

# BUREAU OF ENVIRONMENT CONFERENCE REPORT

**SUBJECT:** NHDOT Monthly Natural Resource Agency Coordination Meeting

**DATE OF CONFERENCE:** May 19, 2021

**LOCATION OF CONFERENCE:** Virtual meeting held via Zoom

**ATTENDED BY:**

**NHDOT**

Sarah Large  
Andrew O’Sullivan  
Matt Urban  
Ron Crickard  
Mark Hemmerlein  
Arin Mills  
Tim Boodey  
Rebecca Martin  
Michael Dugas  
Trent Zanes  
Jonathan Watton

**ACOE**

Mike Hicks

**EPA**

Jeanie Brochi

**NHDES**

Lori Sommer  
Karl Benedict

**NH Fish & Game**

Carol Henderson

**Federal Highway**

Jaimie Sikora

**National Park Service**

Emma Lord  
Jim MacCartney

**Consultants/ Public  
Participants**

Stephen Haas  
Kimberly Peace

**PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH:** *(minutes on subsequent pages)*

Finalize Meeting Minutes.....	2
Franconia, #42835 .....	2
Rumney, #40569.....	3
Conway, 42522 (X-A004(891)) .....	5

*(When viewing these minutes online, click on a project to zoom to the minutes for that project.)*

**NOTES ON CONFERENCE:****Finalize Meeting Minutes**

Finalized and approved the May 19, 2021 meeting minutes.

**Franconia, #42835**

Arin Mills, NHDOT Senior Environmental Manager, presented the location of the project as bridge 085/104 which carries NH 18 over Beaver Brook in Franconia. This is a state funded and executed project. Arin mentioned there was previous reference to 'Black Brook' in the bridge database, but the National Hydrography Dataset (NHD) and USGS maps name the stream Beaver Brook. She also mentioned the project was previously presented in March of 2015 under project #40270, and DOT thought it would be best to bring it forward again in light of the rule changes. Beaver Brook flows 1.4 miles from the headwaters to the crossing, after flowing under I-93 further upstream. The Brook further flows 1/10th miles from site to convergence with Lafayette Brook, further 3/4 mile and enters Meadow Brook and further flows ~1/3 miles to convergence with Gale River in Franconia. This is a Tier 3 crossing as delineated by StreamStats (3.25 square mile drainage area) and a 2nd order stream. Old plans show a previous wetland permit from 2001 (2001-01753) for construction of toe walls and installation of rip rap. A map was shown of surrounding rural/residential landscape near the project, and no conservation lands are adjacent. Photos were shown of the upstream/downstream as well as inlet/outlet existing conditions.

Tim Boodey, NHDOT Bridge Maintenance Senior Engineer, described the project to include deck replacement, minor widening over wings (no increase to existing footprint), rip rap restacking and replacement as well as repair to existing toe wall at the southern abutment. A draft wetland impact plan was shown to depict areas of temporary disturbance for access as well as areas where existing rip rap would be restacked. Tim explained the work would not result in an increase in footprint from rip rap work, and the toe wall would be replaced in-kind. Tim further described the anticipated work would begin in fall of 2021 and take 14 weeks to complete. He discussed the basic erosion control methods through use of sediment barriers and sandbag cofferdam to divert water and protect the stream during construction. Staging will be installed in the brook to facilitate the deck replacement. It will be in place through most of the project duration, however the coffer dam water diversion will only be in place during the phase of in water work associated with the toe wall replacement in kind. Erosion control measures will be removed once work area is stabilized. The proposed work window is this fall (2021) into early winter, with a work window of 14 weeks for the entire project.

Tim further stated the bridge was constructed after the 1927 floods, and widened in 1979. The toe walls were added in 2006, and erosion repair at wings in 2008 after storm event. A concrete invert (bottom) is within a majority of the structure and has an un-known install date. There is no history of overtopping and modeling shows the crossing will pass a 100-year storm event. There is no change to the existing footprint of the rip rap, or in the hydraulic opening resulting from the work.

