BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting
DATE OF CONFERENCES: January 6 and 13, 2011
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Jill Edelmann
Jon Evans
Cathy Goodmen
Doug Gosling
Bob Hudson
Tom Jameson
Steve Johnson
Larry Keniston
Nancy Mayville
Joyce McKay
Jerry Moore
Kevin Nyhan
Christine Perron
John Robinson
John Sargent
Matt Urban
Alex Vogt
Tony Weatherbee

Federal Highway Administration
Jamie Sikora

NHDHR
Laura Black
Edna Feighner
Peter Michaud
Linda Wilson

Atlas RR Construction
Craig Krause

Town of Bedford
Jeff Foote

Town of Brentwood
Daniel Musso

CLD
Shannon Beaumont
John Byatt

Consultants
Harriet Cady
Donald Wilson

Town of Dublin
Sterling Abram

Dubois-King
Bob Durfee

HEB
Jason Ross

Hoyle Tanner
Sean James

Town of Hudson
Bernie Manor
Gary Webster

City of Manchester
Jessica Fleming
Bruce Thomas

McFarland-Johnson
Vicki Chase
Jim Hall
Jed Merrow
Jennifer Zorn

NECR
Ron Bocash
Jonathan Sturges

Stantec
Mike Leach
Andre Betit

Town of Salem
Robert Puff

Warren Street
Jonathan Halle

(When viewing these minutes online, click on an attendee to send an e-mail)

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January 6, 2011

Wentworth, A-001(030), 15908
Participants: Christine Perron and John Sargent

John Sargent provided an overview of the project. The project originally involved the rehabilitation of one bridge carrying NH Routes 25 & 118 over the Baker River. Two additional bridges on the same routes have recently been added to the project. There is also now a paving project planned for this section of NH25 & NH 118 (Wentworth-Rumney 16221) and the two projects will likely be combined and completed under one contract. (Separate project numbers will mostly likely be retained.)

Bridge #1 is a 94’6”-foot long 1937 Thru Plate Girder over the Baker River located near the Village of Wentworth. The project will consist of full or partial depth deck repairs and painting.

Bridge #2 is a 3-span 1960 I-Beam, concrete deck bridge over the Baker River. The bridge had an open grid deck on the shoulders, which has been filled. It was determined that it would be more cost effective to replace the superstructure steel rather than paint and repair the existing steel. In addition, the project will include replacement of the deck and expansion joints, installation of riprap for scour protection, and repair of concrete. The rail will be replaced with standard bridge rail, which will have a slightly different configuration than the existing rail. A dry hydrant will also be installed for the town and will be located within the area of riprap. Substructure repairs will be in-kind and will not visually affect the bridge; the substructure will remain the same. The underside of the bridge will be accessed through the northeast quadrant. All work will be within the existing right-of-way and within previously disturbed areas.

Bridge #3 is a 1978 I-Beam Concrete deck bridge over the South Branch of the Baker River. Repairs will consist of full or partial depth deck repairs.

Edna Feighner stated that she had no archaeological concerns with the project.

Laura Black stated that the project seemed fine to her, but questioned how to write the no adverse effect memo without knowing if the two bridges are eligible for the National Register. Joyce McKay said that in these cases she has been writing in the memo that the bridge is potentially eligible and will be examined as part of the bridge inventory. L. Black concurred with this approach as long as there was agreement that the character defining features of the bridge would be retained. No additional concerns were raised.

Pelham, 99409Z
Participants: Matt Urban, Steve Johnson, Tony Weatherbee, NHDOT

The proposed project is located off of Main Street over Beaver Brook in the Town of Pelham.

This project was previously presented on December 9, 2010 by Steve Johnson and Anthony Weatherbee. The project will consist of repair to a twin stone arch bridge, built circa 1839 and expanded in 1929.

S. Johnson explained the need for the proposed repair is due to loss of large stones and overall structural instability. As such, the Bureau of Bridge Maintenance has proposed a method of repair that will utilize a small portable shotcrete machine that is controllable in areas that require precision. It was explained that the goal for this maintenance repair is not to construct a concrete face that covers all the gaps because there would reduce or eliminate permeability. S. Johnson explained that the proposed repair will only fill large voids and provide stability or adequate chinking for the stones. DHR had concerns about the proposed method, knowing that if not done carefully could clog the porous nature of the structure. In addition, DHR had concerns that the concrete/grout would be harder than the natural stone itself. Jim Garvin addressed many of his concerns in a letter to the Department, however overall, he agreed with the proposed plan. DHR recommended that Bridge Maintenance utilize a softer grout of lower strength than the stone that will not further deteriorate the condition of the natural stones. S. Johnson indicated that gaps filled with the grout would be greater than .5-.75" and that the grout would be tooled back from the face.

DHR asked that a NH inventory form be submitted on the stone arch, most likely at the reconnaissance level. It should include a description, up-to-date photographs, narrative regarding history, significance, and integrity utilizing Jim Garvin's most recent information on the structure, and drawing on the information from the other stone arch in Pelham. Laura Black stated that assuming the stone arch is eligible, pending the outcome of the form, there would be a No Adverse Effect to the bridge with the current proposed repairs. DHR also asked if they could be invited/informed when the shotcrete work would be done so they can see how its application and results first hand as a learning tool.

Salem (no project number):
Participants: Mike Leach (Michael.Leach@stantec.com) and Andre Betit, Stantec; Robert Puff, Town of Salem

The meeting began at 10:00 AM with Michael Leach and Andre Betit from Stantec Consulting Services, Inc. and Bob Puff from the Town of Salem attending for the project. A large-scale plan set arranged by roadway was provided that highlighted the wetland impact areas, buildings over 50 years old and stone wall impacts of the project. There were 24 buildings over 50 years old in the vicinity of the project. In addition, a photographic packet of the previously submitted pictures arranged by the roadways was provided to each of the five committee members. Michael Leach opened the meeting stating that it is a Town project with no state or federal funding and identified the roadway locations on the cover sheet. The project proposed wetland impacts and thus a submission to DHR was provided, which initiated Section 106 review. M. Leach indicated that

the project would be presented by each roadway for convenience starting with Pelham Road located at Exit 2 off I-93 and that the photographic packets were arranged accordingly.

