

**STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION**

DATE: September 3, 2020

FROM: Andrew O'Sullivan
Wetlands Program Manager

AT (OFFICE): Department of
Transportation

SUBJECT Permit-By-Notification (PBN)
Columbia, 42827

Bureau of
Environment

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 Permit-By-Notification (PBN) application package prepared by Hoyle Tanner Associates and NH DOT Bureau of Bridge Maintenance for the subject minimum impact project. This project qualifies for a PBN per Env-Wt 309.06(a)(19)- repair of an existing legal tier 3 stream crossing that complies with Env-Wt 903.01(e)(3) and is classified as minimum per Env-Wt 903.01(e)(3). The project is located along Bungy Road in the Town of Columbia, NH. The proposed work consists of repair to bridge 233/128. The proposed repairs include replacement of rip rap in front of the NE wingwall where previous rip rap existed but has scoured away and now the structure is showing signs of being undermined.

The lead people to contact for this project are Steve Johnson, Administrator, Bureau of Bridge Maintenance (271-3668 or steve.johnson@dot.nh.gov) or Sarah Large, Wetlands Program Analyst, Bureau of Environment (271-3226 or sarah.large@dot.nh.gov).

A payment voucher has been processed for this PBN (Voucher #619480) in the amount of \$400.

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

AMO:sel
Enclosures

cc:
BOE Original
Town of Columbia (4 copies via certified mail)
Kevin Nyhan, BOE (via electronic notification)



WETLANDS PERMIT-BY-NOTIFICATION (PBN)

Water Division/Land Resources Management Wetlands Bureau



[Check the Status of your Notification](#)

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

APPLICANT'S NAME: NH Department of Transportation

TOWN NAME: Columbia

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

To ensure that your project is eligible for a Permit-by-Notification (PBN) and includes all required information, please review all sections of this application form and the "Permit-by-Notification: Attachment Checklist & Additional Instructions". The [project-specific activity checklist](#) that corresponds to the PBN you are applying for may also be used to facilitate submission.

Terms in **bold font** are defined on the attached Definition of Terms page.

SECTION 1 - GENERAL CRITERIA	
a. Is the proposed project a minimum impact project which deviates from the standards and conditions specified in Env-Wt 307 or deviates from the applicable provisions of Env-Wt 500, Env-Wt 600, or Env-Wt 900 (Env-Wt 309.06(b))?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b. Does the project include activities that are prohibited under RSA 482-A (Env-Wt 306.02(a)(2))?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
c. Does the project include activities that do not follow or meet the applicable best management practices (Env-Wt 306.02(a)(3))?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
d. Does the proposed project involve work in any jurisdictional area that was commenced prior to obtaining the applicable approval (Env-Wt 306.02(b)) (i.e. after-the-fact work)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
e. Is the proposed project located in a priority resource area other than a documented occurrence of protected species or habitat (Env-Wt 309.01(b)(3))?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If you answered "Yes" to any of the above questions, you cannot use this form and must file a Standard Permit Application (NHDES-W-06-012) . If you answered "No" to all of the above questions, proceed to Section 2.	

SECTION 2 - PROJECT SPECIFIC CRITERIA (Env-Wt 309.06)

The following project types *may* be eligible for a PBN. If your project is not listed below, you cannot use this form. To confirm eligibility, please refer to the project-specific checklist that corresponds to the PBN project type selected.

† Pursuant to Env-Wt 309.07(h), these projects are exempt from obtaining a conservation commission signature in order to qualify for expedited review.

‡ Pursuant to Env-Wt 309.07(i), these projects consist of routine roadway maintenance activities that may require LAC signature if the project is within **LAC jurisdiction** as defined in Env-Wt 103.27 in order to qualify for expedited review.

<input type="checkbox"/> Exotic aquatic weed control activities not exceeding one acre that comply with Env-Wt 510.08(a)	<input type="checkbox"/> Repair or replacement of an existing legal wall that complies with Env-Wt 514.07(a)(3) †	<input type="checkbox"/> Agricultural activities that comply with Env-Wt 522.06(a)
<input type="checkbox"/> Replenishment of an existing legal beach that complies with Env-Wt 511.07(a) †	<input type="checkbox"/> Maintenance or repair of an existing legal boathouse that complies with Env-Wt 515.07(a) †	<input type="checkbox"/> A temporary coffer dam that complies with Env-Wt 526.06(f)
<input type="checkbox"/> Repair or replacement of an existing legal deck or patio that complies with Env-Wt 511.08(a) †	<input type="checkbox"/> Repair or replacement of a boat launch under Env-Wt 518	<input type="checkbox"/> Maintenance of an existing legal tidal docking structure that complies with Env-Wt 606.17(b) †
<input type="checkbox"/> Installation of a new seasonal dock that is not eligible for an SPN and complies with Env-Wt 513.24(a)	<input type="checkbox"/> Installation of a dry hydrant that complies with Env-Wt 518.07(a)	<input type="checkbox"/> Repair of an existing legal tier 1 or tier 2 stream crossing that complies with Env-Wt 903.01(e)(2) †‡
<input type="checkbox"/> Repair or replacement of an existing legal docking structure that complies with Env-Wt 513.24(a) †	<input type="checkbox"/> Forestry activities that are not eligible for an SPN and comply with Env-Wt 520.05(a)	<input checked="" type="checkbox"/> Repair of an existing legal tier 3 stream crossing that complies with Env-Wt 903.01(e)(3) †‡
<input type="checkbox"/> Installation of a dock anchoring pad that complies with Env-Wt 513.24(a)(1)c	<input type="checkbox"/> Utility activities that are not eligible for an SPN and comply with Env-Wt 521.06(a)	<input type="checkbox"/> Replacement of an existing legal tier 1 stream crossing that complies with Env-Wt 903.01(e)(4) †
<input type="checkbox"/> Installation of a watercraft lift that complies with Env-Wt 513.24(a)(1)a	<input type="checkbox"/> Installation of residential utilities to a single-family home that complies with Env-Wt 521.06(a)(7)	<input type="checkbox"/> Installation of a temporary tier 1 or tier 2 crossing that complies with Env-Wt 903.01(e)(5)
<input type="checkbox"/> Installation of a new canopy that complies with Env-Wt 513.27(a)		

SECTION 3 - PROJECT LOCATION (Env-Wt 309.07(b))

A separate application must be filed with each municipality that jurisdictional impacts will occur in.