Arin determined Beaver Brook is a 2nd order stream to convergence to Lafayette Brook, and outside Shoreland Water Quality Protection Act jurisdiction. Beaver Brook is not a Designated River. Beaver Brook is a predicted coldwater stream per the Wildlife Action Plan (WAP), with no species of concern identified within the project area. NHB21-1077 determined no rare species occurrences in or adjacent to project. No Priority Resource Area (PRA) identified within project limit. NH Fish & Game fish survey data identified Eastern Brook Trout upstream at the head of the stream reach, and there is a private dam also located at this location. The Aquatic Restoration Mapper identifies the crossing at has full aquatic organism passage and partial geomorphic compatibility. The location is within a 100-year FEMA floodplain. US Fish & Wildlife Service species list determined Northern long-eared bat and a 4(d) consistency letter was generated, although it is not anticipated any tree clearing from the project. Canada

lynx was also identified, although a field review determined no habitat present. Section 106 review determined no effect, and an Appendix B under the Programmatic Agreement (state project) was generated.

Karl Benedict, NHDES, stated the work best fits under the 904.09 repair, replacement, rehabilitation to an existing Tier 3 crossing and does not warrant an alternative design. He asked that the Professional Engineer (PE) certification associated with 904.09 within the application discuss the existing bank stabilization work and history to address concerns for stabilization of the site, rather than addressing the bank work within Env-Wt 514. Karl also asked the plans show the existing extent of the existing/“historical” rip rap, as well as the existing and proposed grades (contours). The photos and the historic plan showing the existing extent of riprap bank stabilization are great references as well. Karl asked how access would be obtained to work area and Tim said he would show staging area on the plans. Tim did clarify the work could be done by hand and machinery would be on top of bank; no cut into the slope or embankment are needed to access nor complete this work.

Sarah L asked if the 514 rules for bank stabilization would be required and Karl believed the rip rap work would be considered a component of the structure and discussions should be covered under the stream crossing rules and the PE certification. Karl said the stream crossing rules would apply, and a statement to the Env-Wt 514 rules could be made in the PE certification to address however Karl indicated that the Env-Wt 514 worksheet is not needed for this project. Andy O mentioned the difference between the existing and proposed grades will be difficult to show as the work to restack the existing stone will result in minor grade changes. Tim added that the grades on a plan will look nearly identical due to the 1-2 ft contour interval. Karl mentioned that seeing both existing and proposed contours on a plan that look nearly identical is a statement in itself and that he would like that type of plan. Karl asked that a statement noting and documenting this will help to ensure areas of temporary and permanent impacts are accurately reflected on plans. Karl’s preference is that the plans show the extent of the existing field conditions for the site, Lorie S so long as the plans show no additional new riprap no mitigation would be required as the impacts are within the same footprint of existing riprap and the riprap is for the intention of protecting the existing infrastructure (Env-Wt 313.04(a)(3)a).

Carol H asked why the 2015 repairs were not complete and Tim explained likely due to shifting priorities and resources to complete the work and obtain a permit. Carol further asked the sand bags be removed as soon as possible and after in water work is complete and Tim agreed that could be done. Mike H asked the USFWS be contacted to ensure no concerns for bats and the use of this bridge as part of the US Army Corp review. He further explained of primary concern for bats is tree removal, work to bridges and dam rip rap. Jeanie B had no additional comments. Natural Heritage Bureau was not in attendance, but provided email they had no further comments. Pete S also did not attend but provided a comment via email. He requested enhancements for wildlife passage could be improved by tying in the downstream abutment ledges into the streambank, such as adding a few stepping stones.