M. Leach indicated that the project would involve roadway reconstruction, drainage improvements, impacts to wetlands and to some stone walls along the roadway during construction. M. Leach presented the project plans beginning at Pelham Road with 26 Pelham Road being the first building older than 50 years, then 43 Pelham Rd. across the street, followed by 30 Pelham Rd., 36 Pelham Rd. and then 44 Pelham Rd. located near the intersection with Commercial Drive. As part of the reconstruction, portions of some the adjacent stone walls would be removed and reset during the work as highlighted on the plans.

L. Black asked that the impacts to the properties over 50 years old be highlighted as the presentation progresses. She noted that there were five properties with easements and wanted to know the impacts at those lots and any other historic properties. M. Leach described the impacts at 44 Pelham, consisting of reconstruction of the existing driveway and some wall removal and resetting for roadway and drainage improvements along the roadway. M. Leach proposed discussion of the impacts at properties greater than 50 years, and a review of the previous locations at 26, 43, 30, and 36 Pelham with explanation of the temporary impacts to the properties. The plans were advanced to show the improvements to 56 Pelham Rd., which was the next 50-year-old property with the impacts to the lot. E. Feighner asked what monument was to be retained as noted on the plan. A. Betit noted that monument was a property pin and noted that all property monuments, bounds, pipes, pins are noted as a monuments for the contractor.

The project plans for Pelham Road were advanced to the relocation of the roadway onto Map 104 Lot 10729 at 68 Pelham Road. A. Betit noted the existing roadway has a sharp curve and the proposed relocation was to soften the curve and improve the roadway geometry. The stone walls in the area would be reconstructed. In addition, the pavement would be removed along 79 Pelham Road (an over 50 year old property) and a portion of the existing pavement would be removed adjacent to the building at 68 Pelham Road as requested by the landowner. E. Feighner asked if there were pictures of the area where the roadway was being relocated. M. Leach noted that the location was at wetland impact area PR8 and that the pictures of the wetland area are #215, 216 & 217, which is a field. R. Puff noted that the property has been brought to the Town for discussion for a new subdivision and roadway. As part of the subdivision discussion, the landowner agreed to the Pelham Road relocation. Because of the proposed work, L. Black noted that DHR would need to review the resources on this lot through the completion of an individual form. E. Feighner indicated that NHDHR reviews all projects that require the federal Army Corps permit as required for this project and asked about the type of Army Corps permit - PGP or individual - and the amount of proposed wetland impact. M. Leach stated the project would likely qualify for a PGP permit from the Army Corps since the wetland impact is about 8,000 SF. E. Feighner noted that the Corps would require a signoff from DHR about the historic aspects of the permit for the project. M. Leach noted the intent of this meeting was to find out any concerns and address them.

The Pelham Road plans were advanced with notations of the wall relocations along the roadway, wetland impacts along the roadway, the intersection with Brookdale Road and Brady Avenue, and the ending of the work for Pelham Road near the intersection with Cassidy Avenue. M. Leach asked if there were any questions relative to the Pelham Road work before proceeding with the other two roads. There were none.

The two work areas related to Brookdale Road are located east of I-93 and west of I-93. NHDOT was currently replacing the portion of Brookdale over I-93, including a new bridge. The project begins at Lake Shore Road and precedes westerly toward I-93 with 52 Brookdale Rd. being the first property over 50 years. It has minor driveway impacts located within the ROW. A. Betit noted the existing pavement would be removed and replaced to match into the existing gravel drive. L. Black noted an easement for this property. A. Betit noted that there is an existing roadway cross culvert and the project proposes to replace it. The work would be along the property line with the abutting lot and not near the house. M. Leach noted the pictures related to the culvert impacts are 25 and 26 for the upstream end and 27 and 28 for the downstream end at the property line. The plans were advanced to the locations at 60, 61 and 63 Brookdale Road. M. Leach noted the removal and resetting of a stone masonry wall along the driveway at 61 Brookdale Road. The project ends before the driveway to 63 Brookdale Road where NHDOT will reconstruct the roadway.

The Brookdale Road plans were advanced to the westerly side of I-93, and the project begins at 79 Brookdale Road, the next property over 50 years with some wall removal and resetting across from the property. The next properties over 50 years were 83, 84, 86, 91, and 97 Brookdale Road with some wall removal and resetting. L. Black asked about the impacts and easement at 96 Brookdale Road. A. Betit noted an existing roadway cross culvert was to be removed and replaced with some impacts. M. Leach noted this as a small wetland impact area and that the impacts at the driveway would be within the ROW, which widens in this area. At 109 Brookdale Road, the impacts are to the driveway and located within the ROW. The plans were advanced to the location of wetland impacts and wall removal and resetting noted to 130 Brookdale Road. L. Wilson asked if the house was stone. Mr. Leach responded that he did not know, but it appears that it was in the picture. M. Leach noted that the work on the property only involved the driveway. The plans were advanced to the intersection with Pelham Road with notations of the wall work and wetland impacts along the roadway.

M. Leach presented Brady Avenue work noting the plans started at the intersection with Route 38 also known as Lowell Road. The first two buildings over 50 years old are located on both sides of the intersection at 126 and 130 Lowell Road. The improvements were to126 Lowell Road for the driveway and sidewalk reconstruction. The Brady Avenue plans were advanced to the wall and wetland impacts noted at 159 Brady Avenue, the last property over 50 years. The temporary impacts to the lot at 159 Brady Avenue were for reconstruction of the two driveways. The plans were advanced again with the wall and wetland impacts noted at the intersection with Pelham Road.

