineers electronically.

Mitigation is not required for the project. Additional mitigation details are included within the application.

The lead people to contact for this project are Tim Boodey, Bureau of Bridge Maintenance Engineer (603-271-3667or Timothy.Boodey@dot.nh.gov) or Andrew O'Sullivan, Wetlands Program Manager, Bureau of Environment (271-3226 or Andrew.OSullivan@dot.nh.gov).

A payment voucher has been processed for this application (Voucher # 650046) in the amount of $413.20.

If and when this application meets with the approval of the Bureau, please send the permit directly to Andrew O'Sullivan, Wetlands Program Manager, Bureau of Environment.

AMO:sel
cc:
BOE Original
Town of Columbia (4 copies via certified mail)
David Trubey, NH Division of Historic Resources (Cultural Review Within)
Carol Henderson, NH Fish & Game (via electronic notification)
Maria Tur, US Fish & Wildlife (via electronic notification)
Jeanie Brochi, US Environmental Protection Agency (via electronic notification)
Michael Hicks, US Army Corp of Engineers (via electronic notification)
Kevin Nyhan, BOE (via electronic notification)

S:\Environment\PROJECTS\STATEWIDE\41768\Columbia Br. 233-150\SDF\WETApp Bridge Maintenance.doc

STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION

Water Division/Land Resources Management
Wetlands Bureau

Check the Status of your Application

RSA/Rule: RSA 482-A/Env-Wt 100-900

APPLICANT'S NAME: New Hampshire Department of Transportation **TOWN NAME:** Columbia

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

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

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2)) Please use the Wetland Permit Planning Tool (WPPT), the Natural Heritage Bureau (NHB) DataCheck Tool, the Aquatic Restoration Mapper, or other sources to assist in identifying key features such as: priority resource areas (PRAs), protected species or habitats, coastal areas, designated rivers, or designated prime wetlands.	
Has the required planning been completed?	☒ Yes ☐ No
Does the property contain a PRA? If yes, provide the following information:	☐ Yes ☒ No
• Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.	☐ Yes ☒ No
• Protected species or habitat? o If yes, species or habitat name(s): o NHB Project ID #: NHB21-0804	☐ Yes ☒ No
• Bog?	☐ Yes ☒ No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	☐ Yes ☒ No
• Designated prime wetland or duly-established 100-foot buffer?	☐ Yes ☒ No
• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	☐ Yes ☒ No
Is the property within a Designated River corridor? If yes, provide the following information: • Name of Local River Management Advisory Committee (LAC): • A copy of the application was sent to the LAC on Month: Day: Year:	☐ Yes ☒ No

For dredging projects, is the subject property contaminated? • If yes, list contaminant:	☐ Yes ☐ No
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	☐ Yes ☒ No
For stream crossing projects, provide watershed size (see WPPT or Stream Stats): 2.5 Sq Mi (1,600 Acres)	

SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))

Provide a **brief** description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space provided below.

New Hampshire Department of Transportation (NHDOT) personnel performed an inspection of the Bungy Road Bridge (NHDOT Bridge No. 233/128) over the East Branch of Simms Stream in Columbia, NH on July 2, 2019. The results of the inspection revealed scouring and undermining at the northeast abutment and wing wall to the level such that it needs to be addressed.

There is no available legal Right-of-Way (ROW) for this bridge, therefore, attached to this application is written abutter permission to access areas shown on this plan that may be outside of the Department's prescriptive ROW.

The proposed repair includes replacement of riprap immediately in front of the wing wall where undermining has occurred for the protection of the substructure and replacement of riprap where it was installed prior along the bank immediately upstream of the bridge.

To ensure protection of water quality, the stream will be diverted to one side by installing a cofferdam. The work zone area will be dewatered and water will be pumped to dewatering basins that will have a minimum of 20-foot vegetative buffer to any wetland or waterbody. This operation will not cause a violation to any water quality standard. Upon completion of the repair work all dewatering devices will be removed and the site will be restored to its original condition.

The photos provided in this application identify the location where riprap was installed during previous stabilization efforts; riprap will be placed and limited to within this footprint only, as shown on the plans provided.

There will be 75 square feet of permanent and 958 square feet of temporary impacts for a total of 1,033 square feet of impacts as a result of the repair project.

SECTION 3 - PROJECT LOCATION

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

ADDRESS: Bungy Road

TOWN/CITY: Columbia

TAX MAP/BLOCK/LOT/UNIT: Tax Map 420 / Lot N/A

US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: East Branch Simms Stream
☐ N/A

(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): 44.84528° North
--71.39288° West

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

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

NAME: NH Department of Transportation; Bridge Maintenance, Tim Boodey, PE

MAILING ADDRESS: 7 Hazen Drive / P.O. Box 483		
TOWN/CITY: Concord	STATE: NH	ZIP CODE: 03302
EMAIL ADDRESS: Tim.Boodey@dot.nh.gov		
FAX:	PHONE: 603-271-3734	
ELECTRONIC COMMUNICATION: By initialing here: TMB, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c)) ☐ N/A		
LAST NAME, FIRST NAME, M.I.: Peace, Kimberly R.		
COMPANY NAME: Hoyle, Tanner & Associates, Inc.		
MAILING ADDRESS: 150 Dow Street		
TOWN/CITY: Manchester	STATE: NH	ZIP CODE: 03101
EMAIL ADDRESS: kpeace@hoyletanner.com		
FAX:	PHONE: 603.460.5205	
ELECTRONIC COMMUNICATION: By initialing here KRP, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b)) If the owner is a trust or a company, then complete with the trust or company information. ☒ Same as applicant		
NAME:		
MAILING ADDRESS:		
TOWN/CITY:	STATE:	ZIP CODE:
EMAIL ADDRESS:		
FAX:	PHONE:	
ELECTRONIC COMMUNICATION: By initialing here , I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 7 - RESOURCE-SPECIFIC CRITERIA ESTABLISHED IN Env-Wt 400, Env-Wt 500, Env-Wt 600, Env-Wt 700, OR Env-Wt 900 HAVE BEEN MET (Env-Wt 313.01(a)(3))		
Per RSA 310-A:79 – Exemption III, Sarah Large Wetlands Program Analyst of NHDOT, performed the wetland identification and delineation on August 6, 2019 according to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0, January 2012, US Army Corps of Engineers. The jurisdictional areas are shown on the attached plans. The project is a stream crossing and, as such, has been designed in accordance with the resource-specific criteria established in Env-Wt 900. Project specific information is contained within this permit application.		

SECTION 8 - AVOIDANCE AND MINIMIZATION

The Avoidance and Minimization Checklist is attached to this permit application.

SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

If unavoidable jurisdictional impacts require mitigation, a mitigation pre-application meeting must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.

Mitigation Pre-Application Meeting Date: Month: 10 Day: 16 Year: 2019

(☒ N/A - Mitigation is not required) **This project was reviewed at a DOT NR meeting on 10-16-2019. Per the e meeting recording (since the discussion was not in the meeting minutes), because the proposed riprap will be placed where riprap was installed previously, Lori Sommer stated she would not ask for mitigation for the permanent impacts. Mike Hicks from USACE stated the temporary stream impacts will need a USACE GP but he agreed with Lori that the additional riprap would be viewed as a temporary impact since it will be located where riprap had been installed prior.**

SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)

Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: ☐ I confirm submittal.

(☒ N/A – Compensatory mitigation is not required)

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

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

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

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

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

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

JURISDICTIONAL AREA		PERMANENT			TEMPORARY		
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland			☐			☐
	Scrub-shrub Wetland			☐			☐
	Emergent Wetland			☐			☐
	Wet Meadow			☐			☐
	Vernal Pool			☐			☐
	Designated Prime Wetland			☐			☐
	Duly-established 100-foot Prime Wetland Buffer			☐			☐
Surface Water	Intermittent / Ephemeral Stream			☐			☐
	Perennial Stream or River	75 SF	18 LF	☐	687 SF	82 LF	☐
	Lake / Pond			☐			☐
	Docking - Lake / Pond			☐			☐
	Docking - River			☐			☐

Banks	Bank - Intermittent Stream			☐			☐
	Bank - Perennial Stream / River			☐	271 sf	59 LF	☐
	Bank / Shoreline - Lake / Pond			☐			☐
Tidal	Tidal Waters			☐			☐
	Tidal Marsh			☐			☐
	Sand Dune			☐			☐
	Undeveloped Tidal Buffer Zone (TBZ)			☐			☐
	Previously-developed TBZ			☐			☐
	Docking - Tidal Water			☐			☐
TOTAL		**75 SF**	**18 LF**		**958 SF**	**141 LF**	

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

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

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

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

Permanent and temporary (non-docking):	1,033 SF	× $0.40 =	$ 413.20
Seasonal docking structure:	SF	× $2.00 =	$
Permanent docking structure:	SF	× $4.00 =	$
Projects proposing shoreline structures (including docks) add $400 =			$
		Total =	$ 413.20
The application fee for minor or major impact is the above calculated total or $400, whichever is greater =			$ 413.20

SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05)

Indicate the project classification.

☐ Minimum Impact Project	☐ Minor Project	☒ Major Project

SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)

Initial each box below to certify:

Initials: KRP TMB	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: KRP TMB	The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.
Initials: KRP TMB	The signer understands that: • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: 1. Deny the application. 2. Revoke any approval that is granted based on the information. 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. • The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. • The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.

Initials: N/A	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.

