

# BUREAU OF ENVIRONMENT CONFERENCE REPORT

**SUBJECT:** Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting

**DATE OF CONFERENCES:** October 13, 2022

**LOCATION OF CONFERENCE:** Zoom Meeting

## ATTENDED BY:

### **NHDOT**

Sheila Charles  
Meli Dube  
Jill Edelmann  
Jon Evans  
Marc Laurin  
Chelsea Noyes  
Tony Puntin  
William Saffian  
David Scott  
Jack Watton

### **NHDHR/NHDNCR**

Laura Black  
David Trubey

### **ACOE**

Mike Hicks

### **FHWA**

Jamie Sikora

### **Preservation Consultant**

Jim Garvin

### **BETA Group**

John Byatt  
Chris Turgeon

### **Quantum Construction**

Jim Bouchard  
Sam Cheney  
Anna Giraldi

### **Preservation Co.**

Reagan Ruedig

### **City of Keene**

Don Lussier  
Brett Rusnock

### **Town of Antrim**

Russell McAllister

### **Town of Merrimack**

Kyle Fox  
Dawn Tuomala

### **NH Rails/Trails Coalition**

Dave Topham

## **PROJECTS/PRESENTATIONS REVIEWED THIS MONTH:**

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**Keene (no project number)**

Participants: James Garvin, Preservation Consultant; Don Lussier, Brett Rusnock, City of Keene; Dave Topham, NH Rails & Trails Coalition; Marc Laurin, NHDOT

Initial consultation and introduction to the project to address the Keene Stone Arch Bridge pedestrian safety improvements and overall trail improvements.

This was an introductory meeting, held at the request of the City of Keene, to introduce the subject of safety improvements that will be required to designate the stone arch railroad bridge (1847) over the south branch of the Ashuelot River as a trail crossing in Keene's developing Transportation Heritage Trail. The bridge is located at mile marker 89.41 on the former Cheshire Railroad, later the Cheshire Branch of the Boston and Maine Railroad. Most of the Cheshire Branch was officially abandoned in 1972. In the early 1990s, the New Hampshire Department of Transportation (NHDOT) purchased approximately 40 linear miles of the railroad and placed this linear corridor under the administrative care of NHDOT's Bureau of Rail and Transit. The Bureau of Rail and Transit, in turn, permitted the use of much of the line as a recreational trail under the Bureau of Trails of the New Hampshire Department of Natural and Cultural Resources. The City of Keene now intends to integrate the bridge into its proposed municipal Transportation Heritage Trail (THT). The Transportation Heritage Trail will begin at the current end of the previously constructed Industrial Heritage Trail (IHT), which celebrates Keene's history as a center of industry and manufacturing.

Keene City Engineer Donald Lussier began the discussion by outlining the details of the proposed Transportation Heritage Trail. The THT will extend 1.1 miles from Eastern Avenue to the municipal boundary with Swanzey. The thematic focus of the trail will be the re-use of three historic bridges, centering on the Stone Arch Bridge. To the west of the arch bridge, spanning NH Route 101, the city will install the Robert J. Prowse Memorial Bridge (1963), which was disassembled from its original site as an overpass for Ash Street over I-93 in Londonderry and purchased by the City of Keene; it is presently stored for reuse in Keene. As a component of the mitigation for the relocation to Keene, an interpretive trailside marker for the Prowse Bridge has been completed and delivered to Keene for future installation. East of the Stone Arch Bridge, an existing Bailey bridge, locally called the "Baily Bridge," will be relocated from its present location over the Ashuelot River at Island Street and rehabilitated as an overpass above Swanzey Factory Road to maintain the THT at a consistent elevation for the benefit of trail users. The "Baily Bridge" is the oldest of its type still in vehicular use in New Hampshire. (For further detail on the Transportation Heritage Trail, see <https://storymaps.arcgis.com/stories/62c55141477c45709815531ac9017bee>)

The first phase of construction of the THT will be funded through a Congressional earmark and will entail the development of the trail from Eastern Avenue to the western abutment of the Prowse Memorial Bridge, probably in 2024. Don Lussier noted that the city cannot install the stored Prowse Memorial Bridge over Route 101 until the Stone Arch Bridge is made safe for pedestrians. At present, due to the removal of original granite parapets from the bridge in 1903, the trail surface of this bridge is nearly at the same elevation as the granite curbing at the edges

of the bridge, providing no safety for persons or animals crossing the bridge some 50 feet above the river.