L. Black noted that DHR had received a packet for the wall reconstruction documentation for Cluff Road from Stantec. L. Wilson noted that the wall reconstruction documentation packet was an excellent model for documentation in this project. E. Feigner noted that the same approach be taken for this project. A. Betit stated that the stone wall documentation packet was a considerable expense for this Town project. E. Feighner noted that the stone wall documentation before and after relocation was needed by DHR to permit adequate wall reconstruction. A. Betit noted that it would be done for this project and recommended the work be done just prior to construction. Ms Feighner indicated that this was acceptable. Mr. Puff asked to clarify that the wall documentation was only needed for excellent examples of stone walls impacted by the construction and not all

walls, which the committee acknowledged. L. Wilson also suggested citing commonalities in the wall documentation. J. McKay noted that due to time constraints the recommendations for the project would be provided later. L. Black noted that an individual form for the 68 Pelham Road and the property noted as 104-10729 on Brady Avenue would be needed, and they would provide a letter relative to the assessment needed of the property. M. Leach presented a copy of the NHDHR Request for Project Review form to the committee with a copy of the previously received form with notations attached.

Piermont 16193 (no federal number)
Participant: Jason Ross, HEB (jross@hebcivil.com)

The Barton Road Bridge over Eastman Brook in Piermont, NH is NHDOT Bridge No. 092/103. H.E. Bergeron Engineers, Inc. (HEB) is working with the Town of Piermont to replace the bridge through the NHDOT Municipal Managed Bridge Program. The existing bridge is located on Barton Road, approximately 30 feet southeast of the intersection with NH Route 25C. The latest NHDOT Bridge Inspection Report reported a Critical Deficiency Status, and the bridge was subsequently barricaded and closed to traffic.

The bridge was reported constructed in 1945. The existing bridge has a single 16-foot-wide lane and spans 28 feet over Eastman Brook. The northwestern abutment is constructed of mortared stones that are bearing on ledge. The southeastern abutment is concrete and the footing is exposed. The bridge superstructure consists of steel stringers with a nail laminated timber deck. The stringers are in very poor condition and have significant section loss.

The Town of Piermont would like to completely remove and replace the existing bridge structure in its present location. The new bridge will be wider than the existing structure to accommodate two lanes of traffic. The roadway may be slightly raised and skewed from its current location to improve sight distance at the intersection of Barton Road and NH Route 25C. The new bridge will consist of either steel stringers with a glue-laminated timber deck or a pre-cast concrete rigid frame structure.

The bridge is on the NHDOT Municipal Red List of Bridges (bridges that are in severe condition and in need of replacement) and is currently scheduled for FY 2019 funding under the NHDOT Municipal Managed State Aid Bridge Program.

The committee decided that no Individual Inventory Form is required for this project however a Phase IA/IB archeological study that includes test units will need to be performed, focusing on the eastern side. E. Feighner indicated that the archaeologist should note during research of the area whether a mill or other features existed near this bridge location.

J. Ross noted that the project would avoid the dwelling in the southeast quadrant. L. Wilson asked that the archaeologist provide photographs of all four-quadrant views. J. McKay stated that the End of Field letter should be submitted to NHDOT following the archaeological investigation. Laura Black asked that abutting properties owners be contacted regarding the setting of the bridge, and if they have a preferred choice of the two bridge options.

Once the archaeology is complete and public input gathered, the committee will decide if mitigative efforts are needed. After this decision is made, HEB will fill out the Cultural Resource Memorandum of Effect (Municipally Managed Projects).

Manchester 15401 (no federal number):
Participants: Bob Hudson, NHDOT; Bruce Thomas, Manchester Department of Highways (bthomas@manchesternh.gov)

The City of Manchester plans to replace the Goffs Falls Road Bridge (188/092) over the Manchester-Lawrence Railroad, a location north of the airport. This replacement project consists of replacing the 1948 steel beam, concrete deck bridge resting on trestle supports with a 14' x 14' concrete box culvert. The culvert would be installed on two 18" pipes and be raised slightly. After discussion, it was confirmed from that the rail line at this location was determined to be an ineligible portion of the line as stated in the "Manchester-Lawrence Railroad Area Form - 2008-2009" by Lisa Mausolf.

The Committee did request additional information on the steel pile trestle bridge, in the format of an Individual Inventory form, including:
• How many bridges of this type are there? Include comparative resources?
• Are there other bridges with trestle supports like it?
• Is the bridge technology unique?
• Is the bridge intact (in the same condition/configuration as it was initially constructed)?
• If not in the same condition/configuration, how has the configuration changed over the years?

Bruce Thomas will investigate and report back to the Committee at a future meeting. This information should also be placed on an individual inventory form.

Manchester. X-A001(207), 20004
Participants: Bob Hudson, NHDOT; Bruce Thomas, Manchester Department of Highways (bthomas@manchesternh.gov)

The City of Manchester's Traffic Signal Improvements project proposes improvements at the intersections of:
• Maple Street and Spruce Street,
• Maple Street and Hanover Street, and
• Beech Street and Cilley Road

The traffic signal project consists of replacing the existing traffic signal mast arms and other equipment with new equipment. The project areas are known to have several accidents, and the cause may be that the signals on this intersection are pedestal mounted. Removing and replacing the pedestal mounted signals with mast arm mounted signals; properly aligning the new signals; and providing back plates would make the signals conform to the other traffic signals in the area and would make the intersections safer. It was determined that, assuming there might be a historic district here, the project would result in a no adverse effect provided that the City would minimize any harm to impacts to brick sidewalks. Since it was unclear if the brick sidewalk at the northwest

corner of the intersection of Maple Street and Hanover Street is affected, Bruce Thomas will investigate and submit a revised "Cultural Resources Effect Memo" noting any effects and actions taken to minimize them.

Bedford (no project numbers)
Participants: Vicky Chase (vchase@mjinc.com), Jennifer Zorn, Jim Hall, McFarland-Johnson, Inc.; Jeff Foote, Town of Bedford; Nancy Mayville, NHDOT

Vicky Chase explained the status of the permitting to date: the NHDES wetlands permit has been issued and the USACOE permit is pending. The project is solely funded by the Town of Bedford. It had not come to the NHDOT Cultural Resources Meeting because impacts to historical resources had no be anticipated.