SECTION 15 - REQUIRED SIGNATURES (Env-Wt 311.04(d); Env-Wt 311.11)

SIGNATURE (OWNER): Timothy Boodey	PRINT NAME LEGIBLY: Timothy Boodey	DATE: 6/22/2021
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGIBLY:	DATE:
SIGNATURE (AGENT, IF APPLICABLE): Kimberly Peace	PRINT NAME LEGIBLY: Kimberly R. Peace	DATE: 6//4/2021

SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))

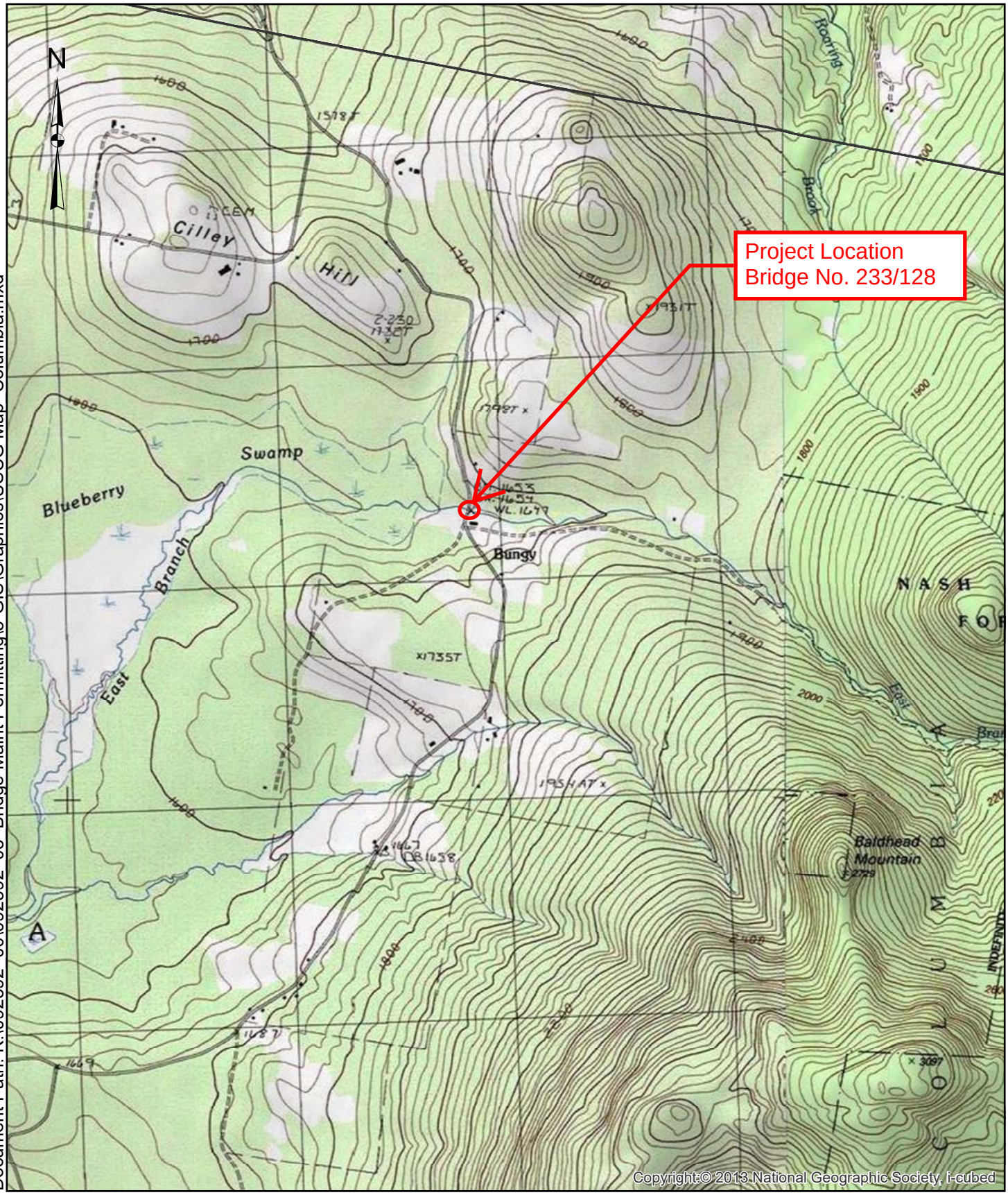
As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.

TOWN/CITY CLERK SIGNATURE:	PRINT NAME LEGIBLY: Please refer to RSA 482-A:3I(a)(1): The four (4) town copies have been sent via certified mail and filed directly with the town in accordance with the above regulation.
TOWN/CITY: Town of Columbia	DATE:

DIRECTIONS FOR TOWN/CITY CLERK:
Per RSA 482-A:3, I(a)(1)

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

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



Document Path: K:\092592 00\092592 05 Bridge Maint Permitting\3-GIS\Graphics\USCG Map Columbia.mxd

Hoyle, Tanner & Associates, Inc.
150 Dow Street
Manchester, NH 03101-1227
Tel 603-669-5555
Fax 603-669-4168
Web Page www.hoyletanner.com

BUNGY ROAD BRIDGE OVER
EAST BRANCH SIMMS STREAM
COLUMBIA, NH

PROJECT LOCATION MAP

APPENDIX

A

DR. BY	DATE	SCALE
dlc	3/12/2020	1 inch = 2,000 feet

Columbia, NH

1 inch = 267 Feet

0 267 534 801

June 10, 2020

CAI Technologies
Precision Mapping. Geospatial Solutions.

N

BUNGY

ROAD

KELSEY

BROOK

50' R/W

6

103

526'

887.9'

1380.8'

12
33 Ac
UNITED STATES OF AMERICA

11
23.5 Ac
UNITED STATES OF AMERICA

10
34 AcC
UNITED STATES
OF AMERICA

13
52 AcC

34
22.1 Ac

33
1.1 AcC

35
5.7 AcC

36
1.03 Ac

37
9.39 Ac

38
7.76 Ac

39
7.63 Ac

40
5.08 Ac

56
3.8 AcC

54
3.08 Ac

53
3.85A

57
4.28 Ac

55
7.1 Ac

58
8.48 Ac

4
5.1 Ac

59

3

6A

6B

2B

1B

7

102

102

1205'S

528'

658'

280'

200'

220'

200'

200'

444'

85'

621.5'

329.13'

1285'

320'

320'

786.29'

1042'

251.82'

1270.52'

1127.81'

1161.91'

194.25'

275.42'

575'

142.25'

150'

194.25'

117.83'

322.75'

245.62'

120'

496.4'

57.1'

63.2'

69'

75.1'

147.15'

65.09'

50.05'

21.2'

177.48'

107.45'

321.8'

307.08'

232.79'

265.84'

325.23'

311.5'

822'

81.64'

127.8'

150.1'

163.8'

485.76'

174.31'

639.52'

150.3'

199.91'

50'

150'

149.69'

164.1'

81.3'

61.9'

500'

498.28'

146.29'

250'

1334.07'

562.4'

569.8'

638.9'

207.74'

152.4'

79.3'

84.5'

39.8'

488.96'

98.18'

100.2'

86'

93.4'

53.9'

80'

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

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

Water Division/Land Resources Management

Wetlands Bureau

Check the Status of your Application

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

APPLICANT'S NAME: New Hampshire Department of Transportation **TOWN NAME:** Columbia

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the Avoidance and Minimization Narrative or Checklist that is required by Env-Wt 307.11.

For projects involving construction or modification of non-tidal shoreline structures over areas of surface waters having an absence of wetland vegetation, only Sections I.X through I.XV are required to be completed.

PART I: AVOIDANCE AND MINIMIZATION
In accordance with Env-Wt 313.03(a), the Department shall not approve any alteration of any jurisdictional area unless the applicant demonstrates that the potential impacts to jurisdictional areas have been avoided to the maximum extent practicable and that any unavoidable impacts have been minimized, as described in the Wetlands Best Management Practice Techniques For Avoidance and Minimization.
SECTION I.I - ALTERNATIVES (Env-Wt 313.03(b)(1)) Describe how there is no practicable alternative that would have a less adverse impact on the area and environments under the Department's jurisdiction.
There is no other alternative that would have a less adverse impact on the area and environments under the Departments jurisdiction and meet the project goals of repairing the substructure of the bridge. The proposed repair will replace riprap where riprap was installed during previous stabilization efforts and will not include placement of new structural components (riprap) in locations where none existed previously.
SECTION I.II - MARSHES (Env-Wt 313.03(b)(2)) Describe how the project avoids and minimizes impacts to tidal marshes and non-tidal marshes where documented to provide sources of nutrients for finfish, crustacean, shellfish, and wildlife of significant value.
N/A – this project is not located within tidal waters or marshes.
SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3)) Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.
Due to the nature of the proposed substructure stabilization/repair project, there will be no interruption of hydrologic connections between adjacent wetland or stream systems. The project will not result in placement of riprap that would cause an interruption of the existing hydrologic connections.

SECTION I.IV - JURISDICTIONAL IMPACTS (Env-Wt 313.03(b)(4))

Describe how the project avoids and minimizes impacts to wetlands and other areas of jurisdiction under RSA 482-A, especially those in which there are exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of concern, or any combination thereof.

There are no exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of concern within the project location.

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

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

The project will have a positive effect on public commerce by protecting the substructure of bridge from further undermining and will allow for continued safe passage of the traveling public. There will no impact on navigation or recreation as a result of the project.

SECTION I.VI - FLOODPLAIN WETLANDS (Env-Wt 313.03(b)(6))

Describe how the project avoids and minimizes impacts to floodplain wetlands that provide flood storage.

There is no history of flooding or damage associated with this crossing. The proposed work will not change the hydraulic capacity of the crossing. In particular, the reconstruction of the downstream wing walls in kind and reestablishment of previously placed riprap will help keep this crossing in place and prevent potential erosion of the streambank. There will be no permanent impact on floodplain wetlands that provide flood storage.

SECTION I.VII - RIVERINE FORESTED WETLAND SYSTEMS AND SCRUB-SHRUB – MARSH COMPLEXES (Env-Wt 313.03(b)(7))

Describe how the project avoids and minimizes impacts to natural riverine forested wetland systems and scrub-shrub – marsh complexes of high ecological integrity.

NA- This project area does not contain natural riverine forested wetland systems or scrub-shrub marsh complexes of high ecological integrity.

SECTION I.VIII - DRINKING WATER SUPPLY AND GROUNDWATER AQUIFER LEVELS (Env-Wt 313.03(b)(8))

Describe how the project avoids and minimizes impacts to wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels.

N/A- There are no impacts to wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels.

SECTION I.IX - STREAM CHANNELS (Env-Wt 313.03(b)(9))

Describe how the project avoids and minimizes adverse impacts to stream channels and the ability of such channels to handle runoff of waters.

The project proposes to repair the substructure of the existing crossing by replacement of riprap in front of the wing wall where undermining has occurred. The proposed repair will replace riprap where riprap was installed during previous stabilization efforts and will not include placement of new structural components (riprap) in locations where none existed previously. As result, there will be no adverse impacts to the stream channel or the ability of the channel to handle runoff of waters

SECTION I.X - SHORELINE STRUCTURES - CONSTRUCTION SURFACE AREA (Env-Wt 313.03(c)(1)) Describe how the project has been designed to use the minimum construction surface area over surface waters necessary to meet the stated purpose of the structures.
N/A – This project does not include any shoreline structures.
SECTION I.XI - SHORELINE STRUCTURES - LEAST INTRUSIVE UPON PUBLIC TRUST (Env-Wt 313.03(c)(2)) Describe how the type of construction proposed is the least intrusive upon the public trust that will ensure safe docking on the frontage.
N/A – This project does not include any shoreline structures.
SECTION I.XII - SHORELINE STRUCTURES – ABUTTING PROPERTIES (Env-Wt 313.03(c)(3)) Describe how the structures have been designed to avoid and minimize impacts on ability of abutting owners to use and enjoy their properties.
N/A – This project does not include any shoreline structures.
SECTION I.XIII - SHORELINE STRUCTURES – COMMERCE AND RECREATION (Env-Wt 313.03(c)(4)) Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.
N/A – This project does not include any shoreline structures.
SECTION I.XIV - SHORELINE STRUCTURES – WATER QUALITY, AQUATIC VEGETATION, WILDLIFE AND FINFISH HABITAT (Env-Wt 313.03(c)(5)) Describe how the structures have been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.
N/A – This project does not include any shoreline structures.
SECTION I.XV - SHORELINE STRUCTURES – VEGETATION REMOVAL, ACCESS POINTS, AND SHORELINE STABILITY (Env-Wt 313.03(c)(6)) Describe how the structures have been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.
N/A – This project does not include any shoreline structures.