ADDRESS: Bungy Road

TOWN/CITY: Columbia

TAX MAP/LOT NUMBER: Tax Map 420 / Lot N/A

NAME OF WATER BODY, WETLAND, OR OTHER JURISDICTIONAL AREA: East Branch Simms Stream

LATITUDE (in decimal degrees to five decimal places):
44.84528°

LONGITUDE (in decimal degrees to five decimal places): ----
-71.39288°

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

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

www.des.nh.gov

SECTION 4 - PROJECT DESCRIPTION AND IMPACT AREA (Env-Wt 309.07(c))

Provide a description of the project, including a list of the work items to be performed and detailed dimensions of the size of the impacts in jurisdictional areas. Please identify the type of landform to be affected, including the type of **wetland** and type of soils.

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 wingwall to the level such that it needs to be addressed.

The proposed repairs include replacement of rip rap in front of the wingwall 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 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.

As shown in the photos attached, per Env-Wt 309.06(a)(19), 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.

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 PBN. Once construction is complete the property will be returned to the preconstruction condition.

A construction sequence is attached to the PBN.

There will be 101 square feet of permanent and 6,932 square feet of temporary impacts for a total of 7,033 square feet of impacts as a result of the repair project.

IMPACT AREAS: Please fill out the table below, indicating square feet (SF) and/or linear feet (LF) of impacts, as applicable. Temporary impacts are impacts not intended to remain (and will be fully restored to pre-construction conditions) after the project is completed.

NOTE: For new seasonal dock projects, please enter the square footage of the proposed dock in the permanent impact column of the applicable resource.

Jurisdictional Area	Permanent (SF/LF)	Temporary (SF/LF)	Jurisdictional Area	Permanent (SF/LF)	Temporary (SF/LF)
Forested Wetland			Lake	/	/
Emergent Wetland			Pond	/	/
Wet Meadow			Tidal Water	/	/
Intermittent Stream/ Ephemeral Stream	/	/	Previously-developed Upland in Tidal Buffer Zone		
Perennial Stream / River	101 SF / 24 LF	6,337 SF / 82 LF	Other (Bank)	0	271 SF / 59 LF

SECTION 5 - MINIMUM IMPACT PROJECT PROVISION (Env-Wt 309.07(c)(1))	
Please identify the applicable minimum project provision in Env-Wt 500, Env-Wt 600, or Env-Wt 900, as applicable, and any required project-specific information. In lieu of a narrative for this section, the applicant may submit the applicable <u>Project Specific Checklist</u> .	
MINIMUM IMPACT PROJECT PROVISION: See attached checklist	
SECTION 6 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 309.07(a))	
If the applicant is a trust or a company, then the name of the trust or company should be written as the applicant's name.	
NAME: NHDOT Bridge Maintenance, Tim Boodey, PE	
MAILING ADDRESS: 7 Hazen Drive / P.O. Box 483	
TOWN/CITY: Concord	STATE: NH ZIP CODE: 03302
DAYTIME PHONE: 603-271-3734	EMAIL ADDRESS: Tim.Boodey@dot.nh.gov
SECTION 7 - NATURAL HERITAGE BUREAU (Env-Wt 309.07(b)(6))	
Include the results and identification number of the investigations required by Env-Wt 306.05. <i>Questions related to completing the DataCheck should be directed to the Natural Heritage Bureau (NHB).</i>	
Natural Heritage Bureau Identification Number: NHB <u>20</u> - <u>0923</u>	
<input checked="" type="checkbox"/> Attach the results and identification number of the <u>DataCheck query</u> .	
SECTION 8 - CONDITIONS FOR PBNs (Env-Wt 309.09)	
Please check each box below to acknowledge that the project meets the following conditions:	
<input checked="" type="checkbox"/>	All work authorized by a PBN shall comply with all applicable conditions specified in Env-Wt 307 and the applicable provisions of Env-Wt 500, Env-Wt 600, or Env-Wt 900.
<input checked="" type="checkbox"/>	Subject to Env-Wt 309.10, after the completion of work authorized by a PBN no other work that would require any permit or other authorization under RSA 482-A or subtitle Env-Wt shall be undertaken on the subject property pursuant to another PBN or EXP, or pursuant to an SPN, for a period of 12 months from the date the PBN was issued.
<input checked="" type="checkbox"/>	Within 10 days following completion of the work covered by a PBN, the person responsible for the project shall submit to the department confirmation of completion of the project, either on paper or electronically.
SECTION 9 - REQUIRED CERTIFICATIONS (Env-Wt 309.07(d))	
Initial each box below and sign the application to certify that:	
Initials: <i>SBW</i>	The proposed project meets the conditions and limits of Env-Wt 307 and the applicable minimum impact project rule.
Initials: <i>SBW</i>	If the project is to repair or replace a docking structure, the docking structure is an existing legal structure.