Jim. Hall provided a brief review of the project and explained that Wallace Road had been closed since October 2010 because the NHDOT found that the bridge lacked safe structural capacity.

J. Hall detailed that McFarland Johnson was providing engineering and permitting services on behalf of the Town of Bedford. The project involved the rehabilitation of a corrugated metal plate arch (CMPA) culvert and rehabilitation of the wing walls. He described the rehabilitation efforts deemed necessary to increase the life span of the culvert for 20-25 years. In general, J. Hall explained the following:

CMPA Rehabilitation: The culvert (installed in 1979) would be rehabilitated with a new structural concrete “paved” invert. Following the wetland permitting, it became apparent that it was necessary to repair the culvert headwall. Two options were available for repairing the headwall.

1. Reset Dry Masonry Wall: The southeast section of retaining wall would be rebuilt as a mortar rubble masonry wall using the existing stones. The mortar would be compatible in color with the existing stones and recessed between stones so as to have the general appearance of a dry laid wall to the satisfaction of the resident engineer.

2. Grout Existing Masonry Wall: The project would place weep holes behind the existing wall and then mortar would be recessed to provide a form for the grout. Then grout would be placed from the top to grout behind the newly placed mortar. The mortar for the facing stones would be compatible in color with the existing stones and recessed between stones so as to have the general appearance of a dry laid wall to the satisfaction of the resident engineer.

Although the designation of the crossing is unknown, it was also noted was that the project location is within the local Bedford Historic District as designated by the Town of Bedford.

Edna Feighner requested that a DHR Project Review Form be filed. No formal determination would made by DHR until that time.

[Note: After the meeting, McFarland Johnson submitted the RPR form, which was signed with a No Historic Properties Affected on 1/11/11].

Brentwood, X-A000(918), 15277
Participants: Harriet Cady (kd4318@yahoo.com); 463-9727); Donald Wilson; Daniel Musso; Nancy Mayville, NHDOT

Harriet Cady and Donald Wilson requested the meeting with NHDHR to present their concerns with the Town's proposed actions to Mr. Daniel Musso's land. The Town is proposing to replace the Crawley Fall's Road Bridge (073/065) over the Exeter River. Donald Wilson provided a brief history of the land and Mr. Musso's ownership rights. He established that the original grant for the land was recorded in 1652, granting permission to build a mill on a 3-acre parcel. In 1868, the Musso deed was recorded, and the description lists the owner as having ownership on both sides of the river and rights to a sluiceway installed in 1815.

H. Cady added that the Town attorney has on file a note that the road agent filled in the sluiceway in 1941 without the landowner's permission. D. Musso would like to have the sluiceway recognized, and a flow of water reestablished so that he can rebuild a mill. H. Cady pointed out that the current bridge plans do not take into consideration D. Musso's existing mill rights, granted in 1868, nor do the plans acknowledge D. Musso's ownership of land on both sides of the river, particularly the eastern bank. She added that this topic has been discussed at length with the Town, and D. Musso has asked the Town and Hoyle Tanner (consultant hired for the bridge replacement) to add these acknowledgements to the plans. However, D. Musso has not been successful.

Nancy Mayville explained that the bridge in question is a town-owned bridge with requested funding from the NH Municipally Managed Bridge Program. Although the DOT is managing the money, the Town is managing the project, and ownership issues are typically locally resolved. It was also noted that Hoyle Tanner is currently undergoing a redesign of the proposed bridge replacement because the bridge no longer needs to be as wide as originally designed. The fire station was relocated. It was noted that the archaeologist did not specifically examine the location of the former sluiceway.

N. Mayville suggested that a meeting be set up with the DOT, the Town, Hoyle Tanner, and concerned parties. This meeting can take place while the redesign of the bridge is on-going.. She suggested that Mr. Musso submit the documentation presented at today's meeting. H. Cady asked that N. Mayville request the meeting when the plans are complete.

Londonderry (no project numbers):
Participants: Participant: Larry Keniston and Jerry Moore, Bureau of Rails and Transit, Matt Urban, NHDOT

Larry Keniston presented the Bureau of Rail and Transit's plan to replace a buried and collapsed 3' x 3' stone box culvert along the Manchester & Lawrence Railroad corridor in Londonderry. The existing culvert, potentially the original stone box constructed in the 1840s, is located about 100 feet north of the point where Verani Way turns into the Verani Development.

L. Keniston explained that the Department proposes to restore the original flows through the railroad embankment by constructing a 60-inch concrete culvert. The railroad maintained the existing 3’ x 3’ stone box culvert against beaver activity and sedimentation from the mid 1800s until some time before the tracks were formally abandoned in 1986. In the years since the abandonment of the railroad, development in the area below the culvert (V&F Investments) filled in much of a floodplain area that had been a receiving area for sediments and wood from the watercourse flowing through the culvert. The downstream fill confined the stream below the culvert to a narrow channel, which has over the last 50 years filled with 4 feet of sediment at the existing stone box culvert outlet. The sediment has now completely buried and blocked the stone box culvert both upstream and downstream. The top of the stone box culvert outlet header and a trickle of water bubbling up from underground at the outlet are the only pieces of evidence left indicating the location of the original stone box.

The existing railroad embankment profile averages about 10 feet above the floodplain surrounding the brook and effectively acts as an 800-foot long dam to upstream waters. Flood waters would overtop the embankment except that after rising just over 5 feet, there is an alternate channel that runs along the east side (upstream side) of the railroad corridor where the water can breach a height-of-land and exit the area.

In 1988, the Department acquired the available portions of the existing culvert and related railroad embankment. The acquisition was made in the public interest in order to preserve the railroad corridor for possible future reuse as a railroad, and to allow recreational use in the interim. The owner of the adjacent property east of the railroad embankment, Charlie Evans, has registered complaints since 2004 about the blocked culvert and the associated perpetual flooding on his property. The additional 5 vertical feet of water elevation has resulted in several acres of perpetually flooded land on his property. The flooding is a relatively recent phenomenon as evidenced by dying trees in the impoundment area.

