BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting
DATE OF CONFERENCES: April 4 and 23, 2013
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Sheila Charles
Bob Davis
Jill Edelmann
Cathy Goodmen
Tom Jameson
Jerry Zoller
Amy Lamb
Jim Marshall
Lee Rand
C.R. Willeke

Federal Highway Administration
Jamie Sikora

NHDHR
Laura Black
Dara Dike

City of Concord
Martha Drukker
Ed Roberge

CHA
Rob Faulker

HDC
Richard Casella

HEB Engineers
Jason Ross

Consulting/ Interested Parties
James Garvin
Audra Klumb
Ray Schweiker

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

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

April 4, 2013 1
Stark, X-A001(157), 20224 1
Concord, 12004 BRF-X-5099(021) 3
April 23, 2013 7
District 3, Statewide Guardrail, 24863, X-A002(978) 7

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

April 4, 2013

Stark, X-A001(157), 20224
Participants: Jason Ross, H.E. Bergeron; Rich Casella, Historic Document Co.; C.R. Willeke, NHDOT

Continued consultation and presentation of recommended repair alternatives and preliminary design for the Stark Covered Bridge (115/091) Rehabilitation, Northside Road over the Ammonoosuc River.

Jason Ross of H.E. Bergeron Engineers (HEB) presented the project on behalf of the Town of Stark. This is the third meeting with the Cultural Resources Committee. Rich Casella was at the meeting to discuss the Historic Structures Report that he prepared.

Prior to this meeting, HEB sent copies of the Engineering Study, Historic Structures Report, and Preliminary Design Drawings for the project for the committee to review.

Jason reviewed the proposed rehabilitation items:

- Remove the existing roofing and purlins
- Reinforce the existing rafters
- Install solid plank roof sheathing

- Install new cedar shake roofing
- Remove the existing roadway and sidewalk decking
- Replace two steel stringers, add one steel stringer, and recoat the two remaining steel stringers
- Rehabilitate the existing concrete pier and concrete bridge seats
- Rehabilitate and reconfigure the trusses back into a two span configuration
- Install glulam transverse timber deck and sidewalk beams
- Install longitudinal timber decking with 14' clear roadway
- Install new vertical ship-lapped siding
- Install partially grouted rip-rap around the pier and in front of the abutments
- Apply No-Char treatment to all exposed timbers
- Install dry hydrants and sprinkler system
- Perform electrical and lighting upgrades

Laura Black questioned what the Character Defining features of the bridge are. We discussed that the only original parts of the bridge are the top chords of the trusses and most of the vertical and diagonal truss members. For the most part, these items will be left in place or reconfigured. Rich mentioned that one of the Character Defining attributes of the bridge is that it has been rehabilitated so many times. The bridge is currently functioning as a steel stringer bridge, not a truss.

It was asked what would happen if nothing was done to the bridge. The answer is that the structure would continue to deteriorate and it would eventually collapse. Compression members are not functioning properly and the truss is currently not carrying its own load.

It was asked whether the 1950's work could be considered Character Defining. Since the current configuration has been in place for more than 60 years, it could be considered Character Defining; however some of the work done at that time was not good for the structure and does not necessarily need to be preserved. The timber trusses were not rehabilitated into a two span configuration when a center pier was returned in the mid-20th century and as a result many of the connections are now failing. Many of the timbers used in the rehabilitation were recycled from another structure. The cantilevered sidewalk configuration is not a good detail and is showing signs of failure. The major Character Defining attribute of the 1950's work was that the roadway and traffic loads were supported by an independent steel structure and the timber trusses no longer took these loads.

It was asked if arches could be reintroduced (removed in 1950s), remove the steel stringers, and make the bridge a true Paddleford truss again. It was determined that it would require even more intervention and replacement of historic materials to deal with rot and damage to a point where the bridge could function again as a truss.

It was asked why the load rating of the bridge is being increased to 15 tons and if this will affect the amount of work that needs to be done to the timber structure. Due to the length of the detour, the Town wants to continue using the bridge for its fire trucks, school busses, and snow plows. Since the roadway is independent of the trusses, the load capacity of the steel beams will not affect the timber structure. The timber trusses need to be rehabilitated to hold up their own dead loads and roof loads regardless of how much load the roadway superstructure can carry.

The committee asked us to summarize why this alternate is the Least Invasive to the historic structure. This alternate will have the least impact to the structure because it will maintain the current two-span configuration of the bridge while reconfiguring the failing trusses back into a two-span configuration so that they can support their own and roof loads. The steel beams will continue to support the roadway loads, otherwise more extensive work to historic materials would be necessary. This rehabilitation will correct some poor construction details that were put into place during the last major rehabilitation in the 1950's. The trusses will be rehabilitated to properly support themselves in the current two span configuration. This

work will have less impact than even doing nothing, which would eventually lead to the collapse of the trusses.

The committee determined that the proposed rehabilitation will have "No Adverse Effect" on the historic structure. They asked that a Cultural Resources Effect Memo should be prepared and submitted for the committee to sign.

Concord, 12004 BRF-X-5099(021)
Participants: Robert Faulkner, CHA; Martha Drukker, Ed Roberge, City of Concord; Richard Casella, Historic Document Co.; Cathy Goodmen, NHDOT; James Garvin, Audra Klumb, Ray Schweiker, Consulting/Interested Parties

Continuing consultation, previously reviewed on May 25, 2000; December 7, 2000; January 1, 2002; May 1, 2002; March 13, 2003; January 12, 2006; November 12, 2009; April 1, 2010; October 7, 2012; September 13, 2012; and December 6, 2012. The purpose of this meeting is to confirm that the City has held a Public information meeting and that the City Council has approved moving forward with the online alternative. Discussions would also include mitigation alternatives as well.