*This project has been previously discussed at the March 15, 2015 Monthly Natural Resource Agency Coordination Meeting.*

### **Rumney, #40569**

Arin Mills, NHDOT Senior Environmental Manager, presented the location of the project as bridge 157/063 which carries Quincy Road (state) over an un-named tributary to the Baker River in Rumney. This is a state funded and executed project. The un-named stream flows ~ 2 miles from the south slope of Stinson Mountain, a primarily forested and undeveloped area. From the crossing it flows ~ 600’ downstream where it enters the Baker River. The bridge was originally constructed in 1928, after the floods of 1927, and widening work was done in 1977. The surrounding landscape is rural/residential along

Quincy Road, and primarily undeveloped and forested beyond. Arin mentioned that earth work was observed upstream of the crossing at the time of the visit in early May, with heavy machinery observed. Photos were shown of the existing conditions upstream/downstream of the crossing, as well as the inlet/outlet and within the arch structure.

Tim Boodey, NHDOT Bridge Maintenance Senior Engineer, described the project to include repair in-kind to the arch along the north abutment, dredging accumulated material at the inlet, installation of erosion control stone (rip rap) at the inlet wings and replacement of fill behind the SE wing up to guardrail (work is outside wetlands jurisdiction). Based on further records investigation Tim stated he determined the material at the inlet of the structure is newly accumulated material, predicted to be the result of fallen natural debris upstream and causing a shift in the flow of water into the structure. The material accumulated downstream at the structure is assumed to be not newly accumulated, but rather evident throughout the life of the crossing. Tim discussed the construction sequence to include installation of a sediment barrier at access points and limit of work at the start of the project. A sandbag cofferdam will be installed along the north abutment to allow repair to the arch and to divert water. Perimeter control will be installed around the area to be dredged at the inlet. It is anticipated natural streambed material will be uncovered and remain once the fine built up sediment is removed. Excess material from the dredge will be used behind the SE wing (outside of jurisdiction) or be removed from site. Rip rap installation at the inlet wings is for infrastructure protection.

Tim stated the bridge was constructed in 1928 and widened in 1977, and at the time of construction the inlet was clear of material based on photographs. While onsite, downed trees were observed upstream of the crossing, and removal of this debris and accumulated material will restore the hydraulic opening of the crossing. Upstream debris removal will further allow the flow of the stream to be restored back to the center of the structure. No history of overtopping at this crossing.

Arin determined, based on her environmental review, this is a 1st order stream to convergence with Baker River and no Shoreland Water Quality Protection Act jurisdiction. StreamStats delineated a watershed of 726 acres, making this a Tier 3 crossing. No designated river and no previous permits identified for this location. NHB21-1520 identified Wood turtle in the project vicinity, although Arin believes this species is most likely associated with the Baker River as it provides habitat for hibernation, foraging and nesting. Coordination with Fish & Game (F&G) is underway. No Priority Resource Areas (PRA) were identified in the project area, and no FEMA floodplains.

The Aquatic Restoration Mapper shows the stream as predicted coldwater, with full aquatic organism passage and mostly compatible geomorphic compatibility. F&G fish survey data documented Eastern brook trout upstream in 2009, and no dams are along the entire length of the stream. US Fish & Wildlife determined potential for Northern long-eared bat and 4(d) consistency letter was obtained. Arin mentioned she did perform a bridge bat survey and found no evidence of bat use or features suitable for bats. Section 106 review was complete, and consistent with an Appendix B of the Programmatic Agreement- no further coordination required.

Sarah L clarified the removal of the accumulated debris at the inlet would restore the hydraulic opening and that DOT has identified the down trees upstream as a contributing factor leading to the buildup of sediment, therefore the plan is to address the likely cause and restore the channel width. Sarah also indicated that this project is included on the Env-Wt 305.02(e) list and MOA between DES and DOT, and assumes no further field data collection is required. Karl B indicated that DES will need to review the MOA and potentially discuss if further data collection is needed. Karl asked what width and depth the proposed dredge will be? And indicated that the width and depth accommodate characteristics similar to the reference reach. Karl further asked the project ensure no additional wetland impacts will be required for removal of trees upstream, and consider if machinery will be required for access and remove the debris.