L. Keniston noted that the Department has other similar situations with failed culverts along the roughly 250 miles of state-owned abandoned railroad corridors. Since the abandonment of the railroads, there has been some challenge implementing an adequate funding mechanism for railroad culvert maintenance. In some cases, the culverts become permanently blocked and the railroad embankments function as man-made dams holding back perennial impoundments. Besides the resulting flooding to upstream property owners, the impounded water causes structural harm to the embankments. Even if there isn't an overtopping of the embankment followed by a catastrophic washout, the railroad embankments were not designed for perpetual inundation. The steep slopes slough away and piping through the embankment soils slowly weaken and progressively collapse the embankments. The Department desires to preserve the integrity of these embankments as corridors for potential future rail use or as corridors for bicycle and pedestrian trails.

Many of old stone boxes along the Manchester & Lawrence railroad corridor throughout Londonderry are heaving, collapsing, clogging and experiencing severe sedimentation. The Evans-Verani culvert may have been extended upstream about 50 years ago with very poor construction in order to provide a woods road access. This extended portion of the culvert is now totally collapsed and buried under water, sediment and wood. The middle of the original stone box culvert may have been additionally damaged during the AT&T cable installation several decades ago as a result of the AT&T cable construction disturbance. For the Evans-Verani culvert, AT&T

constructed their cable right in the embankment at the stream crossing and placed their cable up and over the original stone box culvert.

In order to be a good neighbor and avert potential litigation in the matter, the Department attempted to remedy the situation in 2005. The Department proposed to install twin 24-inch plastic culverts. Prior to the construction, the Department believed that AT&T had installed their cable below the original stone box culvert. Unfortunately, it turned out that the AT&T cable had been installed above the original stone box culvert. Since both AT&T and the contractor on the site were unprepared to expose, support and relocate the AT&T cable, the new 24-inch pipe invert was forced about a foot above the AT&T cable and 5 feet above the original stone box invert elevation.

Now that the Department has an accurate understanding of the actual depth of the AT&T cable, the Department proposes to construct a 60-inch culvert (partially buried) to produce a natural bottomed channel at the location of the existing stone box. This time, AT&T and the Department will be prepared to expose, support and relocate the AT&T cable as necessary.

The Department proposes to construct the culvert coincident with the invert of the collapsed and buried stone box culvert for several reasons. First, the AT&T cable is likely to have the most flexibility at the location of the original stone box since the cable probably was directed toward the surface in a “hump” as the cable mounted the original stone box. Any cut and splice of the AT&T cable would be prohibitively costly. Second, the location of the original stone box makes the most sense from a stream continuity perspective. Third, the proposed 60-inch culvert will be adequate to accommodate water, sediment, and wood and will be maintainable. The 60-inch culvert will, moreover, accommodate otherwise restricted aquatic wildlife passage through the railroad embankment. Finally, constructing the invert at the elevation of the original stone box invert will be effective at reducing perpetual water levels while increasing flood storage capacity on the Evans property to their original design levels, thereby negating any potential culpability of the Department.

Linda Wilson suggested that, in order to conserve limited railroad funds, the owners of V&F Investments be asked to participate in the construction. Larry responded that V&F had little incentive to participate. The Department received a Right of Entry from the V&F owners in 2005 and hopes to get another right of entry for proposed culvert construction and the removal of sediment in the outlet channel. L. Wilson suggested that the Londonderry Conservation Commission be notified in order to see what, if any, “ex-post facto” treatment measures V&F may need to fulfill. L. Keniston responded that the upstream property owner’s patience is waning, and it would be difficult to predict how much additional time the inquiry to the Londonderry Conservation Commission would cost. Nevertheless, the Department will look into the possibility of securing V&F’s financial participation in the project through the Londonderry Conservation Commission under ex-post facto treatments as per L. Wilson’s recommendation.

Laura Black noted that at least one culvert impacted by the I-93 Exit 5 project just to the south (across Independence Drive) appears to have been constructed with quality craftsmanship. J. Edelmann produced a photograph of the inside of the culvert. Larry responded that the culverts visible to the north along Clark Brook appeared to be of a more marginal construction than the culvert shown in the picture. It was noted that Lisa Mausolf’s area form of the Manchester-Lawrence rail line found the culvert to be not extant

Edna Feighner asked how we knew that the culvert was collapsed, since the culvert is buried. L. Keniston responded that a small portion of the outlet was visible in 2005, when the Bureau made the first attempt at remedying the upstream flooding situation. At that time, the engineer recalled earlier observations from witnesses that the inlet side of the culvert had collapsed. Removal of the culvert is necessary since any portion of the culvert intact today will tend to leak embankment soils into any remaining cavities.

Based on this presentation, E. Feighner indicated that there would be no adverse effect to archaeological resources. E. Feighner requested that pictures be taken of the existing stone box culvert if it proves to be extant, during excavation. L. Keniston agreed to ensure that the contractor would provide photos of any extant stone box culvert. L. Black added that no integrity appears to be remaining for the stone box culvert, therefore non-contributing to the railroad resource, and would result in a no adverse effect to the rail line.

January 13, 2011

Lebanon, X-A000(141), 13951
Participants: Jon Evans, and Alex Vogt, NHDOT

Jon Evans began by giving a brief recap of the project. This project involves the replacement of the US Route 4 Bridge over the Mascoma River and Northern Rail Trail in Lebanon, NH. The project also includes the reconstruction of the US Route 4/NH Route and 4A intersection just to the south of the bridge. This intersection was originally designed as a roundabout. However as a result of comments received during the public hearing, the Department has revised the design to include an updated "T" style intersection.

The existing US Route 4 bridge is a Deck Plate Girder Bridge constructed in 1930. A new bridge is proposed to be constructed on the upstream (east) side of the existing bridge. The Department has prepared a Draft Environmental Study/ Programmatic 4(f) Evaluation and is in the process of preparing the final documentation for the effort.