Initials: <i>SWJ</i>	The proposal is the alternative with the least adverse impact to jurisdictional areas, as required by Env-Wt 311.10(c).
Initials: <i>SWJ</i>	The applicant is aware of the limits of the PBN and understands and will comply with all conditions in the PBN and all applicable conditions in Env-Wt 307.
Initials: <i>SWJ</i>	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: <i>SWJ</i>	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: <i>SWJ</i>	<p>The signer understands that:</p> <ul style="list-style-type: none"> The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: <ol style="list-style-type: none"> Deny the application. Revoke any approval that is granted based on the information. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. <p>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 trail projects, where the signature shall authorize only the department to inspect the site pursuant to RSA 482-A:6, II.</p>
Initials: <i>SWJ</i>	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 10 - REQUIRED SIGNATURE (Env-Wt 309.07(d))

SIGNATURE (OWNER): <i>Steve W Johnson</i>	PRINT NAME LEGIBLY: <i>STEVE W JOHNSON</i>	DATE: <i>8/27/2020</i>
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER): _____	PRINT NAME LEGIBLY:	DATE:
SIGNATURE (AGENT, IF APPLICABLE): <i>Kimberly R. Peace</i>	PRINT NAME LEGIBLY: Kimberly R. Peace	DATE: August 24, 2020

SECTION 11 - CONSERVATION COMMISSION SIGNATURE (Env-Wt 306.02(c); Env-Wt 309.07(h); Env-Wt 309.08(d))

With the exception of the project types specified in Env-Wt 309.07(h), the Conservation Commission signature is necessary for NHDES to process this PBN within 10 days of receipt of an administratively complete application. If the Conservation Commission does not sign this statement for any reason where it is necessary, NHDES will process this PBN within 25 days of receipt of an administratively complete application.

The signature below certifies that the municipal Conservation Commission or, if there is no conservation commission, the local governing body, has reviewed this application and waives its right to intervene per RSA 482-A:11.

AUTHORIZED COMMISSION SIGNATURE: _____	PRINT NAME LEGIBLY:	DATE:
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SECTION 12 - LOCAL RIVER MANAGEMENT ADVISORY COMMITTEE (LAC) SIGNATURE (Env-Wt 306.02(d); Env-Wt 309.07(i); Env-Wt 309.08(d))

If a PBN is sought for a routine roadway maintenance project that is within **LAC jurisdiction** and the application has not been signed by a legal representative of the LAC to indicate the right to intervene has been waived by the applicable LAC, NHDES will process this PBN within 25 days of receipt of an administratively complete application.

The signature below certifies that the LAC waives its right to intervene per RSA 482-A:11.

N/A This project is *not* within a Designated River Corridor and/or is *not* within LAC jurisdiction)

AUTHORIZED LAC REPRESENTATIVE SIGNATURE: _____	PRINT NAME LEGIBLY:	DATE:
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SECTION 13 - COUNTY CONSERVATION DISTRICT OR CERTIFIED WETLAND SCIENTIST SIGNATURE (Env-Wt 309.07(g))

ONLY for agriculture PBN projects under Env-Wt 522.06, please provide a signed statement by the county conservation district or certified wetland scientist (CWS) certifying compliance with all conditions of that rule (Env-Wt 522.06(a)(2)).

By signing below, the county conservation district or certified wetland scientist certifies compliance with all conditions of that rule.

AUTHORIZED COUNTY CONSERVATION DISTRICT OR CWS SIGNATURE: _____	PRINT NAME LEGIBLY: Not applicable	DATE:
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SECTION 14 - TOWN / CITY CLERK (RSA 482-A:3, I; Env-Wt 309.07(f))

As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four copies of the application including all attachments 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.	DATE:
TOWN/CITY:		DATE:

DIRECTIONS FOR TOWN/CITY CLERK (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. And
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.



**REPAIR OF AN EXISTING LEGAL TIER 3
STREAM CROSSING
PERMIT-BY-NOTIFICATION CHECKLIST**
Water Division/Land Resources Management
Wetlands Bureau



[Check the Status of your Notification](#)

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

This checklist summarizes the criteria and requirements for a Permit-by-Notification (PBN) for repair of a legally existing tier 3 stream crossing that complies with Env-Wt 903.01(e)(3). In addition to the project-specific criteria and requirements listed on this checklist, all PBNs must meet the criteria and requirements listed on the [PBN form \(NHDES-W-06-027\)](#) and perform the required planning for all projects as described in Env-Wt 306.05.

SECTION 1 - EXEMPTION FROM Env-Wt 903 AND Env-Wt 904 (Env-Wt 901.03)

The following activities and crossings are exempt from Env-Wt 903 and Env-Wt 904, provided they are conducted in accordance with all applicable conditions:

- (a) Minimum impact routine roadway maintenance activities conducted in accordance with Env-Wt 308.04 or Env-Wt 309.03.
- (b) Minimum impact projects to allow vehicular access to a piece of property for forest management activities, conducted in accordance with Env-Wt 520.
- (c) Minimum impact agricultural activities conducted in accordance with Env-Wt 522.
- (d) Minimum impact trail activities conducted in accordance with Env-Wt 517.
- (e) Temporary crossings, so long as the area in which the crossing was placed is restored to pre-installation conditions when the crossing is removed.

If your project meets one of these exemptions, it does not qualify for this PBN. Instead, please seek a [Routine Roadway Maintenance Registration](#) or a [Statutory Permit-By-Notification](#), as applicable.

SECTION 2 - TIER 3 STREAM CROSSING IDENTIFICATION (Env-Wt 904.05)

Your project must be for the repair of an existing, legal tier 3 stream crossing and thus, the crossing must meet the criteria for a tier 3 stream crossing. A tier 3 stream crossing shall be a crossing:

- Not located on a tidal watercourse, and:
 - Located on a watercourse where the contributing watershed is 640 acres or greater.
 - Located within a designated river corridor, unless:
 - The crossing would be a tier 1 stream based on contributing watershed size, or
 - The structure does not create a direct surface water connection to the designated river as depicted on the national hydrography dataset as found on GRANIT.
 - Located within a 100-year flood plain.
 - Located in a jurisdictional area having any protected species or habitat. Or
 - Located in a prime wetlands or within a duly-established 100-foot buffer, unless a waiver has been granted pursuant to RSA 482-A:11, IV(b) and Env-Wt 706.