PART II: FUNCTIONAL ASSESSMENT
REQUIREMENTS Ensure that project meets the requirements of Env-Wt 311.10 regarding functional assessment (Env-Wt 311.04(j); Env-Wt 311.10).
Per RSA 310-A:79 – Exemption III, Sarah Large Wetlands Program Analyst of NHDOT, performed the wetland identification and delineation on August 6, 2019 according to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0, January 2012, US Army Corps of Engineers. The primary functions and values of the adjacent palustrine scrub shrub and forested wetlands are sediment/shoreline stabilization, floodflow attenuation, sediment/ toxicant retention, and nutrient removal.
NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: SARAH LARGE
DATE OF ASSESSMENT: AUGUST 6, 2019
Check this box to confirm that the application includes a NARRATIVE ON FUNCTIONAL ASSESSMENT: ☒
For minor or major projects requiring a standard permit without mitigation, the applicant shall submit a wetland evaluation report that includes completed checklists and information demonstrating the RELATIVE FUNCTIONS AND VALUES OF EACH WETLAND EVALUATED. Check this box to confirm that the application includes this information, if applicable: ☒ Note: The Wetlands Functional Assessment worksheet can be used to compile the information needed to meet functional assessment requirements.

Wetland Function-Value Evaluation Form

Total area of wetland 2+acres Human made? No Is wetland part of a wildlife corridor? no or a "habitat island"?

Adjacent land use transportation & residential Distance to nearest roadway or other development

Dominant wetland systems present PSS1E & PF01E Contiguous undeveloped buffer zone present Some

Is the wetland a separate hydraulic system? no If not, where does the wetland lie in the drainage basin? upper

How many tributaries contribute to the wetland? one Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland 2 & 3

Latitude 71°23'35" Longitude 44°50'43"

Prepared by: S. Large Date 6/21/2021

Wetland Impact:
Type None Area

Evaluation based on:
Office ✓ Field

Corps manual wetland delineation completed? Y ✓ N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		2, 4, 7*, 12, 15,		
Floodflow Alteration	Y	2, 5*, 6, 7, 8*, 9*, 10* 11*, 13, 17,		the bridge structure is immediately upstream of wetland
Fish and Shellfish Habitat		1, 2, 4, 7, 8, 9, 10, 14, 15, 16, 17		
Sediment/Toxicant Retention	Y	3, 4, 5, 7, 9, 10, 11, 12, 16	P	
Nutrient Removal	Y	3, 4, 6, 9*, 10, 11, 13, 14	P	
Production Export		2, 7, 8, 10, 11,		
Sediment/Shoreline Stabilization	Y	2, 3, 4, 6*, 7, 9, 12, 13 15,	P	road/development are potential sediment sources
Wildlife Habitat		2, 7, 8, 13, 14, 15, 19,		fragmented by development
Recreation		6,		
Educational/Scientific Value		11.		wetland is only accessible from road, no safe parking
Uniqueness/Heritage		2, 7, 11, 16, 17,		residential / transportation surrounding wetland
Visual Quality/Aesthetics		10,		
ES Endangered Species Habitat		N/A		
Other				

Notes:

* Refer to backup list of numbered considerations.

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES
WETLAND PERMIT APPLICATION
for
Repairs to the Bungy Road Bridge over East Branch Simms Stream in Columbia, NH

Supplemental Narrative

The following information is offered as a supplement to the information provided in the Wetland Permit Application and Plans.

Explanation as to methods, timing, and manner as to how the project will meet applicable standard permit conditions required in Env-Wt 307 (Env-Wt 311.03(b)(7))

Env-Wt 307.02 (US Army Corps of Engineers (USACE) Conditions). Appendix B is attached to this permit application. The NHDOT seeks and requests to receive review and approval by the Army Corps of Engineers through their General Permit and via submittal of this State wetlands permit application to NHDES.

Env-Wt 307.03 (Protection of Water Quality Required). Please refer to the attached Construction Sequence Narrative for details regarding water quality protection. NHDOT shall be responsible for implementing Erosion and Sediment control measures in accordance with the "New Hampshire Stormwater Manual, Volume 3 Erosion and Sediment Controls during Construction" by NHDES. Erosion and siltation control measures will be installed prior to start of any work and will be maintained during the duration of the construction activities. It is the NHDOT's responsibility to not cause violations of surface water quality standards. Upon completion of the project, the project will cause no adverse effects on the quality or quantity of surface or groundwater entering or exiting the project site.

Env-Wt 307.05 (Protection Against Invasive Species Required) The project areas were reviewed for invasive plant species on 11/7/2019. No species were identified in the project areas at that time. Should invasive species be identified during construction that are on the NH List of Prohibited Invasive Species (AGR PART 3802.01) and the plants cannot be avoided, all work, including daily removal of plant material from construction equipment, shall be conducted in accordance with the Department publication "Best Management Practices for the Control of Invasive and Noxious Plant Species."

Env-Wt 307.06 (Protection of Rare, Threatened or Endangered Species and Critical Habitat) The NH Natural Heritage Bureau was contacted regarding the proposed project (see attached letter NHB21-0804, dated 3/8/2021). The database check determined there are no recorded occurrences for sensitive species near this project area.

An official Federally-listed species list was obtained from the US Fish and Wildlife Service (USFWS) using the Information for Planning and Conservation (IPAC) online tool (Consultation Code 05E1NE00-2020-SLI-1937). The list includes the Federally-threatened Northern Long Eared Bat (*Myotis septentrionalis*; NLEB) and Canada lynx *(Lynx canadensis)*.

Tree removal is limited to no more than .25 acres and no trees will be removed outside of the USFWS time of year restriction for NLEB. The project was reviewed for potential effects to NLEB using the key within the IPAC system. Per the Verification Letter issued for the project, the proposed action is consistent with the activities analyzed in the USFWS Programmatic Biological Opinion (PBO). The action may affect NLEB, but any take that may occur as a result of the action is not prohibited under the Endangered Species Act (ESA) Section 4(d) rule adopted for NLEB.

The NH Natural Heritage Bureau records were researched and there are no Canada lynx records within 5 miles of the project location. A letter was sent to US Fish and Wildlife in May 2020 requesting concurrence with a finding of "no effect". An email was received August 4, 2020 from Eliese Dykstra, Fish and Wildlife Biologist stating "given the description of the very limited potential habitat available within the action area and the

description of project activities including limited tree removal of 0.25 acres adjacent to the highway corridor, a no effect determination for the Canada lynx could be appropriate for this project. If you decide you'd like to make a no effect determination, no concurrence would be necessary for this species and further consultation would not be required for this project". Copies of all USF&W correspondence is included with this permit application.

Env-Wt 307.07 (Consistency Required with Shoreland Water Quality Protection Act). East Branch Simms Stream is not subject to the Shoreland Water Quality Protection Act (SWQPA) (NH RSA 483-B) in this location, nor is it a NHDES Designated River. A Shoreland Permit is not required for this project.

Env-Wt 307.10 (Dredging Activity Conditions) There will be no dredging as a result of this project.

Env-Wt 307.11 (Filling Activity Conditions). All fill material shall conform to the requirements listed in 307.11.

Env-Wt 307.12 (Restoring Temporary Impacts: Site Stabilization) Upon completion of the project all temporary impact areas will be restored to the preconstruction condition per the requirements listed in Env-Wt 307.12.

Env-Wt 307.13 (Property Line Setbacks). It will be necessary to temporarily access one property in order to perform the repairs (Map 420/Lot 34). Permission from this property owner has been granted via email and is attached to this permit application. Once construction is complete the property will be returned to the preconstruction condition.

Env-Wt 307.15 (Use of Heavy Equipment in Wetlands) There will be no heavy equipment in the wetlands for construction of this project.

Env-Wt 307.16 (Adherence to Approved Plans Required) All work shall be in accordance with the plans prepared by the New Hampshire Department of Transportation and approved by NHDES.

Statement of whether the applicant has received comments from the local conservation commission and, if so, how the applicant has addressed the comments (Env-Wt 311.06(h))

A copy of this wetland permit application was submitted to the Town of Columbia for distribution to the Columbia Conservation Commission concurrent with submittal of the application to NHDES.

Federal Agency Coordination

A USACE General Permit will be required for this project. Pre-application coordination with USACE was completed during the DOT NR meeting on 10/16/2019 by Mike Hicks. See section below for Appendix B and Checklist answers. Coordination with the US Fish and Wildlife Service (USFWS) occurred resulting in a determination No Effect for the potential to impact Canada lynx. Additionally, the project was cleared using the online IPAC system to generate a Verification letter regarding the potential to impact northern log-eared bats.

Riprap Installation

The area shown as permanent impact for riprap installation is necessary for protection of the substructure. Installation of riprap will be as shown on the plan and consists of replacement of riprap where riprap was installed during previous stabilization efforts and will not include placement of new structural components (riprap) in locations where none existed previously.

Hydraulic Analysis

There is no history of flooding or damage associated with this crossing. The proposed work will not change the hydraulic capacity of the crossing. In particular, the replacement of riprap will help keep this crossing

in place and prevent potential erosion of the streambank in the future. Due to the limited impact of the proposed work, a full analysis is not being provided. See attached PE certification of work.

AVOIDANCE AND MINIMIZATION CHECKLIST

Water Division/Land Resources Management

Wetlands Bureau

Check the Status of your Application

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

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

For the construction or modification of non-tidal shoreline structures over areas of surface waters without wetland vegetation, complete only Sections 1, 2, and 4 (or the applicable sections in Attachment A: Minor and Major Projects (NHDES-W-06-013).

The following definitions and abbreviations apply to this worksheet:

- "A/M BMPs" stands for Wetlands Best Management Practice Techniques for Avoidance and Minimization dated 2019, published by the New England Interstate Water Pollution Control Commission (Env-Wt 102.18).
- "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (Env-Wt 103.62).

SECTION 1 - CONTACT/LOCATION INFORMATION	
APPLICANT LAST NAME, FIRST NAME, M.I.: NH Department of Transportation; Bridge Maintenance, Tim Boodey, PE	
PROJECT STREET ADDRESS: Bungy Road	PROJECT TOWN: Columbia
TAX MAP/LOT NUMBER: 420	

SECTION 2 - PRIMARY PURPOSE OF THE PROJECT		
Env-Wt 311.07(b)(1)	Indicate whether the primary purpose of the project is to construct a water-access structure or requires access through wetlands to reach a buildable lot or the buildable portion thereof.	☐ Yes ☒ No
If you answered "no" to this question, describe the purpose of the "non-access" project type you have proposed: New Hampshire Department of Transportation (NHDOT) personnel performed an inspection of the Bungy Road Bridge (NHDOT Bridge No. 233/128) over the East Branch of Simms Stream in Columbia, NH on July 2, 2019. The results of the inspection revealed scouring and undermining at the northeast abutment and wing wall to the level such that it needs to be addressed.		