To mitigate for the removal of this historic structure, the Department has prepared and submitted a NH Historic Property Documentation Form. The Department also plans to market the structure for sale prior to removal. J. Evans and Alex Vogt noted that for traffic control purposes, the existing bridge would need to remain in service until the new bridge has been constructed. This will require the structure to be marketed for sale under the condition that it cannot be obtained until the new bridge has been constructed. He additionally noted that the railroad corridor will be returned to its current configuration after construction.

J. Evans also noted that the Department is aware that there is a known archaeological site located between the rail-trail and the Mascoma River to the west of the project area. This archaeological site is well outside the existing project area. He noted, however, that the Department is working on the final drainage plans at this time. It is not anticipated that the drainage design will impact the archaeological site. If changes during the final design could potentially impact this or any

other potential archaeological site, the Department will review such potential impacts with NHDHR.

Linda Wilson signed the Memorandum of Agreement detailing the project mitigation.

Hudson, X-A000(348), 14408
Participants: Gary Webster (gwebster@hudsonnh.gov) and Bernie Manor, Town of Hudson; Jonathan Halle, Warren Street Architects; Peter Michaud, DHR; Bob Hudson, DOT

The meeting discussed the findings of Anthony Booth's archaeological investigation on the proposed utility impacts needed for the location of the train depot. The artifacts that were found by A. Booth were deposited with the Benson's Committee, Town of Hudson. It was noted that DHR should notified before the disposition of the artifacts at a location other than Airport Road. Additionally, an archaeologist also needs to monitor the excavation in the vicinity of the new foundation, which is the location of a former 19th century dwelling. It was also noted that the archaeological report inaccurately states that there is nothing at Benson's that is National Register eligible. It was decided that the report did not have to be edited, however it would be noted, and corrected in future documents.

G. Webster presented the new location of the train station, which was located and approved by the Benson's Committee, which is similar to an earlier layout. They had turned it almost 90 degrees from the original plan that faced Kimball Hill Road. The committee felt that there would be more room in front of the station, the location would not disturb the existing island with a cheery tree, and it would permit a walkout on the end of the station to provide access to the basement. Peter Michaud noted that beyond what the committee requests, the project needs to meet the Secretary of the Interior's Standard for Rehabilitation. He needed to look at the proposed location in relationship to the new setting. He requested to see any new plans at least two weeks prior to the next meeting to provide sufficient time for review. In the future, copies will be sent to Peter prior to any meetings.

G. Webster noted that the town's current intent was to move the station on a foundation, replace the roofing, and add utilities to the site. The next discussion reviewed the shingles that could be placed on the roof. It was agreed that three-tab shingles would be acceptable. The town intends to place temporary rolled roofing over the buildings for the winter. However, P. Michaud asked that specs be provided to his office for review. It was noted that gutters are not currently on the building, and the Town did not find it necessary to install them in the future. Based on the information presented, P. Michaud agreed that gutters did not have to be installed, however additional information on moisture management would have to be presented to DHR. P. Michaud also noted that the Town was not required to replace features that are missing. The town does plan to replace the other eave treatments.

We did discuss the funding for the station since Warren Street Architects developed a new estimate as part of the phase I engineering study, and the cost for the project has more than doubled. It limits what the town can do with the money we have to move the station. Peter Michaud did mention that a grant of up to $10,000.00 for renovations through the LCHIP moose plate revenues might be available. Robert Hudson, NHDOT, did mention that the town could

apply for the entire amount to finish the station at the same 25%-75% match that we have now. I told him that I would go to the next selectman's meeting to discuss the funding for the entire station before our next meeting with DHR. G. Webster agreed to have all materials and plans ready for the next meeting in order to start phase II of the engineering study.

New England Central Railroad, Track 1, Vernon-St. Albans, VT Upgrade
Participants: Jed Merrow, McFarland-Johnson, Inc. (jmerrow@mjinc.com); Ron Bocash and Jonathan Sturges, NECR; Craig Krause, Atlas RR Construction; and John Robinson of NHDOT Rail

Jed Merrow introduced the project and went through a list of project components handed out by J. McKay. The railroad corridor between Vernon and St. Albans, Vermont is being rehabilitated. There are 24 miles of the corridor in New Hampshire between North Walpole and Cornish. It is noted that the Sullivan County Railroad line is eligible for the National Register. NECR also handed out a green folder with information on proposed work. Project components and meeting discussion are described below:

1. Replace jointed rail with continuously welded rail: no issue
2. Replace cross ties: no issue
3. Install additional ballast: no issue
4. Clean existing ballast: no issue
5. Rebuild certain turnouts (listed in green folder) with new switches and other hardware: This is regular maintenance and will have little effect on the appearance of the turnouts. Linda Wilson suggested contacting local historical groups to see if they have interest in any of the old hardware. NECR agreed to contact local groups and to direct them to contact the scrap contractor directly (Unitrac).
6. Upgrade grade crossing warning devices: New gates will be added to two crossings that currently do not have gates, and to replace one existing gate system. "Houses" that hold equipment at crossings will be replaced. Most are 6 feet by 6 feet and about 10 feet tall. [Discussions after the meeting revealed that some of the house footprints will be slightly larger than the existing house footprints, and one house may be relocated. NECR will coordinate with NHDOT and NHDHR on historical resource clearance at these sites.] Old bulbs were previously replaced with newer LED lights. DHR would like photos of existing and proposed structures and may have comments on them. NECR will provide photos.
7. Rebuild at-grade crossings: This involves removing the existing material at railroad/roadway crossings to a depth of 2'-3, laying fabric down, installing drainage structures as needed, installing ballast, and re-paving the crossing. All work is expected to be within the lateral limits of ballast and no deeper than existing ballast fill. Edna Feigner noted that land below the fill at these crossings is sensitive for archeological deposits. If excavation does exceed this depth, NECR will employ an archeological monitor to oversee excavations. She requested a list of crossing changes.
8. Bridge maintenance and upgrades for five bridges: Most work is relatively routine maintenance like replacing ties, walkway planks, walkway handrails, and patching concrete. The 1848, dry laid stone arch bridge in North Charlestown (mile post 157.75) is a contributing element of the National Register-listed North Charlestown Historic District. Part of the timber mat under the arch is scoured away, a large scour hole has formed, and