Consultant Jim Garvin outlined the history of the Stone Arch Bridge. The structure was built in 1847 under the direction of noted early railroad engineers Lucian Tilton and William Scollay Whitwell, who separately continued their careers by designing many of the earliest railroads, tunnels, and water supply systems in the United States. The bridge is the most daring and impressive of the many arched stone bridges on the former Cheshire Railroad, which was noted as one of the best engineered railroads in the nation. Garvin noted that the participants in this meeting had previously been supplied with two briefing documents: a compilation of prior documentation on the bridge, including a NHDHR individual inventory form (KEE0182) of 2006 and a National Register nomination of 2012; and an engineering report, "Evaluation and Historic Recordation of the Cheshire Railroad Stone Arch Bridge Over Branch River" (2009) by CHA Engineering.

The meeting concurred in the assumption that the Stone Arch Bridge is owned by the State of New Hampshire and is under the administration of the NHDOT Bureau of Rail and Transit. Don Lussier (Keene) stated the city's assumption that Keene will adapt the bridge for safe trail use and take responsibility for maintaining the bridge for that function. Jill Edelmann (NHDOT) stated that as the trail project develops, she will keep Rail and Transit administrator Michelle "Shelly" Winters and property manager Lou Barker apprised of discussions and will convey any concerns from Rail and Transit to the City of Keene.

Details are uncertain at this initial stage of the project affecting the Stone Arch Bridge. The project has a placeholder in the Keene capital improvements budget, but the scope, timing, and cost of the work remain undetermined and will depend in substantial part on success in securing future grants.

City Engineer Lussier expressed deep admiration for the bridge. He described his vision for the replacement of the granite parapets that were removed in 1903 to permit the widened trains of that era to pass one another on the double tracks of the bridge. Consultant Jim Garvin posed the question of whether, if parapet replacement should prove financially feasible, the *Secretary of the Interior's Standards for Restoration* could govern the future treatment of the bridge. Laura Black (NHDHR) stated that a project that changes the function of a property is usually governed by the *Secretary's Standards for Rehabilitation*. In any future design choice, the safety of trail users will need to be paramount, and it will be imperative to meet design standards for trail safety both for the bridge and along the steep and high earthen causeways that approach the bridge from both east and west.

This project has not yet been scheduled for a formal coordination meeting. To move toward such a meeting, consultant Jim Garvin will prepare a Request for Project Review (RPR) Form in consultation with the City of Keene and submit the form, when ratified by the city, to Sheila Charles at the NHDOT Bureau of Environment.

## **New Hampton 25365, X-A003(115)**

Participants: Meli Dube, Jon Evans, Chelsea Noyes, William Saffian, NHDOT

The proposed project addresses safety concerns at Bridge #240/104. Chelsea Noyes, NHDOT Bureau of Bridge Design, introduced the project which involves a red listed bridge, New Hampton 240/104, carrying Jackson Pond Road over the NH Railroad, also known as “Smith’s Crossing.” The purpose of the meeting is to discuss the bridge, including the existing condition and history, historical resources in the project area, the project purpose and need, and alternative analysis. The Department is seeking input on the preferred alternative, concurrence on a proposed effect finding and to discuss potential mitigation strategies. C. Noyes noted the location of Bridge 240/104 in relation to other landmarks in the area, including the rail line which is currently operated by the Plymouth-Lincoln Railroad, and the privately owned crossing to the west of the bridge which connects the White Family property to Winona Road. Several photos of the existing condition of the bridge were reviewed, including the deterioration of the deck and rails, and barricades on both Jackson Pond Road bridge approaches. Photos of the rail line looking east and west under the crossing show the old tell tales and other railroad devices in place, which are not considered to be part of the project.