SECTION 3 - A/M PROJECT DESIGN TECHNIQUES Check the appropriate boxes below in order to demonstrate that these items have been considered in the planning of the project. Use N/A (not applicable) for each technique that is not applicable to your project.		
Env-Wt 311.07(b)(2)	For any project that proposes new permanent impacts of more than one acre or that proposes new permanent impacts to a Priority Resource Area (PRA), or both, whether any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs.	☐ Check ☒ N/A

Env-Wt 311.07(b)(3)	Whether alternative designs or techniques, such as different layouts, construction sequencing, or alternative technologies could be used to avoid impacts to jurisdictional areas or their functions and values.	☒ Check ☐ N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(1) Env-Wt 311.10(c)(2)	The results of the functional assessment required by Env-Wt 311.03(b)(10) were used to select the location and design for the proposed project that has the least impact to wetland functions.	☐ Check ☒ N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(3)	Where impacts to wetland functions are unavoidable, the proposed impacts are limited to the wetlands with the least valuable functions on the site while avoiding and minimizing impacts to the wetlands with the highest and most valuable functions.	☒ Check ☐ N/A
Env-Wt 313.01(c)(1) Env-Wt 313.01(c)(2) Env-Wt 313.03(b)(1)	No practicable alternative would reduce adverse impact on the area and environments under the department's jurisdiction and the project will not cause random or unnecessary destruction of wetlands.	☒ Check ☐ N/A
Env-Wt 313.01(c)(3)	The project would not cause or contribute to the significant degradation of waters of the state or the loss of any PRAs.	☒ Check ☐ N/A
Env-Wt 313.03(b)(3) Env-Wt 904.07(c)(8)	The project maintains hydrologic connectivity between adjacent wetlands or stream systems.	☒ Check ☐ N/A
Env-Wt 311.10 A/M BMPs	Buildings and/or access are positioned away from high function wetlands or surface waters to avoid impact.	☐ Check ☒ N/A
Env-Wt 311.10 A/M BMPs	The project clusters structures to avoid wetland impacts.	☐ Check ☒ N/A
Env-Wt 311.10 A/M BMPs	The placement of roads and utility corridors avoids wetlands and their associated streams.	☐ Check ☒ N/A
A/M BMPs	The width of access roads or driveways is reduced to avoid and minimize impacts. Pullouts are incorporated in the design as needed.	☐ Check ☒ N/A
A/M BMPs	The project proposes bridges or spans instead of roads/driveways/trails with culverts.	☐ Check ☒ N/A
A/M BMPs	The project is designed to minimize the number and size of crossings, and crossings cross wetlands and/or streams at the narrowest point.	☐ Check ☒ N/A
Env-Wt 500 Env-Wt 600 Env-Wt 900	Wetland and stream crossings include features that accommodate aquatic organism and wildlife passage.	☒ Check ☐ N/A
Env-Wt 900	Stream crossings are sized to address hydraulic capacity and geomorphic compatibility.	☒ Check ☐ N/A

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

DOT Natural Resources Meeting Minutes

The Columbia project was reviewed at a NR meeting on 10-16-2019. The meeting recording was reviewed due to the meeting minutes not containing the discussion for the project. Replacement of the riprap where it once was previously was discussed, Lori Sommer stated she would not ask for mitigation for the permanent impacts, Mike Hicks from USACE stated the temporary stream impacts will need a USACE GP but he agreed with Lori that the additional riprap would be viewed as a temporary impact since it will be located where riprap had been installed prior.

Mitigation Information

Mitigation

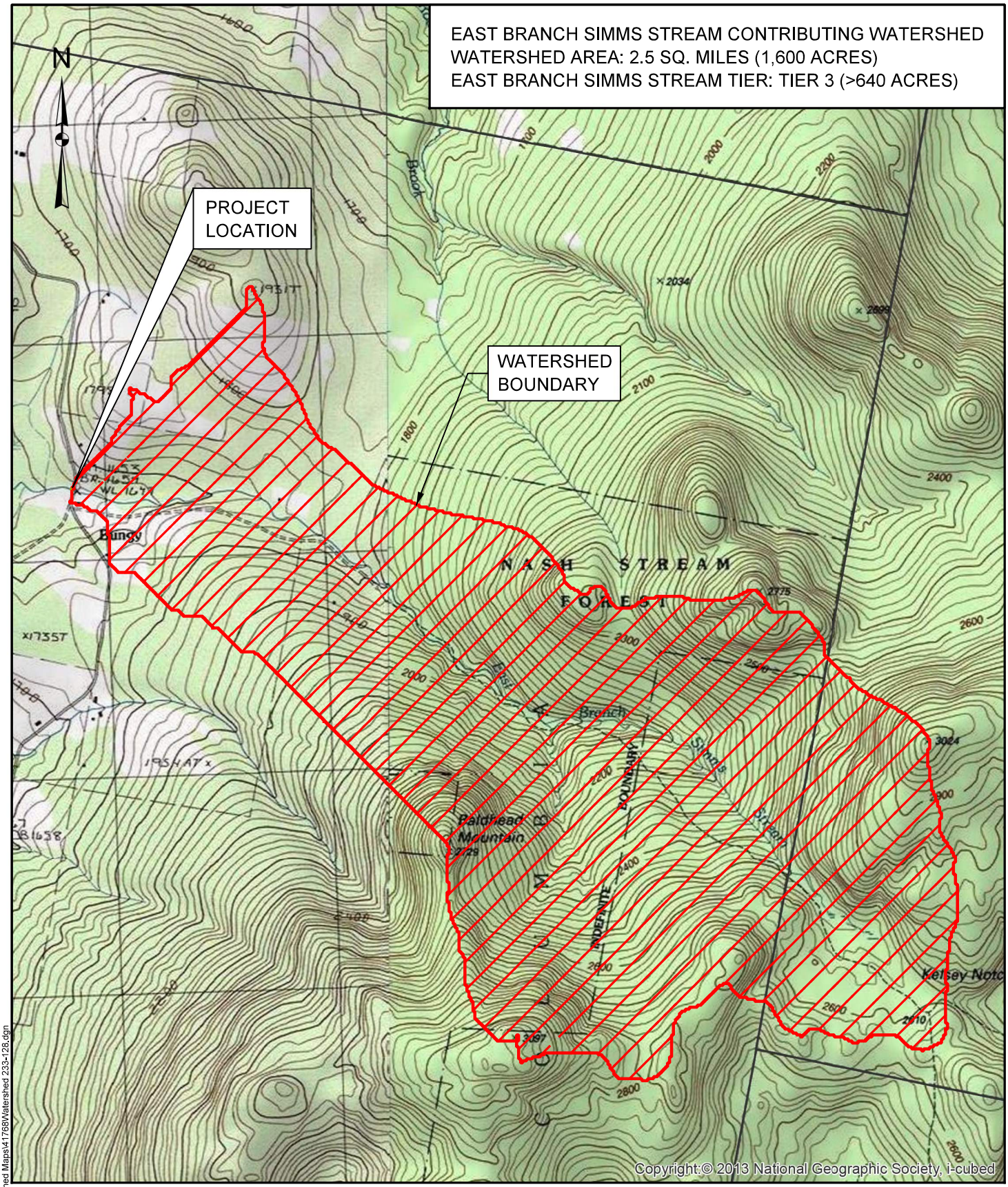
Per Env-Wt 313.04, mitigation is not required for the proposed project because:

(1) There is no permanent impact to a PRA;

(2) The total project impacts less than 10,000 SF of non-tidal wetlands or less than the threshold for tidal wetlands established in Env-Wt 600; and

(3) The overall project:

a. Is limited to bank stabilization using rip-rap, bio-engineering methods, or other bank stabilization techniques to protect existing infrastructure such as highways, bridges, dams, or buildings, or includes such work in combination with other qualifying criteria;
The permanent impacts proposed are necessary to stabilize the bank and protect the infrastructure.



Hoyle, Tanner & Associates, Inc.
150 Dow Street,
Manchester, NH 03101-1227
Tel (603) 669-5555
Fax (603) 669-4168
www.hoyletanner.com

BUNGY ROAD BRIDGE OVER
EAST BRANCH SIMMS STREAM
COLUMBIA, NH

PROJECT LOCATION MAP

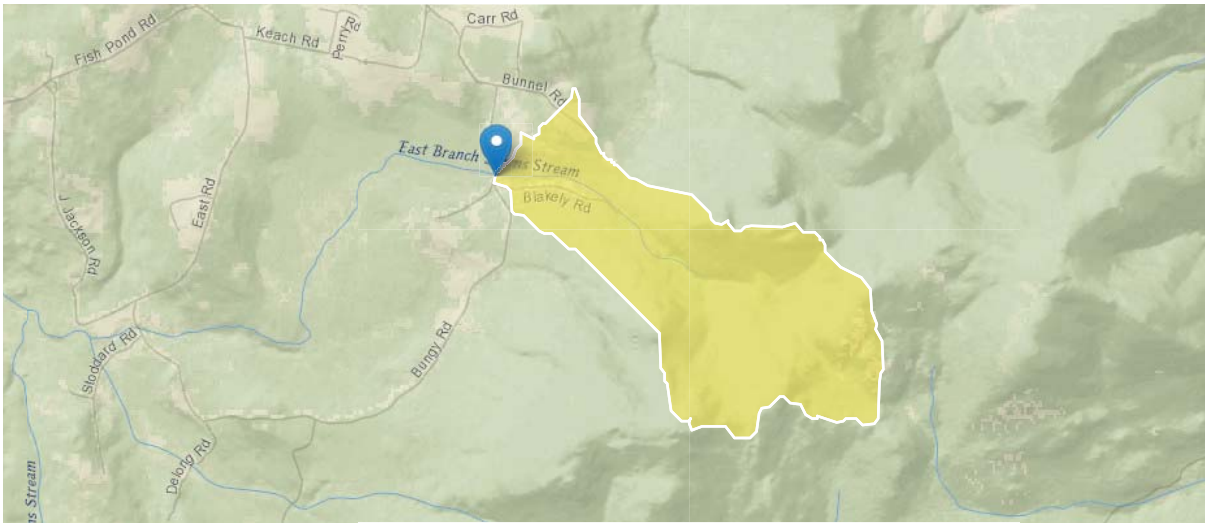
APPENDIX
A
FIGURE 1 OF 1

DRAWN BY	DATE	SCALE
TAG	AUGUST 2020	1" = 2,000'

8/28/2020
3:12:28 PM
K:\092592_052-CADD\BRC\Graphics\Watershed Maps\41768\Watershed 233-128.dgn

StreamStats Report for Bungy Road Bridge, Columbia

Region ID: NH
Workspace ID: NH20200827141144435000
Clicked Point (Latitude, Longitude): 44.84527, -71.39285
Time: 2020-08-27 10:12:01 -0400



Watershed Delineation verified based on topography and stream information from StreamStats and 2018 USGS Quadrangle Map