wall stones have come loose. Within the scoured portion of the structure, existing broken timbers will be cut back to the wall; concrete will be added under, along, and a few feet up the wall; the floor or streambed within part of the structure will be replaced with shot rock and concrete; and stone will be placed at the outlet to prevent future scour. Access has not been determined. Linda Wilson noted that a cultural resources specialist would be needed to document the structure using a NH Historic Property Documentation Form prior to the beginning of work. Edna Feighner asked for photos of all existing bridges where work is proposed, with a description of what is proposed. DHR would also like to review design plans and proposed access areas for the stone arch bridge when they become available.

9. Access and staging areas: Two areas in New Hampshire are identified as staging areas: sidings in Walpole and Claremont. These are not a concern as long as access and other work stays within existing areas of disturbance, for example roads, sidings, rail embankments, etc. E. Feighner requested that these locations be placed on a USGS map and sent to DHR for review.

DHR then requested the following materials: photographs of bridges, housings and cabinets, and handrails and planks; USGS mapping of access and staging areas; and documentation of the stone arch bridge by an architectural historian specialist. An archaeological monitor may be needed for some of the work depending on the depth of disturbance. Contact local historical societies to find if they have interest in discarded railroad equipment.

Dublin 15684 (no federal number)
Participants: John Byatt (johnb@cldengineers.com) and Shannon Beaumont, CLD; Sterling Abram, Town of Dublin

This was the first meeting in regard to this project. The following items were discussed:

The project is the replacement of the Charcoal Road Bridge over the Charcoal Brook. The existing bridge is an 18-foot long single span, steel jack arch bridge on cast-in-place concrete abutments. The bridge was built in 1976 replacing an older bridge in its entirety in the same location. The construction date of the older bridge is unknown. The existing bridge is load-restricted to 10 tons and the steel girders are rusted and have section loss in some areas. The abutment and wing walls are cracked, and one wing wall shows signs of settlement.

The Town would like to replace the existing structure in its entirety. The new bridge span will be determined using a hydraulic analysis. The bridge will be widened several feet and the roadway may be slightly realigned resulting in approximately 500 feet of approach work. The majority of the excavation will be within the limits of the existing bridge abutments and wing walls. There are no visible foundations or other building remains adjacent to the bridge site.

Sterling Abrams presented old photographs of the construction of the existing bridge and the older bridge it replaced. He had spoken to the builder of the existing bridge, who provided the photos, and he confirmed the bridge was constructed in 1976. There is also a new photograph of the existing bridge with the date of construction and the builder's name marked on an exterior steel beam. It was noted that the DOT records show the construction date as 1938. Sterling also

presented a historical map, which showed the bridge area with no historic buildings in the immediate vicinity.

The group determined that there are no historic or archaeological impacts caused by the project. No further action is required, and a No Historic Properties Affected memo can be prepared and signed.

Rumney (no project number)
Participants: Christine Perron, Doug Gosling, Tony Weatherbee, NHDOT

The project involves the replacement of the deck and concrete rail of a 1937 I-Beam Concrete bridge that carries Quincy Road over Stinson Brook. The project will be carried out by the Bureau of Bridge Maintenance and was discussed at the December Cultural Resources Coordination meeting.

Tony Weatherbee, Bridge Maintenance, started the discussion by explaining that Bridge Maintenance has taken a closer look at the bridge since the December meeting, and it has been determined that the bridge is located on a curved section of Quincy Road. The existing deck and rail are straight. Typically, Bridge Maintenance would match new rail to the curvature of the roadway, which would be impossible to do with concrete rail. A photograph was shown of aluminum bridge rail on a curved roadway. Doug Gosling, Bridge Maintenance, explained that putting a straight section of rail along a curve has been done in the past but it is not preferred. He said that in the case of this bridge, the rail is actually in good shape but the deck is in poor condition.

Laura Black asked why it would be necessary to replace the rail if the purpose of the project was to replace the deck. D. Gosling explained that the existing rail is cantilevered beyond the bridge so that removing the deck requires removing the rail as well. It is really all one structure or unit, and the rail cannot be saved when the deck is removed.

L. Black said that she reviewed the Area Form completed for the Groton Wind Project and bridges were not reviewed as part of that study.

D. Gosling said that Bridge Maintenance is in the process of replacing concrete rail on a concrete arch bridge in Haverhill on a straight section of road. This is an example of a new concrete rail system being installed, and there are other concrete rails on older bridges throughout the state. L. Black provided a printout from a webinar that discussed a project that replaced concrete rail on a bridge. D. Gosling pointed out that the bridge and concrete rail shown in the webinar was very much like the one they were installing on the Haverhill project.

Edna Feighner asked about the setting of the Rumney bridge. D. Gosling said that it is on a rural road just outside the Village of Rumney. E. Feighner added that the replacement rail should be appropriate for a rural setting, and perhaps concrete rail would be more appropriate than aluminum rail. D. Gosling replied that rail systems are always changing and he has seen aluminum rail in all types of settings.

E. Feighner asked what the town wanted. Christine Perron explained that the Chair of the Rumney Planning Board contacted her and wanted to learn more about the project. She also called the President of the Rumney Historical Society and explained the project to him. He did not have any concerns with the type of rail that would be installed. Bridge Maintenance typically does not hold public informational meetings for proposed work, but D. Gosling commented that his Bridge Superintendents normally discuss the project impacts with abutters and others in town. He added that Bridge Maintenance would not want to do something if the town is opposed to it, and E. Feighner said that DHR would also like to see the Town get what they want.

Linda Wilson said that the concrete rail on this bridge is a character defining feature and it is how you know that the bridge is older. D. Gosling commented that the concrete rail is not often seen on this newer IB-C type of bridge structure.