C. Noyes described the current structure, which is a 85’ long, three span timber bridge built by the Boston and Maine Railroad in 1916. Major repairs were completed in 1932 and 1934 which ultimately replaced all three spans and both bents. The bridge was posted at 6 tons in 1996, was added to the State Red List in 1999 and was closed to all traffic in 2015. The bridge is inspected twice annually and currently has a deck rating of 1 (imminent failure), a superstructure rating of 4 (poor) and a substructure rating of 5 (fair). The bridge has been barricaded on both ends as it has been deemed to have no safe live load capacity. C. Noyes also discussed the bridge in the context of the railroad assets in the project area, which include the rail line, the physical bridge structure and Smith’s Crossing over the railroad. The railroad and all its assets were acquired by the Department from the Boston and Maine Railroad in 1975, and the bridge was still used as a crossing by the White Family at this time. A private crossing was built to the west of the bridge in 2017 for the White Family. By this time, the bridge had already been closed to all traffic due to the structural safety concerns, and in 2020, the White Family co-petitioned to have Smith’s Crossing closed and removed from the list of Railroad Assets with the intention of removing the structure in time. The removal of the crossing asset was finalized in 2021. Since the bridge closure in 2015, there has been no maintenance on the bridge, except for removal of fallen debris onto the railroad track, and there is no planned maintenance or allotment of funding for maintenance in the future as the Department does not have any planned vehicular, recreation, bicycle, or pedestrian use for the structure.

Meli Dube, NHDOT Bureau of Environment, described the Historical Resources in the project area. Bridge 240/104 is individually eligible for the National Register of Historic Places, including both the substructure and superstructure. The bridge is eligible under Criterion C with the character defining features including the creosoted timber superstructure, 3-span configuration with timber bents and stone abutments. Some elements, such as the deck, railing and stringers, are presumed to have been replaced since original construction, however they still retain integrity and historic character. The bridge is also considered to be a contributing feature to the Boston, Concord and Montreal Railroad Historic District based on its date of construction

during the Period of Significance (1844-1972) under Criterion A and C. The Historic District boundary includes the bridge and railroad right-of-way.

M. Dube discussed that the purpose of the proposed project is to address the safety concerns at the bridge and to promote efficient management of transportation resources. Safety concerns are most prevalent for the operation of the railroad, which uses the line for recreational transport during leaf peeping season, and for transport of rail cars along the line for maintenance of the track and to deliver rail cars to a maintenance facility in Lincoln and for the public at large given evidence that the bridge is being used despite the barricades and bridge closed postings. The need for this work is demonstrated by the severe decay and increasingly unsafe condition of the bridge which will result in continual falling of debris and collapse of the bridge onto the track and is supported by the existence of redundant crossings and via Jackson Pond Road from its southwesterly end.

M. Dube noted that the Federal Highway Administration has been consulted regarding the anticipated 4(f) evaluation associated with the project, and the following “avoidance alternatives” have been considered: no build, rehabilitation with no adverse effect and offline construction with structure preservation. These alternatives were discussed as follows:

1. **No Build:** This alternative was deemed not to be feasible or prudent by the Department as it does not meet the purpose and need of the project. Leaving the structure in place would create a continued safety risk to users of the rail line, as well as allow continued opportunity for unauthorized and unsafe use by pedestrians despite the barricade. Leaving the structure in place also does not promote financially responsible or efficient management of transportation resources as railroad closures due to debris falling on the track cost is estimated to be approximately \$25,000.00 per day. This would ultimately NOT be an avoidance alternative, as it would result in an adverse effect due to the inevitable collapse of the structure which would be considered removal by neglect.
2. **Rehabilitation with “No Adverse Effect”:** This alternative was deemed not to be feasible or prudent by the Department as it does not meet the purpose and need of the project. The timber elements cannot be rehabilitated to add strength in the way that steel frame structures can, so adequate strength and capacity for safe re-opening is not achievable without replacing components critical to the historical integrity of the bridge. Therefore, this would not avoid an adverse effect to the historic resource. Additionally, the crossing is redundant and rehabilitating it would not promote efficient asset management and the cost would not be justifiable.
3. **Offline Construction with Preservation:** This alternative was deemed not to be feasible or prudent by the Department as it does not meet the purpose and need of the project. The timber elements cannot be rehabilitated to add strength in the way that steel frame structures can, so adequate strength and capacity for safe re-opening or to allow for safe operation of the railroad under the bridge is not achievable without replacing components critical to the historical integrity of the bridge. Therefore, this would not avoid an adverse effect to the historic resource. Additionally, the crossing is redundant so preserving the existing crossing and construction and additional crossing would not promote efficient asset management and the cost would not be justifiable.