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

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

www.des.nh.gov

SECTION 3 - MINIMUM IMPACT PROJECT CRITERIA (Env-Wt 309.06(a)(20); Env-Wt 903.01(e))

To qualify for this PBN, the project must meet the following criteria:

- Only one stream crossing is included in the project.
- The repair is limited to existing legal crossings where the tier classification is based only on the size of the contributing watershed.
- The crossing is not part of a larger crossing that meets the criteria for a major project specified in Env-Wt 400, regardless of the tier classification of the stream crossing that is part of the project.
- The project does not need one or more waivers.
- The project is not a for a temporary tier 3 stream crossing.
- A professional engineer certifies, and provides supporting analyses, to show the following:
 - 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, and
 - The proposed stream crossing will:
 - a) Meet the general criteria specified in 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.

Please note that “repair” as applied to a stream crossing means work on an existing legal structure to allow the structure to remain in place where the necessary work does not include the installation of new structural components (Env-Wt 902.24). It is different from “rehabilitation” (Env-Wt 902.23) and “replacement” (Env-Wt 902.26).

SECTION 4 - CONDITIONS APPLICABLE TO ALL STREAM CROSSING WORK (Env-Wt 904.02)

- All stream crossing work are subject to all applicable conditions in Env-Wt 307.
- In stream work must be done only during low flow conditions.
- Work on stream crossings that requires any work in areas that are subject to flowing water must maintain normal flows and prevent water quality degradation during the work by using best management practices, such as temporary by-pass pipes, culverts, or cofferdams.

SECTION 5 - GENERAL DESIGN CONSIDERATIONS (Env-Wt 904.01)

All stream crossings shall be designed and constructed so as to:

- Not be a barrier to sediment transport.
- Not restrict high flows and maintain existing low flows.
- Not obstruct or otherwise substantially disrupt the movement of aquatic organisms indigenous to the water body beyond the actual duration of construction.
- Not cause an increase in the frequency of flooding or overtopping of banks.
- Maintain or enhance geomorphic compatibility by:

- Minimizing the potential for inlet obstruction by sediment, wood, or debris, and
- Preserving the natural alignment of the stream channel.
- Preserve watercourse connectivity where it currently exists.
- Restore watercourse connectivity where: **N/A**
 - Connectivity previously was disrupted as a result of human activity(ies), and
 - Restoration of connectivity will benefit aquatic organisms upstream or downstream of the crossing, or both.
- Not cause erosion, aggradation, or scouring upstream or downstream of the crossing.
- Not cause water quality degradation.

SECTION 6 - INFORMATION REQUIRED FOR A STREAM CROSSING (Env-Wt 903.03; Env-Wt 904.04(e))

In addition to the information required on the [PBN form \(NHDES-W-06-027\)](#), please provide:

- A US Geological Survey map or updated elevation data based on LiDAR on which the following are clearly delineated or otherwise noted:
 - The approximate boundaries of the contributing watershed,
 - The size of the contributing watershed, and
 - Identification of the stream tier based on watershed size.
- Plans that show the following:
 - The scale of the plan and a north arrow,
 - The extent of disturbance,
 - Road locations, including road edges, centerline, and boundaries of the right-of-way,
 - Proposed channel work including bank erosion control features, grade control, and channel linings, and
 - All dimensions of the proposed structure and of the existing structure, if any, including inlet and outlet invert elevations.
- The hydraulic capacity of the proposed crossing, in terms of flood frequency event, and of the existing crossing, if any. **See Included Supplement.**
- The type of crossing, such as a culvert or span, that is proposed and that exists, if any.
- The following information about the dewatering system proposed to be used: **See included supplement**
 - Estimated maximum flow anticipated during construction,
 - The location, height, and width of the diversion dam,
 - The location and capacity of each sump, and
 - Backwater prevention method.
- The following information about erosion and pollution controls: **See included supplement**
 - The sediment treatment plan, including methods, release point(s), and extent,
 - Any additional methods proposed to control erosion, and
 - All methods of preventing and controlling releases from pumps, fuel stations, and equipment storage.

Supplemental Information per Env-Wt 903.03 (c) (e) and (f)- Columbia 233/128

(c) 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.