L. Wilson asked for information on the Department's washing and oiling program. D. Gosling explained that the Bureau of Bridge Maintenance washes its bridges annually and ideally oils the bridges every other year; however, it often ends up being done every three years. The good condition of the rail on the Rumney bridge is likely due to frequent oiling, and also to the limited amount of salt on this rural roadway, less than on busier roads. Linseed oil has been used over the last 30 years but is now being replaced with a similar performing product, siloxane, which is VOC compliant with the new lower VOC regulations. L. Wilson commented that the washing and oiling program is something that DHR has always advocated.

L. Black reiterated that Bridge Maintenance needs to find out what the town wants. If the town wants concrete rail, this option will be fully explored. If concrete rail is chosen for the project, then no NH Individual Inventory Form will be necessary for the bridge. If the town prefers the aluminum rail option, then an Inventory Form will need to be prepared. L. Wilson added that new concrete rail would result in No Adverse Effect. D. Gosling said that he would have someone from his Bureau talk with the town officials to discuss the project plans and solicit their input. The project would be discussed at a future meeting once a course of action is determined.

Manchester, X-A000(907), 14412A
Participants: Sean James, Hoyle Tanner (sjames@hoyletanner.com); Jessica Fleming, City of Manchester; Tom Jameson, NHDOT

S. James, P.E., SECB from Hoyle, Tanner presented this TE-funded project that is the fourth and final phase of converting an abandoned rail line to a paved multi-use trail in the City of Manchester. The project extends from the terminus of the Phase 3 trail section at Electric Street over the Piscataquog River and continues to the Goffstown Town line. The typical trail section will include a 10' wide paved section with 2' shoulders bordered by a wood rail. The rail section will be built up from the existing ground, and it is anticipated that very little to no excavation of the trail bed will be required. Provided that the trail section is within the existing disturbed area and the excavation in minimal, there were no archaeological concerns raised.

Three bridge options at the Piscataquog River crossing are being evaluated; each of which retains the existing abutments and wing walls. Option 1 includes rehabilitation of the existing rail trestle with the addition of a wood or concrete deck and railing. Option 2 is similar to option 1 except

that one or more of the existing bents would be removed to reduce the amount of debris stopped by the trestle. This option would also include new steel members spanning over removed bents. Option 3 includes a complete removal of the timber trestle and installation of a new, single span metal truss bridge. The exact bridge railing to be used has not been selected but it is not anticipated that it will include tall 'cyclone' fence.

J. Flemming, E.I.T., LEED AP from the City of Manchester explained that Options 2 and 3 are being considered due to the cost required by the City to remove debris from the trestle that collects in the spring or after flooding. Depending upon the amount of debris, the removal can include over 30 City employees from Public Works and the fire department.

Each option includes stairs at the southeast quadrant of the bridge to provide access to boat-launch parking area. There was some discussion of how this would be viewed in terms of ADA compliance. There is another paved route that could be taken from the boat launch parking lot to the bridge as well as another parking area near the ice arena, which leads to the bridge so close-by alternate routes are available.

S. James described the available documentation for the trestle bridge. Only a single drawing of the bridge is known to exist. A determination of eligibility (DOE) report was completed for the rail corridor and three remaining bridges in 1995. The conclusion of the report was that the corridor and bridges were not eligible for National Register. L Black explained that NHDHR typically prefers to review DOEs if they are over 10 years old and in this case it is likely that the trestle bridge over the Piscataquog would be found eligible.

It was generally agreed that no additional documentation would be required for Option 1 provided that the work retains the trestle to the best extent practicable. If Options 2 or 3 are pursued an Individual Inventory Form would then be required. Depending on the treatment, Option 2 could be no adverse effect. In addition to the inventory form, Option 3 would require mitigation of the adverse impacts and the preparation and execution of a MOA. E. Feighner added that there would be not be archaeologically sensitive areas if the project is staying within previously excavated areas.

Sandwich, 16014 (no federal number)
Participants: Bob Durfee, Dubois-King (rdurfee@dubois-king.com)

Bob Durfee provided an overview. The scope of the project is to rehabilitate Bridge No. 203/138 on Quaker Whiteface Road. The bridge superstructure (I-beams/concrete deck) was constructed in 1953; the substructure (concrete abutments and wing walls) is estimated to have been constructed in the 1930's.

Rehabilitation will include replacing the existing superstructure (18 feet wide curb to curb) with a new (and wider) steel stringer/pre-cast concrete deck panel superstructure (22 feet wide curb to curb). The existing substructure will be repaired and reused. Riprap will be placed in the river in front of the abutments to address scour. Roadway approaches on each end of the bridge will be reconstructed and paved for 100 feet.

All proposed work occurs within the existing 3-rod Right-of-Way (assumed) that is defined by existing stone walls parallel to the roadway. Stone walls will not be disturbed.

The Committee anticipates that there will be no historic properties affected and that as defined the project did not include archaeologically sensitive areas.

The Committee required that an inventory form be completed for the existing bridge. It is highly recommended that a historical architectural consultant be retained to do this work. Documentation will include completing a reconnaissance Individual Inventory Form, black and white digital photographs of all aspects of the structure, a sketch plan or design plan showing the direction of views, location map, a photographic description, and a CD containing digital photographs. Documentation is to be submitted to the NHDOT for review. NHDOT will forward copies to DHR and the Sandwich Historical Society.

A Memorandum of Effect will be executed (signed) once the documentation has been submitted and approved by NHDHR/NHDOT.

****Memos/MOA's**: New Castle 15895; Seabrook Railroad Bridge; Benson's Senior Center; Westmoreland-Walpole 15749; Bath X-A000(901), 14439; Bedford (Wallace Road Bridge); Manchester (Traffic Signal Improvements)

Submitted by: Joyce McKay, Cultural Resources Manager
Jill Edelmann, Cultural Resources Assistant

http://www.nh.gov/dot/org/projectdevelopment/environment/units/technicalservices/crmeetings.htm