M. Dube noted that the above alternatives cannot be completed in a way that would be considered successful as avoidance alternatives. The Department's preferred alternative involves complete removal of the existing structure. This would meet the project purpose and need by removing the safety concerns and promoting efficient asset management by removing the redundant structure which is closed and therefore, not used as a crossing. This would result in an adverse effect to both the individually eligible bridge and the Railroad Historic District through the complete loss of the bridge resource. The Department is looking for feedback and concurrence from the Resource Agencies on the preferred alternative and anticipated adverse effect finding.

M. Dube stated that the project has not yet been presented at a Public Informational Meeting but that it is the Department's intention to host one soon to solicit input from the public about the proposed preferred alternative and to seek feedback on mitigation strategies. The Department will list the bridge for sale per requirements. A preliminary idea to inventory similar timber railroad structures was put forth for mitigation, and the Resource Agencies were welcomed to provide comment.

Laura Black, NHDHR, asked for more context about the use of Jackson Pond Road and its historical and current use. M. Dube stated that it connects to private residences only. C. Noyes further clarified that it is a Town-owned, unmaintained Class 6 road. The White family to the west of the project area has access to their property over the railroad across a private, at-grade crossing and all other abutters along Jackson Pond Road can access their properties from either Winona Road or the southern end of Jackson Pond Road without needing to cross the railroad. L. Black said that it would be appropriate to reach out to abutters as they may have interest in the structure for its historic value, separate from the petition to close the railroad crossing asset, and may have input on mitigation. C. Noyes clarified that the process to close the crossing asset was specific in the intent to also remove the bridge at some point in the future and that the White family was aware of and supportive of this intent. M. Dube reiterated that the public would be invited to discuss mitigation and to become a consulting party should they wish at an upcoming Public Informational Meeting, date to be determined. L. Black stated that more detail on the potential mitigation is required before feedback can be provided- she would like to know what would be included in the inventory, what criteria would be looked at, and why it would be useful. Jillian Edelmann, NHDOT Bureau of Environment, clarified that the initial idea was to inventory the remaining timber bridges strictly over railroads that are considered railroad assets, noting that timber bridges as part of the roadway transportation system have already been inventoried. Jamie Sikora, FHWA, had no further comments.

M. Dube requested concurrence on the proposed adverse effect determination for the preferred alternative of complete removal without replacement and provided a summary of DHR's response to the Request for Project Review which stated that the "alternative analysis is reasonable. Continue consultation for mitigation regarding adverse effects to bridge and railroad." L. Black concurred that there are serious safety concerns with the advance deterioration of the bridge and that the opportunity to effectively preserve the bridge has passed so that it is now unlikely to avoid an "no effect" determination, especially given the process of closing the railroad crossing asset that has already occurred. L. Black noted that ideally steps to

address Section 106 would have been taken at that time, however, we can work towards creating a mitigation strategy now with the situation at hand.

**Merrimack 41588 (now included in Merrimack 29174, X-A005(226))**

Participants: Jim Bouchard, Sam Cheney, Anna Giraldi, Quantum Construction; Reagan Ruedig, Preservation Co.; Kyle Fox, Dawn Tuomala, Town of Merrimack; John Byatt, Chris Turgeon, BETA Group; Jon Evans, Tony Puntin, NHDOT

Initial consultation on the proposed safety & capacity improvements for U.S. Route 3 from Baboosic Lake Road Intersection to the Wire Road Intersection. Due to technical issues at the Quantum Construction Consultants, LLC office, the Request for Project Review (RPR) submission was screen shared by Jill Edelmann during the presentation.

The Town of Merrimack is proposing evaluations and redesign of the U.S. Route 3 / Wire Road intersection to enhance pedestrian and vehicular safety and improve traffic capacity on U.S. Route 3 in Merrimack. Additionally, the project provides for improved pedestrian connectivity from the Baboosic Lake Road intersection northerly to the U.S. Route 3 bridge replacement project (NHDOT #29174, NHDHR RPR 8459) thereby extending connectivity to the Front Street / U.S. Route 3 intersection. Lastly, the signalization within the U.S. Route 3 corridor will be evaluated for contiguous progressive movements of the main corridor.