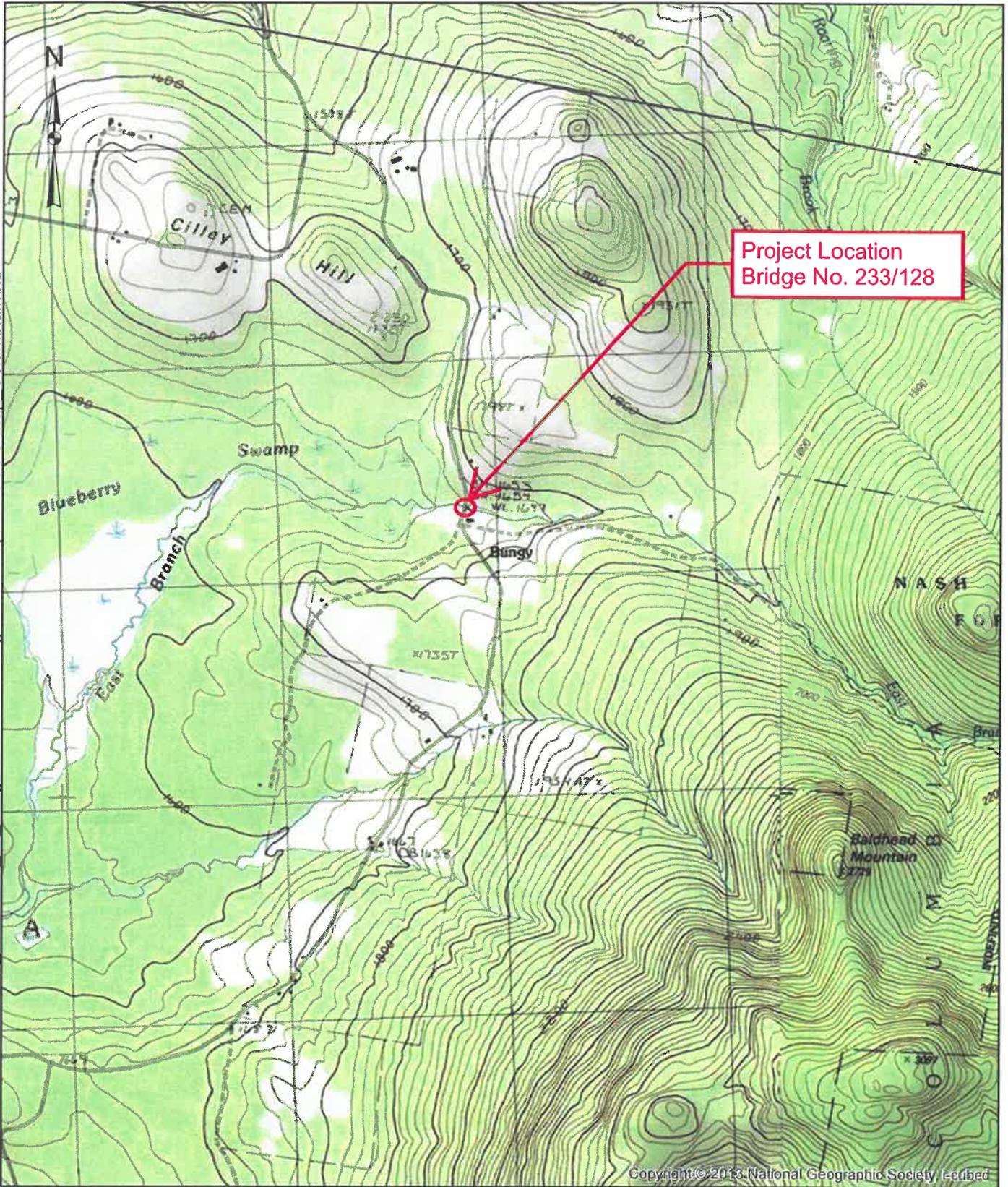
(e) Dewatering system:

- 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.

(f) 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 from 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.

Document Path: K:\092592_00\092592_05 Bridge Maint. Permitting\3-GIS\Graphics\USCG Map Columbia.mxd



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Hoyle, Tanner
& Associates, Inc.

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Web Page www.hoyletanner.com