Lori S asked for the linear measurement of the new rip rap, as the bank stabilization activities (rip rap) require mitigation. Karl and Sarah agreed that the riprap of the arch meets and triggers Env-Wt 904.09 Repair, Rehabilitation, and replacement of a tier 3 stream crossing. Lori further requested the provided plans show the extent of the proposed rip rap at the inlet and if there is any existing riprap in that impact location. Tim, Arin, and Sarah advised that DOT does not have records nor do the photos show any existing rip rap in this location. Tim estimated the rip rap would be about 3' along each bank and is for protection of existing infrastructure. The group discussed implementation of Env-Wt 313.04(a)(3)a- no mitigation required for bank stabilization work however DES indicated criteria of previously disturbed and existing riprap versus new as the trigger and that mitigation would be required for the small LF of bank impacts associated with the placement of new riprap to protect the structure from scour. Sarah also asked Karl if the dredge rules are triggered by this project; Karl advised that he will look into it and follow back up with DOT.

Carol H asked how the bank would be stabilized after the dredge material was removed to ensure the bank would remain stabilized. Carol further asked about the time of year the work would be conducted, Tim stated it is anticipated late summer/early fall work of this year. Carol asked that the sandbag cofferdam be removed from the stream as soon as in water work was complete as to restore the natural flow of the stream, and Tim concurred. Carol asked Arin to continue to communicate with F&G biologist on the turtle species NHB hit. Sarah L commented that the stream bank will be built back and stabilized, and cross section could be provided to show bank stabilization after dredging. Mike H and Jeanie had no additional comments.

Pete S (TNC) provided written comments via email. He asked if a series of stepping cobble/boulders could be placed along each abutment wall and above the low water level to facilitate terrestrial passage.

*This project has not been previously discussed at the Monthly Natural Resource Agency Coordination Meeting.*

### **Conway, 42522 (X-A004(891))**

Stephen Haas, Senior Project Manager, PE, and Kimberly Peace, Senior Environmental Coordinator, of Hoyle, Tanner & Associates, gave an overview of the project, presented existing conditions data and discussed the proposed NR impacts.

The project is located at the intersection of US 302 (Eastman Rd) and East Conway Road in Conway approximately 2 miles east of NH 16 and 1 mile north of NH 113. Project limits extend about 2,000 linear feet along US 302 and 500 linear feet along Eastman Road. The intersection is located adjacent to the Conway Police Department. The purpose of the project is to provide intersection improvements to improve safety and reduce crashes utilizing Highway Safety Improvement Program (HSIP) funding. The intersection often ranks near the top of New Hampshire's high crash locations and has resulted in several fatal crashes at or near the intersection in recent years. The project proposes to construct changes to the intersection, alternatives being considered include: a traffic signal or roundabout. Drainage upgrades to support the proposed improvements will be required. Some overhead utility relocations are anticipated.

The traffic signal alternative would mainly keep the existing road layout, however, a northbound right turn lane would be added requiring 4'-6' of pavement widening. The US 302 approaches would also require reconstruction to not exceed the maximum cross slope allowed for a signalized intersection. The roundabout alternative would be a single lane roundabout, and as presented, the current layout is centered on US 302. There may be a minor reduction in existing pavement within the project limits, but this alternative would also result in some roadway cross slope adjustments.

The project was initiated in October 2020, including design and NEPA. A Public Informational Meeting was held March 30, 2021. A Draft Engineering Report was provided to NHDOT on April 2021. Future steps include a possible Public Hearing in September 2021 (if required), Part A Preliminary Design and NEPA completion in October 2021, Final Design completion in 2022 and construction in the spring of 2023.