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	2.5	square miles
CONIF	Percentaqe of land surface covered by coniferous forest	35.6837	percent
PREBC0103	Mean annual precipitation of basin centroid for January 1 to March 15 winter period	8.74	inches
BSLDEM30M	Mean basin slope computed from 30 m DEM	19.305	percent
MIXFOR	Percentage of land area covered by mixed deciduous and coniferous forest	36.513	percent
PREG_03_05	Mean precipitation at gaging station location for March 16 to May 31 spring period	9.3	inches
TEMP	Mean Annual Temperature	37.655	degrees F
TEMP_06_10	Basinwide average temperature for June to October summer period	54.517	degrees F
PREG_06_10	Mean precipitation at gaging station location for June to October summer period	23	inches
ELEVMAX	Maximum basin elevation	3091.196	feet

Seasonal Flow Statistics Parameters[Low Flow Statewide]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.5	square miles	3.26	689
CONIF	Percent Coniferous Forest	35.6837	percent	3.07	56.2
PREBC0103	Jan to Mar Basin Centroid Precip	8.74	inches	5.79	15.1
BSLDEM30M	Mean Basin Slope from 30m DEM	19.305	percent	3.19	38.1
MIXFOR	Percent Mixed Forest	36.513	percent	6.21	46.1
PREG_03_05	Mar to May Gage Precipitation	9.3	inches	6.83	11.5
TEMP	Mean Annual Temperature	37.655	degrees F	36	48.7
TEMP_06_10	Jun to Oct Mean Basinwide Temp	54.517	degrees F	52.9	64.4

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
PREG_06_10	Jun to Oct Gage Precipitation	23	inches	16.5	23.1
ELEVMAX	Maximum Basin Elevation	3091.196	feet	260	6290

Seasonal Flow Statistics Disclaimers[Low Flow Statewide]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Seasonal Flow Statistics Flow Report[Low Flow Statewide]

Statistic	Value	Unit
Jan to Mar15 60 Percent Flow	1.5	ft^3/s
Jan to Mar15 70 Percent Flow	1.26	ft^3/s
Jan to Mar15 80 Percent Flow	1.09	ft^3/s
Jan to Mar15 90 Percent Flow	0.839	ft^3/s
Jan to Mar15 95 Percent Flow	0.673	ft^3/s
Jan to Mar15 98 Percent Flow	0.561	ft^3/s
Jan to Mar15 7 Day 2 Year Low Flow	1.11	ft^3/s
Jan to Mar15 7 Day 10 Year Low Flow	0.619	ft^3/s
Mar16 to May 60 Percent Flow	6.41	ft^3/s
Mar16 to May 70 Percent Flow	4.95	ft^3/s
Mar16 to May 80 Percent Flow	3.57	ft^3/s
Mar16 to May 90 Percent Flow	2.4	ft^3/s
Mar16 to May 95 Percent Flow	1.7	ft^3/s
Mar16 to May 98 Percent Flow	1.19	ft^3/s
Mar16 to May 7 Day 2 Year Low Flow	1.56	ft^3/s
Mar16 to May 7 Day 10 Year Low Flow	0.851	ft^3/s
Jun to Oct 60 Percent Flow	1.56	ft^3/s
Jun to Oct 70 Percent Flow	1.24	ft^3/s
Jun to Oct 80 Percent Flow	1.06	ft^3/s
Jun to Oct 90 Percent Flow	0.776	ft^3/s
Jun to Oct 95 Percent Flow	0.61	ft^3/s
Jun to Oct 98 Percent Flow	0.506	ft^3/s
Jun to Oct 7 Day 2 Year Low Flow	0.777	ft^3/s
Jun to Oct 7 Day 10 Year Low Flow	0.424	ft^3/s
Nov to Dec 60 Percent Flow	2.7	ft^3/s
Nov to Dec 70 Percent Flow	2.13	ft^3/s
Nov to Dec 80 Percent Flow	1.69	ft^3/s
Nov to Dec 90 Percent Flow	1.14	ft^3/s
Nov to Dec 95 Percent Flow	0.774	ft^3/s
Nov to Dec 98 Percent Flow	0.512	ft^3/s
Oct to Nov 7 Day 2 Year Low Flow	1.64	ft^3/s
Oct to Nov 7 Day 10 Year Low Flow	0.776	ft^3/s

Seasonal Flow Statistics Citations

Flynn, R.H. and Tasker, G.D.,2002, Development of Regression Equations to Estimate Flow Durations and Low-Flow-Frequency Statistics in New Hampshire Streams: U.S.Geological Survey Scientific Investigations Report 02-4298, 66 p. (http://pubs.water.usgs.gov/wrir02-4298)

Application Version: 4.4.0

NH Department of Transportation

Bureau of Bridge Maintenance

Project: Columbia 233-128, 42827

P.E. Certification in Accordance with Env-Wt 904.

Stream Crossing Rules for Standard Application Tier 3, repair/preservation/rehabilitation project

Crossing's Drainage Area: 2.5 square miles

Existing Conditions: The existing structure is a cast in place concrete slab bridge constructed in 1925. The roadway, bridge substructure and deck was widened 1991, increasing the size of the crossing to the current footprint. The interior dimensions are 14'-0" clear span and 6'-6" rise. No changes or repairs to the structure were observed or documented other than routine maintenance since 1991. There are no reports of flooding or damage to roadway or private property related to this crossing. There is scour and undermining present at the NE corner of the abutment and NE wing. The course of the exiting stream brings flows into the NE bank area and wing. The structural components of the bridge are listed in satisfactory condition based on the last bridge inspection. There is existing rip rap at the NE corner near the wing and along the bank.

Project Description: The proposed project will repair the existing undermining at the NE wing and abutment corner. A concrete jacket will be added at this wing to repair the condition. Rip will be placed in front of this wing and along the bank at the NE corner, replacing rip rap that was previous placed. See the Wetland Impact Map and photo pages located elsewhere in this application. When the in stream work is complete, the concrete deck will receive preservation work to prolong the life of the structure.

Proposed Conditions: The installation of the rip rap and concrete wing repair will not change the ability of the structure to pass water or sediment. The existing conditions were modeled using FHWA's HY-8 using information from NH StreamStats, existing plans and on site measurements. This showed that the existitng structure will pass the predicated 100-year event. The system was run again changing the inlet condition to match the proposed scope of work that includes changing the inlet opening and adding rip rap at the crossing. Using the same stream flows, the proposed condition will again pass the 100-year event and does not change the functions of the crossing. The inlet and outlet elevations of the bridge structure will not change due to the work. The water surface elevations, including the elevation of the 100-year event, will not change due to the work.

Included with this form is supporting analysis by way of photos and plans

Env-Wt 904.01 General Design Considerations Applicable to
All Stream Crossings

(a) All stream crossings, whether over tidal or non-tidal waters, shall be designed and constructed so as to:
1) Not be a barrier to sediment transport;
2) Not restrict high flows and maintain existing low flows;
3) Not obstruct or otherwise substantially disrupt the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction;
4) Not cause an increase in the frequency of flooding or overtopping of banks;
5) Maintain or enhance geomorphic compatibility by:
    a. Minimizing the potential for inlet obstruction by sediment, wood, or debris; and

b. Preserving the natural alignment of the stream channel;

6) Preserve watercourse connectivity where it currently exists;
7) Restore watercourse connectivity where:
   a. Connectivity previously was disrupted as a result of human activity(ies); and
   b. Restoration of connectivity will benefit aquatic life upstream or downstream of the crossing, or both;
8) Not cause erosion, aggradation, or scouring upstream or downstream of the crossing; and
9) Not cause water quality degradation.

(b) For stream crossing over tidal waters, the stream crossing shall be designed to:
1) Match the velocity, depth, cross-sectional area, and substrate of the natural stream: and
2) Be of sufficient size to not restrict bi-directional tidal flow over the natural tide range above, below, and through the crossing.

Env-Wt 904.09(a)- The repair, rehabilitation, or replacement of tier 3 stream crossings shall be limited to existing legal crossings where the tier classification is based only on the size of the contributing watershed.

Env-Wt 904.09(b)- Rehabilitation of a culvert or other closed-bottom stream crossing structure pursuant to this section may be accomplished by concrete repair, slip lining, cured-in place lining, or concrete invert lining, or any combination thereof, except that slip lining shall not occur more than once.
(Not applicable to repair)

Env-Wt 904.09(c) A project shall qualify under this section only if a professional engineer certifies, and provides supporting analyses to show, that:

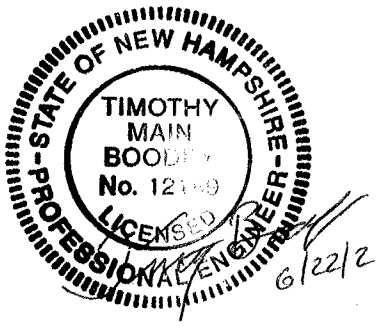
(1) The existing crossing does not have a history of causing or contributing to flooding that damages the crossing or other human infrastructure or protected species habitat;

(2) The proposed stream crossing will:
   a. Meet the general criteria specified in Env-Wt 904.01;
   (see page 2 of this form for Env-Wt 904.01)
   b. Maintain or enhance the hydraulic capacity of the stream crossing;
   c. Maintain or enhance the capacity of the crossing to accommodate aquatic organism passage;
   d. Maintain or enhance the connectivity of the stream reaches upstream or downstream of the crossing; and
   e. Not cause or contribute to the increase in the frequency of flooding or overtopping of the banks upstream or downstream of the crossing.

Env-Wt 904.09(d) Repair, rehabilitation, or replacement of a tier 4 stream crossing shall comply with Env-Wt 904.07(d). *(if non-tidal, N/A)*

I hereby certify that the above referenced project meets the criteria of Env-Wt 904.09(c).

Timothy Boodey — 6/22/2021
Name: Date:



New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter

To: Deb Coon
150 Dow Street
Manchester, NH 03101

From: NH Natural Heritage Bureau

Date: 3/8/2021 (This letter is valid through 3/8/2022)

Re: Review by NH Natural Heritage Bureau of request dated 3/8/2021

Permit Types: Wetland Standard Dredge & Fill - Major
General Permit

NHB ID: NHB21-0804

Applicant: Deb Coon

Location: Columbia
Tax Map: Tax Map 420, Tax Lot: N/A
Address: Bungy Road

Proj. Description: Repairs to the Bungy Road Bridge Over East Branch Simms Stream, Columbia, NH. The proposed repairs include replacement of rip rap in front of the wingwall where undermining has occurred for the protection of the substructure. The proposed repair will replace riprap where riprap was installed during previous stabilization efforts and will not include placement of new structural components (riprap) in locations where none existed previously

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.