BUNGY ROAD BRIDGE OVER
EAST BRANCH SIMMS STREAM
COLUMBIA, NH

APPENDIX

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

A

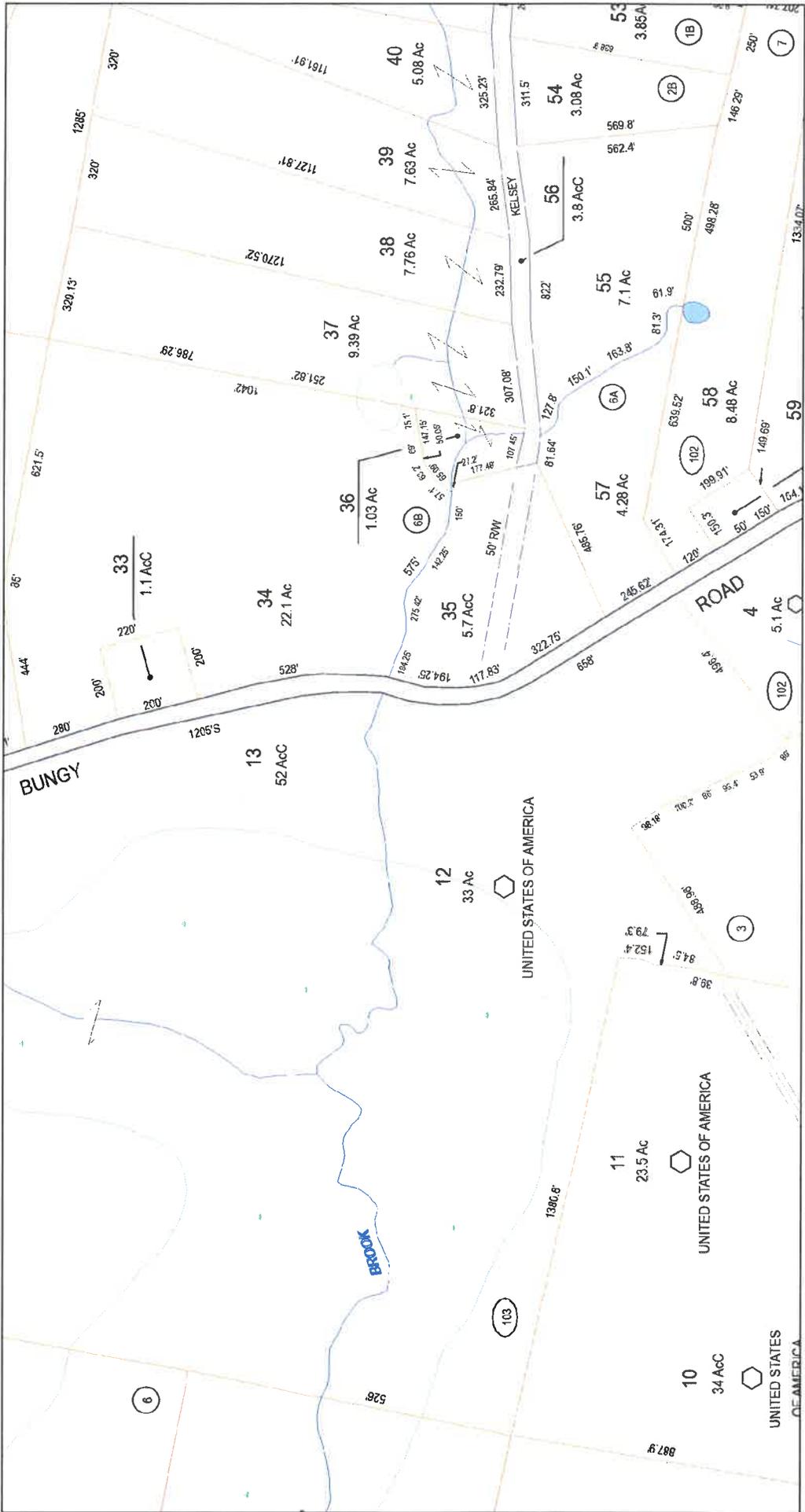


Columbia, NH

1 inch = 267 Feet

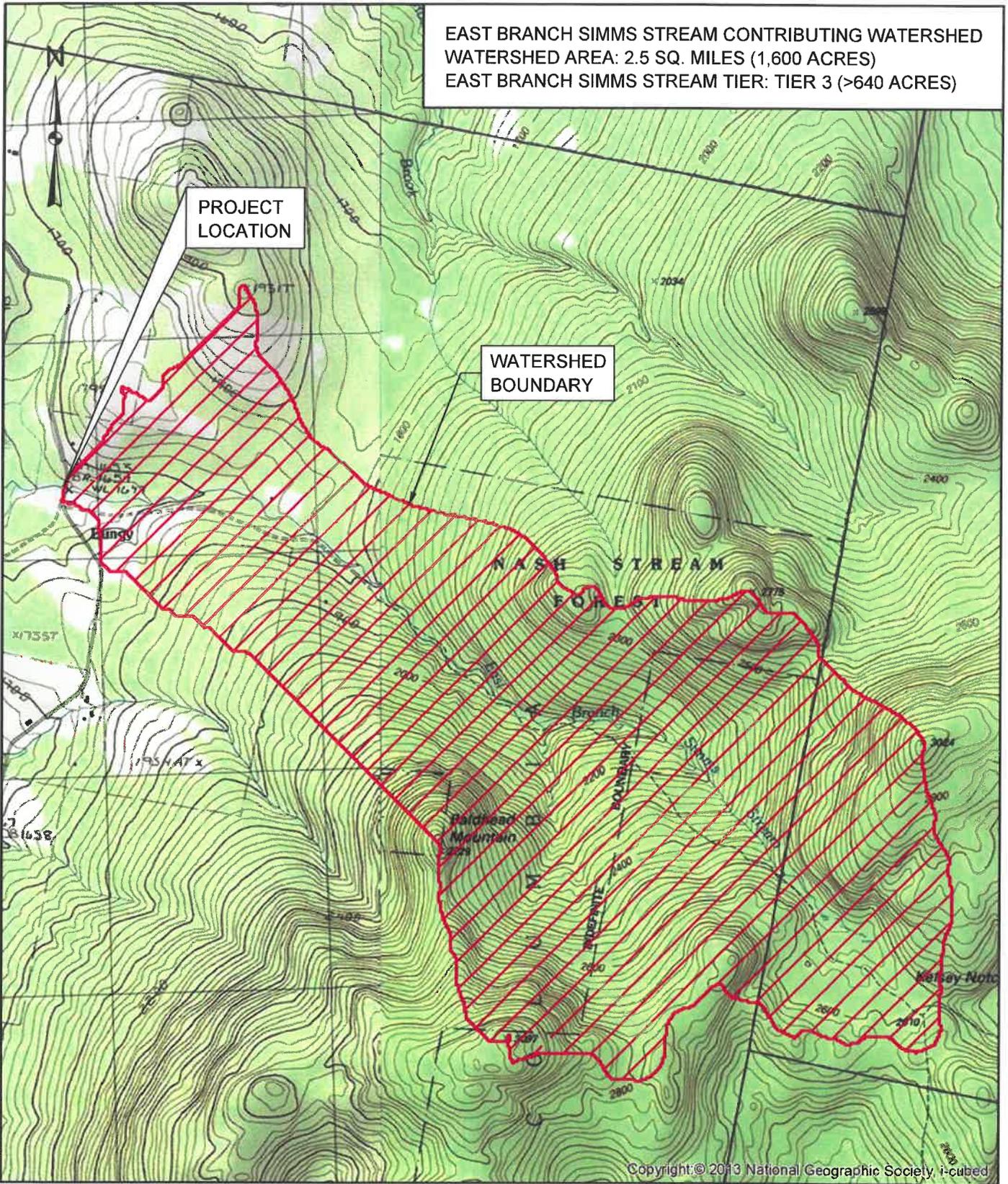


June 10, 2020



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.

EAST BRANCH SIMMS STREAM CONTRIBUTING WATERSHED
 WATERSHED AREA: 2.5 SQ. MILES (1,600 ACRES)
 EAST BRANCH SIMMS STREAM TIER: TIER 3 (>640 ACRES)



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9/28/2020 9:28 AM K:\092522_0512-CADD\BRC\Graphics\Watershed Maps\41768\Watershed 223-128.dgn

Hoyle, Tanner & Associates, Inc.