Jim Bouchard began by giving an overview of the proposed project. There is an existing disconnect in sidewalks, and there is currently no pedestrian access from Twin Bridge Park. Jill shared the EMMIT Area of Potential Effect (APE) map and labeled aerial photographs depicting the project location and proposed improvements. The project's APE borders the APE for Merrimack #29174, Replacement of the U.S. Route 3 over Baboosic Brook bridge. These two projects will occur simultaneously. Microwave coordination of traffic signals is required for the existing signals along the U.S. Route 3 corridor with the proposed traffic signals at the Wire Road intersection. The Southern half of the project APE is within the Souhegan Village Historical District.

Reagan Ruedig, Preservation Company, confirmed that the southern half of the APE is within the Souhegan Village Historical District. The Determination of Eligibility (DOE) for the Souhegan Village Historical District states the district is not eligible, however there is the potential that individual resources within the district could be considered for individual designation. To that end, Preservation Company has identified all individual properties listed within Table 2 of the RPR submission.

Jim added that most of the work will occur within the existing roadway Right-of-Way (ROW), although there is the potential for minor grading outside of the ROW where required for drainage design. The purpose and need of the project are to enhance connectivity for the community and provide safer pedestrian access along U.S. Route 3.

Tony shared a map depicting the overlap between the proposed project and the U.S. Route 3 over Baboosic Brook bridge replacement project (Merrimack #29174). Tony explained that implementing both projects simultaneously made the most sense from a construction standpoint,

otherwise new pavement might needlessly be demolished to tie the proposed roadway improvement into the bridge approach.

Jamie Sikora, FHWA asked for clarification that the bridge replacement and roadway safety & capacity improvements were two (2) distinct projects. He also inquired if a NEPA document and supportive documentation has been previously completed for the bridge project (Merrimack #29174).

Jon Evans clarified that NEPA has not yet been completed for either project, but that there had been discussions that Merrimack #29174 and Merrimack #41588 would each have its own separate NEPA document. Jon said that the implications of having two (2) separate NEPA documents could be discussed offline between NHDOT and FHWA.

Laura stated that NHDHR should be kept in the loop regarding any offline discussions that take place relative to the NEPA document, as NEPA and Section 106 are interrelated.

Dave Trubey said that an archaeological survey had been performed for the Merrimack #29174 project, and that it had been determined there were no archaeologically sensitive areas from the bridge down through the U.S. Route 3 / Wire Road intersection, and within the vicinity of the Twin Bridge Park ballfield. Dave added that he believes there's no need to perform archeological further south down U.S. Route 3 due to the findings of the previous survey. He then asked Sheila Charles if she concurred.

Sheila replied that she was also involved in the archaeological review of Merrimack #29174. Victoria Bunker, Inc. had completed a Phase I-A archaeological survey for the project, with the determination that no further archaeological evaluation was recommended, due to extensive fluvial erosion along the streambanks and known soil contaminants upstream of the bridge crossing. Sheila agreed with Dave that no additional archaeological surveys should be required for the Merrimack #41588 project, because most of the project will take place within the existing ROW. Sheila added that her daughter lives off Baboosic Lake Road, and that she's excited to see a project that will help alleviate some of the ongoing traffic issues on U.S. Route 3.

Laura Black said that she reviewed the RPR submission prior to the Cultural Resources Meeting and had a few comments. Following her review of Preservation Company's report, she stated that an update to the existing 2006 Project Area Form would not be required for this project. The NHDHR is no longer doing Project Area Forms, as they now have a stand-alone planning document that will be utilized going forward. At this point, Laura believes it is not necessary to have a planning document for this project. She suggested the next step from a cultural resources' perspective would be to conduct a site visit, but this cannot be done until the Engineering Study has been completed, and a preferred alternative has been selected.

Therefore, QCC and BETA will complete the Engineering Study, determine a best practicable design alternative, and will reconvene with NHDHR in the design phase of the project to coordinate a site visit.