MAP OF PROJECT BOUNDARIES FOR: NHB21-0804

Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord NH 03301

United States Department of the Interior

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

In Reply Refer To: March 31, 2020
Consultation Code: 05E1NE00-2020-SLI-1937
Event Code: 05E1NE00-2020-E-05799
Project Name: Repairs to the Bungy Road Bridge over the East Branch of Simms Stream

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(s):

- Official Species List

Official Species List

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

This species list is provided by:

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

Project Summary

Consultation Code: 05E1NE00-2020-SLI-1937

Event Code: 05E1NE00-2020-E-05799

Project Name: Repairs to the Bungy Road Bridge over the East Branch of Simms Stream

Project Type: TRANSPORTATION

Project Description: Repairs to the Bungy Road Bridge over the East Branch of Simms Stream

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/44.83085482611362N71.44004658784769W

Counties: Coos, NH

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

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

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

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

---

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

Mammals

NAME	STATUS
Canada Lynx *Lynx canadensis* Population: Wherever Found in Contiguous U.S. There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

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

United States Department of the Interior

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

In Reply Refer To: April 06, 2020
Consultation Code: 05E1NE00-2020-TA-1937
Event Code: 05E1NE00-2020-E-05956
Project Name: Repairs to the Bungy Road Bridge over the East Branch of Simms Stream

Subject: Verification letter for the 'Repairs to the Bungy Road Bridge over the East Branch of Simms Stream' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Deb Coon:

The U.S. Fish and Wildlife Service (Service) received on April 06, 2020 your effects determination for the 'Repairs to the Bungy Road Bridge over the East Branch of Simms Stream' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Canada Lynx, *Lynx canadensis* (Threatened)

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

---

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

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

1. Name

Repairs to the Bungy Road Bridge over the East Branch of Simms Stream

2. Description

The following description was provided for the project 'Repairs to the Bungy Road Bridge over the East Branch of Simms Stream':

> Repairs to the Bungy Road Bridge over the East Branch of Simms Stream

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/44.83085482611362N71.44004658784769W

Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

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

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

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

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Coon, Deb

From: Dykstra, Eliese A <eliese_dykstra@fws.gov>
Sent: Tuesday, August 11, 2020 10:29 AM
To: Peace, Kimberly R.; Hicks, Michael C CIV USARMY CENAE (US)
Cc: Coon, Deb; Crickard, Ronald; 092592.05 - NHDOT Statewide Env #41768 Bridge Maint Permitting; Matt Urban
Subject: Re: [External] Fwd: NHDOT Bridge No. 233/128 Bridge Maintenance USFWS Consultation

Hi Kimberly,

Thank you for your email and attachments, the background information you provided will be extremely helpful when I review similar projects in the future. I will attach your email to the original project package we received to indicate that you have made a no effect determination for the Canada lynx. No further section 7 consultation is necessary, but don't hesitate to reach out if there are any questions.

Thanks,
Eliese

Eliese Dykstra
Fish and Wildlife Biologist
Endangered Species Program
U.S. Fish and Wildlife Service
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301
Phone: 603-227-6427
Email: eliese_dykstra@fws.gov

From: Peace, Kimberly R. <kpeace@hoyletanner.com>
Sent: Monday, August 10, 2020 11:35 AM
To: Dykstra, Eliese A <eliese_dykstra@fws.gov>; Hicks, Michael C CIV USARMY CENAE (US) <Michael.C.Hicks@usace.army.mil>
Cc: Coon, Deb <dcoon@hoyletanner.com>; Crickard, Ronald <Ronald.Crickard@dot.nh.gov>; 092592.05 - NHDOT Statewide Env #41768 Bridge Maint Permitting <092592.05-NHDOTStatewideEnv#41768BridgeMaintPermitting@hoyletanner.onmicrosoft.com>; Matt Urban <MUrban@dot.state.nh.us>
Subject: RE: [External] Fwd: NHDOT Bridge No. 233/128 Bridge Maintenance USFWS Consultation

Hi Eliese-

I am the consultant working with DOT for permitting this project. Thanks for asking about the federal agency, you are correct that in this case, with no federal funding involved, USACE would be the federal agency via their wetland permit. DOT completes an Environmental Short Form for projects without FHWA funding that is very similar to a NEPA Programmatic Cat Ex review in order to identify and resolve any outstanding environmental issues early in the project's design, I have attached the draft we completed for this project if you haven't seen these before.

As you may know, for a NEPA document, DOT acts as the federal agency on behalf of FHWA and is able to make the determination and request concurrence. In this case, DOT submitted a consultation letter with a determination regarding Canada lynx on behalf of USACE, who was cc'ed on that letter. Sorry for any confusion.

I agree with you that the "No Effect" determination for Canada lynx is appropriate for this project; this should end Section 7 consultation. I have cc'ed Mike Hicks at USACE on this email so that he is aware of this communication between us for this project.

I have also attached a letter issued by USACE to USFWS that allows DOT to serve as a non-Federal representative to conduct informal Section 7 consultation for their projects with potential impacts to Northern long-eared bat.

Thank you-

Kimberly R. Peace
Associate, Senior Environmental Coordinator
Hoyle, Tanner & Associates, Inc.
150 Dow Street | Manchester, NH 03101
(603) 669-5555, ext 151 | Fax: (603) 669-4168
Cell: (603)716-3343
www.hoyletanner.com
Our vision is to provide innovative, collaborative and sustainable engineering and planning solutions to the challenges our clients face, while enhancing the communities in which we work and live. We strive to uphold the highest ethical standards while maintaining integrity and respect within our professional relationships. We continue to build a corporate culture that honors and values the individuality and strengths of our team members and our clients.

From: "Dykstra, Eliese A" <eliese_dykstra@fws.gov>
Date: August 4, 2020 at 3:46:41 PM EDT
To: "Urban, Matt" <Matt.Urban@dot.nh.gov>
Subject: Re: NHDOT Bridge No. 233/128 Bridge Maintenance USFWS Consultation

Hi Matt,

I am reaching out with regards to section 7 consultation for the NH Department of Transportation Bungy Road Bridge maintenance project in Columbia, NH (NHDOT Bridge No. 233/128; TAILS# 20-TA-1937). I have reviewed your project package and would like some additional information. Could you clarify what the federal action agency is for this project and whether NHDOT has been designated as their non-federal representative for the purposes of section 7 consultation? The NLEB streamlined consultation form we received indicated the US Army Corps of Engineers, and I just wanted to verify because on some projects they have conducted consultation with us directly rather than designating a non-federal representative to do so.

In addition, I see that you have made a may affect, not likely to adversely affect determination for the Canada lynx. However, given the description of the very limited potential habitat available within the action area and the description of project activities including limited tree removal of 0.25 acres adjacent to the highway corridor, a no effect determination for the Canada lynx could be appropriate for this project. If you decide you'd like to make a no effect

determination, no concurrence would be necessary for this species and further consultation would not be required for this project. Let me know what you think and I'm happy to answer any questions.

Thank you for the additional information, let me know if you'd prefer to set up a time for a quick call to discuss this project, I have availability most days next week or the following.

Sincerely,
Eliese

Eliese Dykstra
Fish and Wildlife Biologist
Endangered Species Program
U.S. Fish and Wildlife Service
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301
Phone: 603-227-6427
Email: eliese_dykstra@fws.gov<mailto:eliese_dykstra@fws.gov>

Section 106 Cultural Resources Effect Memo
(Project NOT delivered managed by NHDOT)

11845

Project Town: **Columbia** Date: **5/11/2020**

State No.: **42827** Federal No. (as applicable): **Click here to enter text.**

Lead Federal Agency: **Federal Highway Administration**

Submitted by: **Matt Urban** Email address: **Matt.Urban@dot.nh.gov**
(Project Manager/Sponsor)

Pursuant to meetings on and/or the Request for Project Review signed on Click here to enter a date., and for the purpose of compliance with the regulations of National Historic Preservation Act and the Advisory Council on Historic Preservation's *procedures for the Protection of Historic Properties* (36 CFR 800), and NH RSA 227-C the NH Division of Historical Resources and, when applicable, the NH Division of the Federal Highway Administration or the US Army Corps of Engineers have coordinated the identification and evaluation of cultural resources relative to:

Scour repairs to the Bungy Road Bridge over East Branch Simms Stream which include placement of rip rap in front of the wingwalls where undermining has occurred for the protection of the substructure. The stream will be diverted to one side by installing a cofferdam. The work zone area will be dewatered and water will be pumped to dewatering basins which will have a minimum of 20-foot vegetative buffer to any wetland or waterbody. This operation will not cause a violation to any water quality standard. Upon completion of the repair work all dewatering devices will be removed and the site will be restored to its original condition.

Please describe all public outreach efforts (see 36 CFR800.2-3) that have been done to-date. Identify Consulting Parties and include any public feedback (if applicable, attached pages if necessary):

Due to the minimal nature of the project and the lack of historic nature of the bridge, public outreach included a letter sent to the Town of Columbia, Board of Selectmen on April 13, 2020. To date no response has been received.

Based on a review of the project, as presented to date, it has been determined that:

Section 106 Effect Determination	
	☒ **No Historic or Archaeological Properties will be Affected**
	☐ **There will be No Adverse Effect on Historic or Archaeological Properties**
	☐ **There will be an Adverse Effect on Historic or Archaeological Properties or Resources**
	Additional comments, please explain *why* the undertaking has resulted in the above effect: In 2018 a historic bridge inventory was performed on the bridge. The bridge was found to be not eligible for historic listing with the following comment "The bridge is an altered example of a short-span slab bridge with no technological details or features to distinguish it from the population of bridges of similar age and type. The loss of integrity has impaired its ability to convey significance under Criterion A for transportation or Criterion C for engineering".

In accordance with the Advisory Council's regulations, we will continue to consult, as appropriate, as this project proceeds.

Section 4(f) *(to be completed by FHWA)*				
	There Will Be:	☒ **No 4(f);**	☐ **Programmatic 4(f);**	☐ **Full 4 (f);** or
	☐ **A finding of *de minimis* 4(f) impact as stated:** In addition, with NHDHR concurrence of no adverse effect for the above undertaking, and in accordance with 23 CFR 774.3, FHWA intends to, and by signature below, does make a finding of *de minimis* impact. NHDHR's signature represents concurrence with both the no adverse effect determination and the *de minimis* findings. Parties to the Section 106 process have been consulted and their concerns have been taken into account. Therefore, the requirements of Section 4(f) have been satisfied.			