Wetlands within the project limits have been delineated and include a unnamed perennial stream and floodplain wetlands on west side of US 302/ Eastman Road. The stream flows under US Route 302 through a culvert to the east, where flow is ponded due to beaver activity. Flow outlets from the pond to the southeast. Impacts to the culvert, stream, and pond are not anticipated. The stream is not protected per SWQPA, thus, no shoreland permit is anticipated. Initial project limits include the outer edge of the ¼ mile protected buffer of the Saco Designated River; no impacts are expected within this buffer. Wetlands will be avoided to the extent practicable, with potential for minimal impacts to wetlands on the west side of US 302, should the roundabout alternative be chosen. The anticipated impacts are due to potential for grading at the toe of slope. The project may also require impacts to wetlands on the west side of US 302, south of the intersection, due to cross slope adjustments. Water quality will be protected throughout the project construction using the appropriate ESC BMPs per NHDOT standards.

While NHDOT is not required to obtain an Alteration of Terrain (AoT) permit, the project will be designed to comply with AoT regulations. Should the project exceed the 10,000 square foot soil disturbance threshold, AoT requirements will be considered, including stormwater management, if necessary. *At this point it is not clear if the alternatives would result in an increase or decrease in impervious area.*

The roundabout alternative would likely not be shifted east to avoid wetland impacts because there is a contaminated site at the northeast corner of the intersection, as well as a potential Section 4(f) resource, Founder's Park, on the southeast section of the intersection; disturbance to both could likely be avoided if the roundabout is centered on the existing alignment. Cultural/historic resource analysis efforts completed to date were also presented; neither alternative is anticipated to result in adverse impacts to a resource protected under Section 106. Coordination with NH Division of Historical Resources will be completed in the future as an alternative is chosen.

The NHNHBB Datacheck report #NHB21-1653 stated no recorded occurrences in the project area. The USFWS IPAC reported Northern long-eared bat (NLEB), however, due to the limited number of trees to be removed, clearance is anticipated using either the online verification letter per 4(d) or FHWA/FTA Bat Programmatic Agreement. Small whorled pogonia (SWP) was also included, however, there is little such habitat within the proposed work limits per consultation with the wetland scientist. Coordination with USFWS will be completed in the future regarding this species.

Other natural resources reviewed for the project include:

- No floodways/floodplains.
- No conservation lands or 6(f) properties.
- No groundwater reporting elevated PFAS per DES mapping.
- No areas of highest ranked habitat in NH or the region per Wildlife Action Plan.
- Unnamed stream marginally impaired for fish consumption due to mercury according to the 2018 Draft 303(d) list. No stream work anticipated.
- Invasive Species, Purple loosestrife, Management Plan to be developed.

Karl Benedict opened the discussion by noting that most of his questions have been addressed in the presentation, particularly for floodplains (none present) and that the Priority Resource Area (PRA) peatland that was confirmed by the Certified Wetland Scientist (CWS) to be mislabeled on the WPPT. He understood why the roundabout cannot be shifted further east to avoid or minimize impacts to the wetland on the west side of US 302. He appreciated that the AoT requirements regarding stormwater management for any potential increase in impervious area will be addressed as needed.

**Carol Henderson commented that she expected to see more specific wetland impact calculations to compare the proposed alternatives and asked if the project will return for a second NR meeting when the alternative has been chosen and impacts are defined. Kimberly Peace responded that if NHDOT should determine it necessary then the project would be presented at a second meeting. She noted that wetland impacts are anticipated to be minimal, so the project would only need to return to this group if there were unanswered questions. Sarah Large concurred that it would depend on impacts.**

**Jean Brochi stated that she agreed with Ms. Henderson's comment, and that some of the outstanding issues could be resolved with coordination between specific agency staff.**

**Rebecca Martin commented that any additional coordination regarding effects to Section 106 resources will be resolved with representatives from NHDHR and NHDOT CR Program staff. If necessary, the project could be presented at a future NHDOT CR Agency Coordination Meeting.**

**Jamie Sikora commented that he is working with Ms. Martin and Ms. Peace to complete the outstanding coordination regarding impacts to Founder's Park, a potential Section 4(f) resource, and agreed that any outstanding conflicts for Section 106 resources would be addressed through the Cultural Resource review.**

*This project has not been previously discussed at the Monthly Natural Resource Agency Coordination Meeting.*