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 www.hoyletanner.com

BUNGY ROAD BRIDGE OVER
 EAST BRANCH SIMMS STREAM
 COLUMBIA, NH

APPENDIX

A

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

FIGURE 1 OF 1

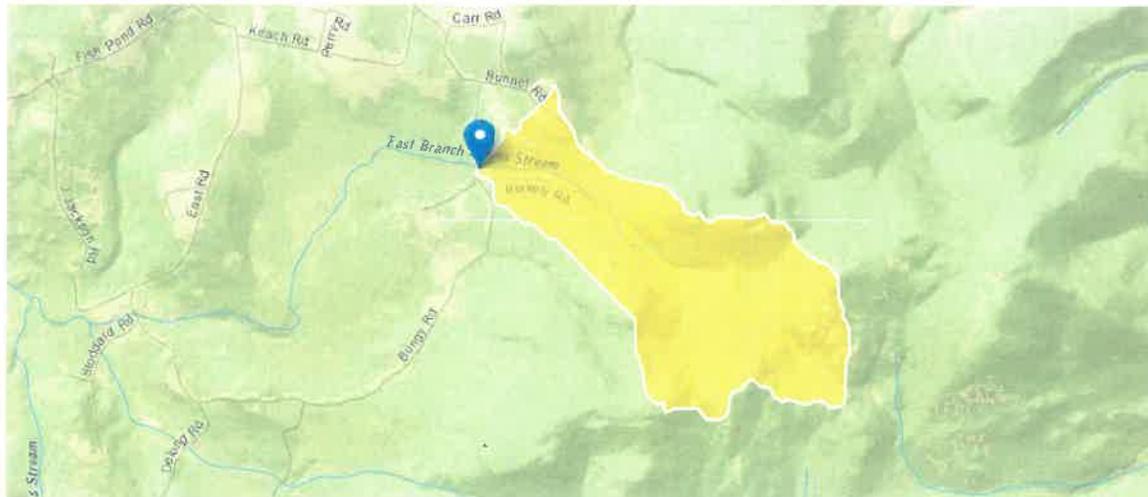
StreamStats Report for Bungy Road Bridge, Columbia

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	Percentage 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>)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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Application Version: 4.4.0



NEW HAMPSHIRE NATURAL HERITAGE BUREAU
NHB DATACHECK RESULTS LETTER

To: Deb Coon, Hoyle, Tanner & Associates, Inc.
150 Dow Street
Manchester, NH 03101

From: NH Natural Heritage Bureau

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

Re: Review by NH Natural Heritage Bureau of request submitted 3/31/2020

NHB File ID: NHB20-0923

Applicant: NHDOT

Location: Columbia
Bungy Road

Project

Description: Repairs to the Bungy Road Bridge Over East Branch Simms Stream,
Columbia, NH

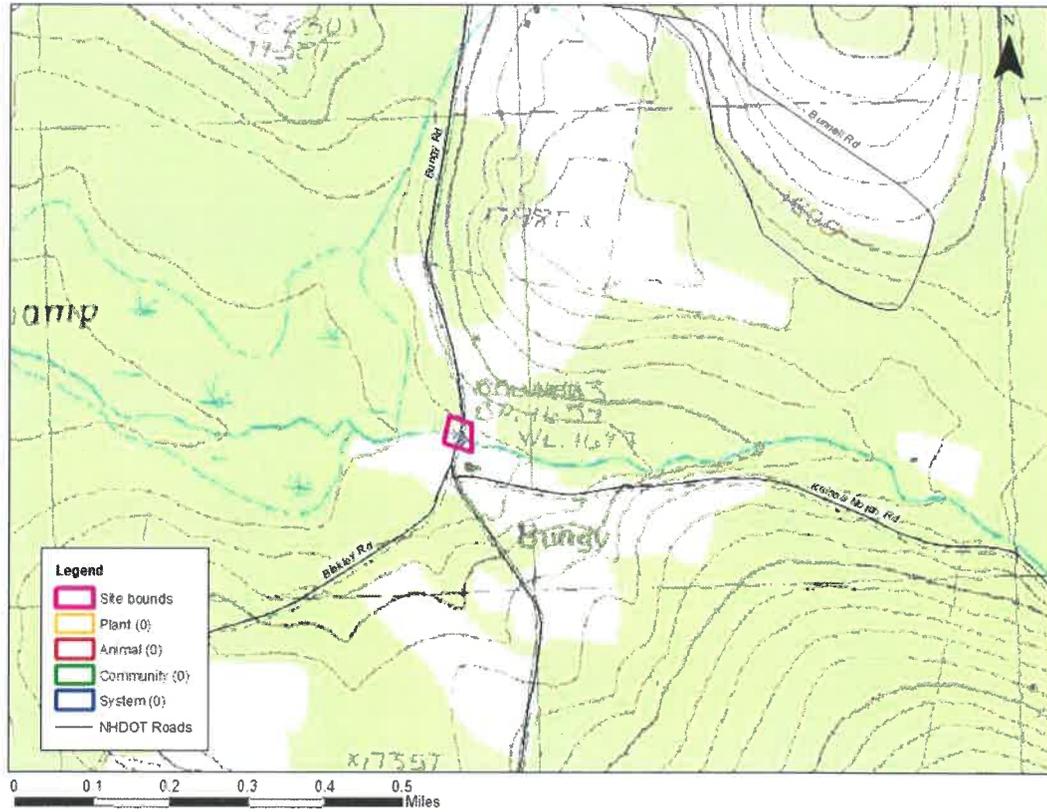
The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 3/31/2020, and cannot be used for any other project.



MAP OF PROJECT BOUNDARIES FOR: NHB20-0923

NHB20-0923



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

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

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~

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

**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

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. Work will not occur during periods of time when storms and rain events are anticipated.