Lead Federal Agency (date)
(if applicable)

Jill Edelmann 6/16/2020
NHDOT Cultural Resources Program

The NH State Historic Preservation Officer concurs with these findings: Nadine Miller, DSHPO
NH Division of Historical Resources
6/19/2020

cc: FHWA NHDHR ACOE (⇐ as applicable ⇑)

US Army Corps of Engineers ®
New England District

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

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

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm to determine if there is an impaired water in the vicinity of your work area.*	X	
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	X	
2.2 Are there proposed impacts to SAS, special wetlands. Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at https://www2.des.state.nh.us/nhb_datacheck/. The book Natural Community Systems of New Hampshire also contains specific information about the natural communities found in NH.		X
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?	X	
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		X
2.5 The overall project site is more than 40 acres?		X
2.6 What is the area of the previously filled wetlands?	N/A	
2.7 What is the area of the proposed fill in wetlands?	75 SF	
2.8 What is the % of previously and proposed fill in wetlands to the overall project site?	N/A	
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: https://www2.des.state.nh.us/nhb_datacheck/ USFWS IPAC website: https://ecos.fws.gov/ipac/location/index	X	

3.2 Would work occur in any area identified as either "Highest Ranked Habitat in N.H." or "Highest Ranked Habitat in Ecological Region"? (These areas are colored magenta and green, respectively, on NH Fish and Game's map, "2010 Highest Ranked Wildlife Habitat by Ecological Condition.") Map information can be found at: • PDF: www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm. • Data Mapper: www.granit.unh.edu. • GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html.	X	
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		X
3.5 Are stream crossings designed in accordance with the GC 21?	X	
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?		X
5. Historic/Archaeological Resources		
For a minimum, minor or major impact project - a copy of the Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review**)** with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 11 GC 8(d) of the GP document**	X	

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

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

U.S. Army Corps of Engineers
New Hampshire Programmatic General Permit (PGP)
Appendix B Corps Secondary Impacts Checklist
(for inland wetland/waterway fill projects in New Hampshire)

Repairs to the Bungy Road Bridge over East Branch Simms Stream
Columbia, NH

Explanations for Checklist Answers

1.1 East Branch Simms Stream is marginally impaired for fish consumption due to mercury and severely impaired for primary contact recreation due to Escherichia coli according to the 2018 Draft 303(d) list. The proposed project will not add to these impairments.

2.1 The project is to repair the substructure of the Bungy Road Bridge by replacement of riprap where it previously existed. The stream and some associated floodplain will be affected by the project.

3.1 The NH Natural Heritage Bureau was contacted regarding the proposed project (see attached letter NHB21-0804, dated 3/8/2021). The database check determined there are no recorded occurrences for sensitive species near this project area.

An official Federally-listed species list was obtained from the US Fish and Wildlife Service (USFWS) using the Information for Planning and Conservation (IPAC) online tool (Consultation Code 05E1NE00-2020-SLI-1937). The list includes the Federally-threatened Northern Long Eared Bat (*Myotis septentrionalis; NLEB*) and Canada lynx (*Lynx canadensis*).

Tree removal is limited to no more than .25 acres and no trees will be removed outside of the USFWS time of year restriction for NLEB. The project was reviewed for potential effects to NLEB using the key within the IPAC system. Per the Verification Letter issued for the project, the proposed action is consistent with the activities analyzed in the USFWS Programmatic Biological Opinion (PBO). The action may affect NLEB, but any take that may occur as a result of the action is not prohibited under the Endangered Species Act (ESA) Section 4(d) rule adopted for NLEB.

The NH Natural Heritage Bureau records were researched and there are no Canada lynx records within 5 miles of the project location. A letter was sent to US Fish and Wildlife in May 2020 requesting concurrence with a finding of “no effect”. An email was received August 4, 2020 from Eliese Dykstra, Fish and Wildlife Biologist stating “given the description of the very limited potential habitat available within the action area and the description of project activities including limited tree removal of 0.25 acres adjacent to the highway corridor, a no effect determination for the Canada lynx could be appropriate for this project. If you decide you'd like to make a no effect determination, no concurrence would be necessary for this species and further consultation would not be required for this project”. Copies of all USF&W correspondence is included with this permit application..

3.2 The project is located in a Highest Ranked Habitat in New Hampshire; however, the project is not expected to cause impacts that would alter this designation.

4.1 The proposed bridge repair project is located within the 100-year floodplain of the East Branch of Simms Stream but will not result in a loss of flood storage. The proposed repair will replace riprap where riprap was installed during previous stabilization efforts and will not include placement of new structural components (riprap) in locations where none existed previously. There will be no

permanent impact on floodplain wetlands that provide flood storage. Effective stabilization of this crossing will improve the stream's ability to handle runoff waters.

5. A Request for Project Review was submitted to the NHDOT Bureau of Environment and the NH Division of Historic Resources (NHDHR). The NHDOT and NHDHR concurred that the work as proposed would have no adverse effect on historic or archaeological resources in the Area of Potential Effects (APE) and have issued a No Adverse Effect memo for the project. A copy of the Section 106 Cultural Resources Effect Memo with a determination of "No Historic or Archaeological Properties will be Effected" is included with this application.

Repairs to the Bungy Road Bridge over East Branch Simms Stream
Columbia, NH

Site Photos

Bungy Road Bridge Upstream Elevation View
Area of proposed riprap installation along base of wingwall on right side of photo (November 7, 2019).

East Branch Simms Stream Looking Upstream
(November 7, 2019)

Repairs to the Bungy Road Bridge over East Branch Simms Stream
Columbia, NH

Site Photos

East Branch Simms Stream Looking Upstream
(November 7, 2019)

Upstream View showing placement of riprap in location of currently proposed riprap
(November 7, 2019)

Repairs to the Bungy Road Bridge over East Branch Simms Stream
Columbia, NH

Site Photos

Upstream North Wingwall showing historic placement of riprap in location of currently proposed riprap (November 2015)

Upstream View showing historic placement of riprap in location of currently proposed riprap (November 2015)

Construction Sequence and Dewatering details

1. Install erosion control measures.
2. At normal to low flow, the stream will be diverted to one side by installing a cofferdam.
3. The work zone area of the southeast wing will be dewatered. Water from this operation will be pumped to dewatering basins which will have a minimum of 20-foot vegetative buffer to any wetland or waterbody. This operation will not cause a violation to any water quality standard or impact any wetland or stream.
4. Riprap will be replaced and installed in front of the wing walls.
5. All dewatering devices will be removed and the site will be restored to its original condition.

Note: The Project will utilize BMP's from the Best Management Practices manual during all phases of construction.

Supplemental Information per Env-Wt 903.04

There is not a history of flooding at this crossing or damage to the environment or infrastructure. The replacement of rip rap at previously placed locations to protect the structure will not diminish the function of the crossing. The proposed work will not change the hydraulic capacity of the crossing. Given the nature of the project we reviewed the anticipated hydraulic conditions during our anticipated construction period but are not providing a full analysis.

(d) Dewatering system:

- Estimated maximum flow anticipated during construction: DOT estimates the maximum flow during construction of 115 CFS
- The location, height, and width of the diversion dam: The location of the cofferdams that support the bypass pipe/clean water bypass are shown on the plan included in the application submittal. DOT anticipates the height of the cofferdam to be 3.5' with a 42" base width
- The location and capacity of each sump: There will be a small sump for a three-inch submersible pump located between the cofferdams near the northeast corner of the abutment. It will only be used to dewater the area between the cofferdams during work hours.
- Backwater prevention method: The cofferdam on the downstream side of the bypass pipe will prevent backwatering.

(e) Erosion and pollution controls:

- The sediment treatment plan, including methods, release point(s), and extent: Most water will flow through the bypass pipe. Water from dewatering using a small submersible pump will be pumped to the dewatering basin in the northwest corner. This dewatering basin is 20 to 25' from jurisdictional wetlands or streams. Sediment will be removed form the bag and disposed of per NHDES requirements.
- Any additional methods proposed to control erosion: Silt fence will be installed at location shown on the plans as natural buffer/perimeter controls at TOB locations at each corner and along the delineated wetland in the northeast corner. Any temporarily disturbed vegetated areas will be stabilized for vegetation growth.

Coon, Deb

From: Boodey, Timothy <TIMOTHY.M.BOODEY@dot.nh.gov>
Sent: Wednesday, March 31, 2021 11:35 AM
To: Peace, Kimberly R.; Coon, Deb; OSullivan, Andrew; Large, Sarah
Cc: 092592.05 - NHDOT Statewide Env #41768 Bridge Maint Permitting
Subject: [External] FW: Upcoming NHDOT Bridge Work at Bungy Road over East Branch Simms Stream in Columbia, NH

Hello,
This is from the owner of the land in Columbia on the downstream side (NW corner) where access is required for the dewatering basin. We now have permission from the NE and NW landowners to do the work on/adjacent to their property.
Tim

From: Paul Hrycuna <paulhrycuna@keelerfamily.com>
Sent: Tuesday, March 30, 2021 6:07 PM
To: Hall, Andrew <Andrew.D.Hall@dot.nh.gov>
Subject: Re: Upcoming NHDOT Bridge Work at Bungy Road over East Branch Simms Stream in Columbia, NH

Good evening,

Thank you for taking the time to explain it to me over the phone and I appreciate you explaining it in detail in your email, as well. This all sounds good to me. You have my permission to do the work you need to do based on what you stipulated in your email to me.

Have a great night! :)

Thank you,

New website: www.keelerfamily.com

Agency Disclosure

https://www.keelerfamily.com/about-us/relationship-disclosure/

On Mar 30, 2021, at 2:26 PM, Hall, Andrew <Andrew.D.Hall@dot.nh.gov> wrote:

Paul,

As discussed on the phone this afternoon, NHDOT Bridge Maintenance will be doing work on the bridge that carries Bungy Road over East Branch Simms Stream in Columbia. As part of the work we will be diverting water away from the upstream wingwall of the bridge and doing occasional dewatering work in our work area. The dewatering basin (hay bales) will be located on your property that abuts the downstream side of the bridge. This will be a small and temporary basin and will be completely removed and any silt cleaned up at the conclusion of the project. We would access the property either from the stream or the road side and any damage to the property will be repaired to existing by us. I don't anticipate anything other than foot traffic and the dewatering basin will consist of about 10 haybales and some filter fabric. As discussed, there will be not permanent impacts to your property and not added maintenance to the property or changes in the stream resulting from our work. The actual work we are doing is on the upstream side of the bridge.

Could you please send me a responding email to this effect that you give permission to us to access the property to place our dewatering basin there. The work is probably going to happen in October or late fall of this year and will take about 1 month.

Thanks,
Andy

Andrew Hall
NHDOT Bridge Maintenance
Office : 603-271-3667
Mobile: 603-419-0498
Fax: 603-271-1588

Coon, Deb

From: Boodey, Timothy <Timothy.Boodey@dot.nh.gov>
Sent: Monday, July 6, 2020 11:43 AM
To: James, Sean T.
Subject: [External] FW: Bungy Road over East Branch Simms Stream Bridge Work

Hello Sean,
Here is a note from the landowner at the NE corner of Columbia 233/128 regarding access to the work area.
Thank you,
Tim

Timothy Boodey, P.E.
NHDOT – Bridge Maintenance
PO Box 483 Concord, NH 03302
Office: 603-271-3667
Fax: 603-271-1588
Cell: 603-419-9690

From: Hall, Andrew <Andrew.Hall@dot.nh.gov>
Sent: Monday, July 06, 2020 11:41 AM
To: Boodey, Timothy <Timothy.Boodey@dot.nh.gov>
Subject: FW: Bungy Road over East Branch Simms Stream Bridge Work

Tim,

This is the landowner in Colebrook I spoke with.