**Antrim 14942 (no federal number) – High Street over Great Brook (174/070)**

Participants: Jim Bouchard, Sam Cheney, Anna Giraldi, Quantum Construction Consultants; Reagan Ruedig, Preservation Company; Russell McAllister, Town of Antrim; Jon Evans, NHDOT; Mike Hicks, ACOE

Continued consultation regarding inventory efforts for the area surrounding the High Street Bridge, including the Great Brook Industrial Historic District and the Antrim Village Historical District. Previous Cultural Resource Agency meetings occurred on October 14, 2021, November 18, 2021, and July 14, 2022.

The purpose and goal of the meeting was to determine if the existing bridge contributes to the Cultural Landscape within the Town of Antrim, specifically the Great Brook Cultural Landscape (GBCL) and the Antrim Village Historical District (AVHD). Quantum Construction Consultants, LLC (QCC) and the Town of Antrim need direction from NHDOT Cultural Resources, the New Hampshire Division of Historical Resources (NHDHR), and the Army Corps of Engineers (ACOE) on what needs to be done from a cultural resources perspective so the project can continue to move forward.

Reagan Ruedig, Preservation Company, summarized the findings of their report and how the High Street Bridge fits into the Cultural Landscape of Antrim. She explained that the High Street Bridge contributes to the Great Brook Cultural Landscape, and that its removal would be considered an adverse effect. The High Street Bridge was constructed with the existing Mill Pond adjacent to the bridge in mind. The Determination of Effect (DOE) Committee agreed with Preservation Company's Assessment, but questions remain on whether the High Street Bridge directly contributes to both the GBCL and the AVHD.

Jim Bouchard (QCC) discussed some of the takeaways from the previous meeting. In the previous Cultural Resources Meeting, it had been determined that there were no previously surveyed contributing resources within the project's Area of Potential Effect (APE). The Town of Antrim directly contributed to identifying potential historically significant resources within the GBCL. Section F of Appendix C states that if there are no listed historical properties within the APE, then the ACOE cannot make the applicant do a survey for historical properties. Now that it has been determined that the High Street Bridge directly contributes to the GBCL, QCC and the Town are seeking input relative to what steps need to be taken to finalize the design and move the project along.

Jill Edelmann (NHDOT) is in the process of preparing the AVHD form, which will finalize the boundaries of the district and provide a concrete explanation of the district. Jill explained that she had discussions with Laura Black (NHDHR) and Mike Hicks (ACOE) relative to what the next steps should be. Two (2) separate Effect Memos should be written, one for the AVHD and one for the GBCL. These Effect Memos should explain how the High Street Bridge contributes to both historical districts.

Jim Bouchard inquired as to whom would be funding the additional work. The Town cannot afford to expend additional funds on this extra work without adversely impacting the project's design budget and schedule.

Mike Hicks stated that it would be a better option for the NHDOT to complete the Effect Memos, to which Jill replied that NHDOT Cultural Resources could complete the Effect Memos internally. Reagan offered to assist Jill in completing the Effect Memos by answering questions and providing additional information as required. It was decided that NHDOT would complete the Effect Memos with assistance from Preservation Company and have it completed within a week.

Laura Black stated that all work completed to date has been part of what is known as the “Identification Step” of the Section 106 process. NHDHR is not requiring that Preservation Company complete another report discussing additional findings relative to how the High Street Bridge impacts Antrim’s Cultural Landscape. She reiterated that the Identification Step of the Section 106 process has been completed, and the project is now moving into the “Determination of Effects” stage of the process. Once Jill has completed the modified District Form for the AVHD, and the Effect Memos for both districts, NHDHR and ACOE will make a final determination of whether or not a Memorandum of Agreement (MOA) will be required for the project. Jill is planning on having the modified District Form for the AVHD done by the end of the week (Friday, 10/14).

Mike Hicks asked if concrete boundaries have been defined for the AVHD, as that had been a focal point of discussions from previous Cultural Resource meetings. Jill replied that the boundaries for the AVHD will be finalized in the modified Historic District Form.

Once the Effect Memos for the AVHD and GBCL have been finalized, another NHDOT Cultural Resource Meeting will convene to discuss the findings and next steps.