WETLAND IMPACT SUMMARY								
WETLAND NUMBER	WETLAND CLASSIFICATION	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	SF	LF	
1	BANK	A					47	11
	R3UB12	B					6637	82
	BANK	C					100	31
1	R3UB12	D			101	24		
	BANK	E					124	17
					101	24	6908	141

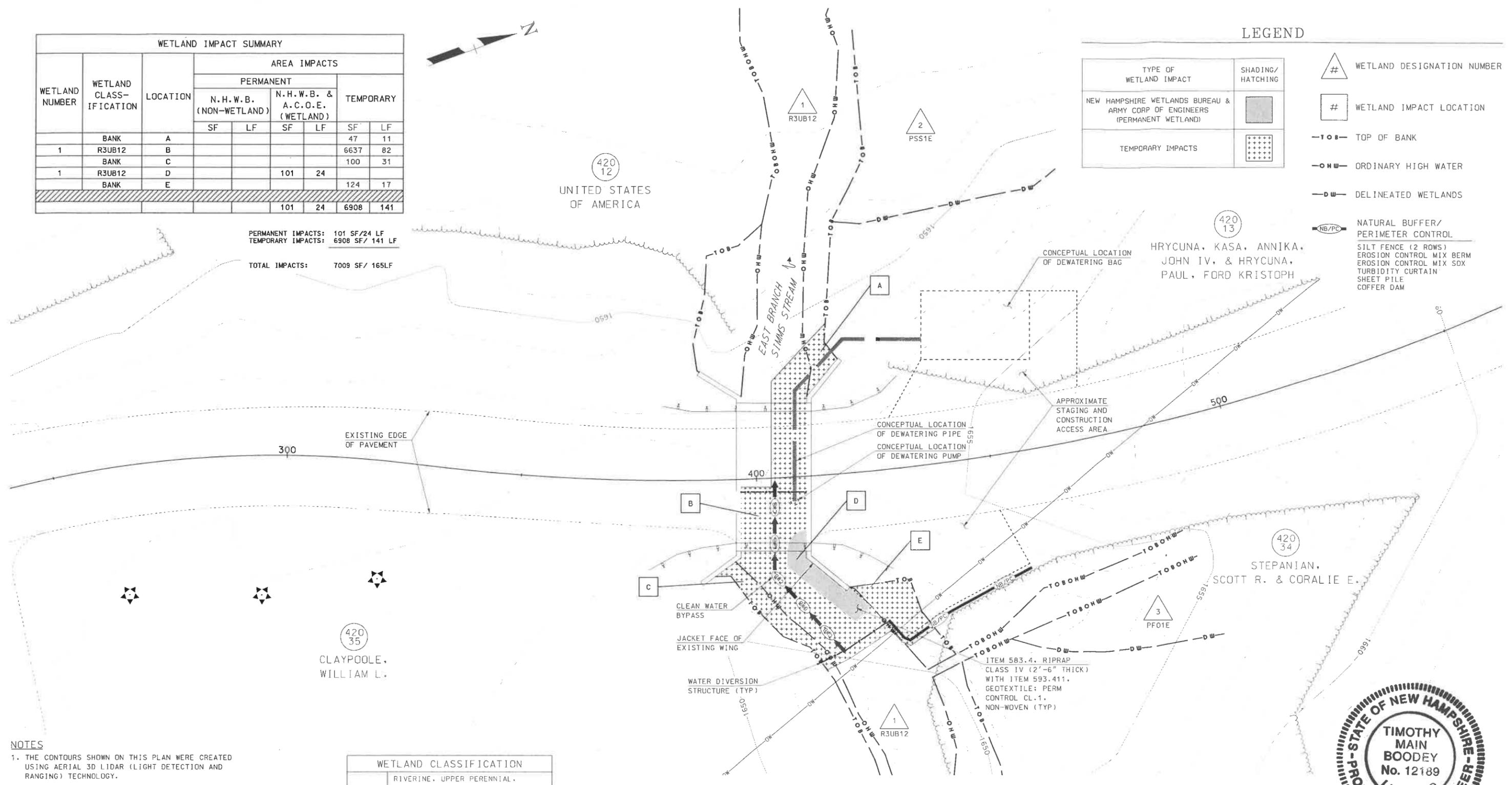
PERMANENT IMPACTS: 101 SF/24 LF
 TEMPORARY IMPACTS: 6908 SF/ 141 LF

TOTAL IMPACTS: 7009 SF/ 165LF

LEGEND

TYPE OF WETLAND IMPACT	SHADING/HATCHING
NEW HAMPSHIRE WETLANDS BUREAU & ARMY CORP OF ENGINEERS (PERMANENT WETLAND)	[Solid Grey Box]
TEMPORARY IMPACTS	[Cross-hatched Box]

- # 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



- #### NOTES
- THE CONTOURS SHOWN ON THIS PLAN WERE CREATED USING AERIAL 3D LIDAR (LIGHT DETECTION AND RANGING) TECHNOLOGY.
 - 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 DATA AND DO NOT NECESSARILY REPRESENT "AS-BUILT" DIMENSIONS AND ELEVATIONS. PLEASE FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF THE EXISTING STRUCTURES AND BE PREPARED TO MAKE ANY ADJUSTMENTS REQUIRED TO PROPERLY REHABILITATE THE BRIDGE.
 - 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.

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 8, 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

SCALE IN FEET

Hoyle, Tanner
 Associates, Inc.

HTA PROJECT NO.	MODEL
092592.05	41768Wetlandplan 233-128
SUBDIRECTORY	.DGN LOCATOR
XX	41768Wetplan 233-128
	SHEET SCALE
	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	CHECKED	BY	DATE	BRIDGE SHEET OF
DESIGNED	---	---	CHECKED	---	---	FILE NUMBER
DRAWN	BJN	05/20	CHECKED	---	---	
QUANTITIES	---	---	CHECKED	---	---	
ISSUE DATE	FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS	
REV. DATE			1		1	