Thanks,
Andy

From: Coralie Stepanian <bungysteps@gmail.com>
Sent: Monday, July 06, 2020 11:39 AM
To: Hall, Andrew <Andrew.Hall@dot.nh.gov>
Subject: Re: Bungy Road over East Branch Simms Stream Bridge Work

---

Hi Andy,
This email is confirmation that I spoke with you about the bridge repairs on Bungy Road at Sims Stream. You have our permission to conduct the work as discussed. Please inform me of any changes to the plans. Thank You.

Sincerely,
Scott Stepanian

On Thu, Jul 2, 2020 at 11:01 AM Hall, Andrew <Andrew.Hall@dot.nh.gov> wrote:

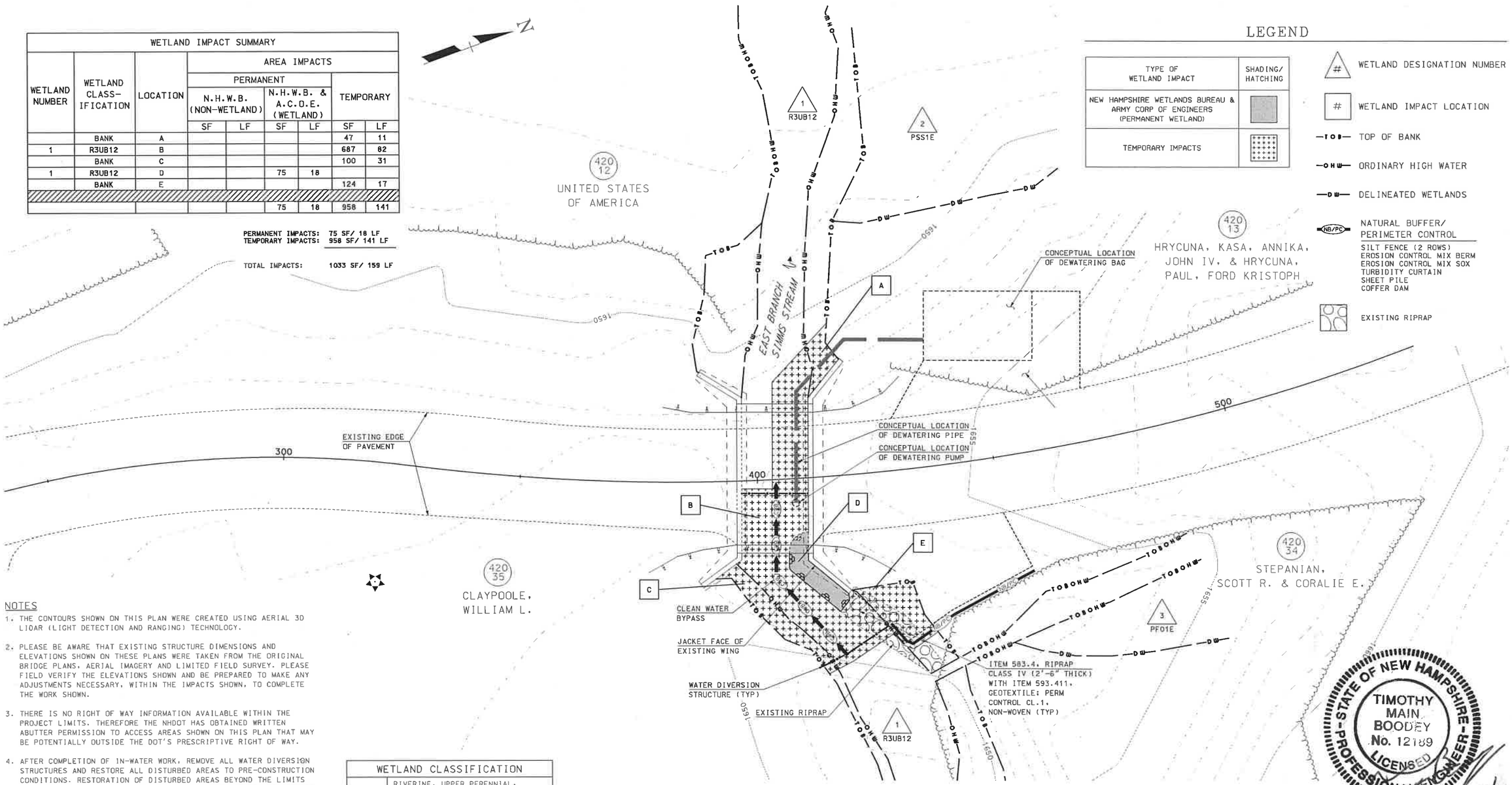
> Scott,
>
> Can I get an email from you stating that we reviewed the work to the bridge at your property and it was acceptable to you, and we will review any changes with you. I talked to Del about how we leave the area, accessibility, and taking care not to interfere with your pump which we don't intend to be anywhere near.
>
> Thanks,
> Andy
>
> Andrew Hall
> NHDOT Bridge Maintenance
> Office : 603-271-3667
> Mobile: 603-419-0498
> Fax: 603-271-1588

--
~Coralie~

WETLAND IMPACT SUMMARY								
WETLAND NUMBER	WETLAND CLASS-IFICATION	LOCATION	AREA IMPACTS					
			PERMANENT				TEMPORARY	
			N.H.W.B. (NON-WETLAND)		N.H.W.B. & A.C.O.E. (WETLAND)			
			SF	LF	SF	LF	SF	LF
	BANK	A					47	11
1	R3UB12	B					687	82
	BANK	C					100	31
1	R3UB12	D			75	18		
	BANK	E					124	17
					75	18	958	141

PERMANENT IMPACTS: 75 SF/ 18 LF
TEMPORARY IMPACTS: 958 SF/ 141 LF

TOTAL IMPACTS: 1033 SF/ 159 LF



LEGEND

TYPE OF WETLAND IMPACT	SHADING/ HATCHING
NEW HAMPSHIRE WETLANDS BUREAU & ARMY CORP OF ENGINEERS (PERMANENT WETLAND)	
TEMPORARY IMPACTS	

- # — WETLAND DESIGNATION NUMBER
- # — WETLAND IMPACT LOCATION
- TOB — TOP OF BANK
- OHW — ORDINARY HIGH WATER
- DW — DELINEATED WETLANDS
- NB/PC — NATURAL BUFFER/ PERIMETER CONTROL
  - SILT FENCE (2 ROWS)
  - EROSION CONTROL MIX BERM
  - EROSION CONTROL MIX SOX
  - TURBIDITY CURTAIN
  - SHEET PILE
  - COFFER DAM
- EXISTING RIPRAP

NOTES

1. THE CONTOURS SHOWN ON THIS PLAN WERE CREATED USING AERIAL 3D LIDAR (LIGHT DETECTION AND RANGING) TECHNOLOGY.
2. PLEASE BE AWARE THAT EXISTING STRUCTURE DIMENSIONS AND ELEVATIONS SHOWN ON THESE PLANS WERE TAKEN FROM THE ORIGINAL BRIDGE PLANS, AERIAL IMAGERY AND LIMITED FIELD SURVEY. PLEASE FIELD VERIFY THE ELEVATIONS SHOWN AND BE PREPARED TO MAKE ANY ADJUSTMENTS NECESSARY, WITHIN THE IMPACTS SHOWN, TO COMPLETE THE WORK SHOWN.
3. THERE IS NO RIGHT OF WAY INFORMATION AVAILABLE WITHIN THE PROJECT LIMITS. THEREFORE THE NHDOT HAS OBTAINED WRITTEN ABUTTER PERMISSION TO ACCESS AREAS SHOWN ON THIS PLAN THAT MAY BE POTENTIALLY OUTSIDE THE DOT'S PRESCRIPTIVE RIGHT OF WAY.
4. AFTER COMPLETION OF IN-WATER WORK, REMOVE ALL WATER DIVERSION STRUCTURES AND RESTORE ALL DISTURBED AREAS TO PRE-CONSTRUCTION CONDITIONS. RESTORATION OF DISTURBED AREAS BEYOND THE LIMITS AS SHOWN ON THESE PLANS TO SUIT CONTRACTOR'S MEANS AND METHODS SHALL BE SUBSIDIARY TO ITEM 503.101.
5. CONTRACTOR SHALL RETAIN SEDIMENT ON-SITE AND IMPLEMENT THE FOLLOWING DEWATERING CONTROL PRACTICES:
   - A. TEMPORARY SEDIMENT BASINS SHALL BE SIZED TO RETAIN ON SITE, THE VOLUME OF A 2-YEAR 24-HOUR STORM EVENT FOR ANY AREA OF DISTURBANCE OR 3,600 CUBIC FEET OF STORMWATER RUNOFF PER ACRE OF DISTURBANCE, WHICHEVER IS GREATER.
   - B. CONSTRUCT AND STABILIZE DEWATERING INFILTRATIONBASINS OR BAGS PRIOR TO ANY EXCAVATION THAT MAYREQUIRE DEWATERING.
   - C. TEMPORARY SEDIMENT BASINS SHALL BE PLACED AND STABILIZED AT LOCATIONS WHERE CONCENTRATED FLOW (CHANNELS AND PIPES) DISCHARGE TO THE SURROUNDING ENVIRONMENT FROM AREAS OF UNSTABLIZED EARTH DISTURBING ACTIVITIES.
   - D. SEDIMENT FROM THE DEWATERING INFILTRATION BASINS OR BAG SHALL BE DISPOSED OF PER NHDES REGULATIONS.

WETLAND CLASSIFICATION	
R3UB12	RIVERINE, UPPER PERENNIAL, UNCONSOLIDATED BOTTOM, COBBLE-GRAVEL, SAND
PSS1E	PALUSTRINE, SCRUB SHRUB, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED
PF01E	PALUSTRINE, FORESTED BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED

PER RSA 310-A:79-EXEMPTION 111, SARAH LARGE WETLANDS PROGRAM ANALYST OF NHDOT PERFORMED THE ORIGINAL WETLAND IDENTIFICATION AND DELINEATION ON AUGUST 6, 2019 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0. JANUARY 2012, US ARMY CORPS OF ENGINEERS.

WETLAND PLAN BR NO 233/128

10 0 10 20

SCALE IN FEET

STATE OF NEW HAMPSHIRE - PROFESSIONAL ENGINEER - TIMOTHY MAIN BOODEY No. 12189 LICENSED 6/2/2021

Hoyle, Tanner & Associates, Inc.

HTA PROJECT NO.	MODEL
092592.05	41768Wetlandplan 233-128

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
XX	41768Wetplan 233-128	AS SHOWN

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE MAINTENANCE

TOWN COLUMBIA BRIDGE NO. 233/128 STATE PROJECT 42827

LOCATION BUNGY ROAD OVER EAST BRANCH SIMMS STREAM

WETLAND IMPACTS PLAN

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
			DESIGNED	---	---
			DRAWN	BJN	04/21
			QUANTITIES	—	---
			ISSUE DATE		
			REV. DATE		

CHECKED	---	---
CHECKED	---	---
CHECKED	---	---

FEDERAL PROJECT NO.

BRIDGE SHEET OF

FILE NUMBER

SHEET NO. 1

TOTAL SHEETS 1