Rob Faulkner provided handouts of the Sewalls Falls Road Bridge Project presentation and comments received to date from the public and Consulting Parties which are available at the City's project website http://nh-concord.civicplus.com/index.aspx?nid=426 and noted that the intent of this meeting was to be a continuation of the previous discussions and public process that started with this project back in 1999 even though the preferred alternative has changed from the previous Alternative H to an on-line replacement alternative. Mr. Faulkner continued to provide background information on the bridge and project efforts to date, a summary of recent meetings as part of the public process as well as public and Consulting Party comments received to date.

Jim Garvin (Consulting Party) asked who was managing this project, who the lead federal agent for the project was, and who will report the final findings. Jamie Sikora responded he was the lead federal agent and that the project was being done through NHDOT's Bridge Aid Program with Tom Jameson as NHDOT's LPA Project Manager. Jamie further noted that he felt that this project would likely have a Programmatic 4(f) review. Jim Garvin stated that the project had not gone to the Advisory Council for Historic Preservation (ACHP) for review. Jamie Sikora stated that in fact it had gone through the ACHP as part of the original NHDOT Preliminary Design process with Alternative H as the preferred alternative and were notified of the adverse effect based on that alternative. Jamie added that the project has now evolved in a similar fashion as the Memorial Bridge project where it started out as a rehabilitation project, but later became a replacement project due to the extensive deterioration and rehabilitation needs of the bridge. Jamie further noted that he typically waits on notifying the ACHP until the effects memo has been signed. Jim Garvin followed up by asking if a Programmatic 4(f) review was a less stringent review. Jamie Sikora responded that the review will still be stringent, but the processing time is streamlined for these types of Programmatic Section 4(f) Evaluations as they do not require the Dept. of Interior's review or FHWA legal sufficiency review. Jamie Sikora noted he would send Mr. Garvin and other meeting attendees copies of FHWA Guidance related to the Programmatic 4(f) Evaluation for Historic Bridges.

Following initial comments, Rob Faulkner continued his presentation by providing an overview of the plans of the three alternatives on the board with the On-Line Replacement, Alternative 8, being the preferred alternative that was approved by the Concord City Council on February 11, 2013. Mr. Faulkner noted that the City remained concerned with the structural deficiencies and safety of the truss bridge as well as the highway approach issues. Mr. Faulkner noted that the existing bridge fails to meet the City's long-term development goals for the area. Rob Faulkner reviewed the project decision summary matrix outlining the process of considering alternatives including project impacts (cultural, environmental, and ROW), risk contingency, and costs. Mr. Faulkner concluded with review of the recent public process, a summary of public comments and consulting party comments received by the City to date, and outlined the next steps in the project.

Ed Roberge provided a brief summary of the project noting that CHA was retained by NHDOT in 1999 to do preliminary engineering on what was a replacement project at that time. The project evolved through a public review process initiated by the City to a rehabilitation project (rehabilitated truss to carry northbound traffic; build an additional bridge to accommodate the southbound lane, and re-do all the piers/abutments). However, consensus on the rehabilitation alternative was made prior to any detailed inspection or load rating of the bridge being performed. Ed Roberge noted that in 2010, a structural inspection and load rating analysis was performed after which the City expressed concerns with the rehabilitation option; specifically that the majority of the structural members would need replacement or strengthening, the portal openings and rail systems would require modifications to the extent that members would need replacement including the intermediate sway bracing and the entire rail system. Mr. Roberge added that all of this is after fully replacing the bottom chords, decking, center pier and abutments. He further noted that while HDC's review did find that the bridge could still be considered eligible for listing in the National Register (NR) of Historic Places after rehabilitation, it still did not address the City's biggest concern of structural stability, safety, and longevity of the truss bridge and felt that the rehabilitation of the bridge is not sustainable, does not meet long term goals of the City and that the bridge needed to be replaced and not rehabilitated.

Jim Garvin noted that he was aware of a Memorandum of Agreement (MOA) between NHDOT and SHPO from a previous project on preserving High Pratt trusses although he did not know the specific details or commitments of that agreement. Rich Casella noted that the MOA was to develop a Management Plan for preservation and not for the actual preservation and further noted that the draft plan prepared for the DOT did not include the Sewalls Falls Bridge because project plans at the time were to rehabilitate the bridge. Ed Roberge noted that City Council was careful in their decision to not rely on State Bridge Aid Funds for the long-term maintenance of this bridge in the event funding was not available.

Jim Garvin referenced the Adverse Effect Memo that was signed in 2010 for the previous project which included the removal of the stone pier and the southern abutment. He further stated that CHA's report noted that the bridge could be rehabilitated to carry legal highway loads and he therefore contended that the rehabilitation alternative may be considered a reasonable alternative under section 4(f). Jamie Sikora noted that "prudent and feasible" only applies to No Adverse Effects, and not adverse effects, so it wouldn't apply in this case. Ed Roberge again indicated that the previous selection of the rehabilitation alternative did not include the engineering data reported now and if it did, that alternative would not likely have been advanced. Jamie Sikora noted, with the latest information, the alternative analysis needs to be documented. Jamie also noted that he

commended the City in its effort to date and he would email a copy of the Section 4(f) information to the meeting attendees.

Jim Garvin requested that Rich Casella summarize his report on the effects of the rehabilitation on the historic significance of the bridge. Rich noted that his report was an opinion that the bridge would still remain historically significant. He further stated that this was his professional opinion and based on the conceptual level of rehabilitation design that was discussed with CHA and not based on hard design. Jim Garvin also noted that MaryAnn Naber should be involved in the project, as it is the SHPO Officer that decides whether an alternative is historic or not, not Rich Casella. Martha Drukker and Jamie Sikora both noted that it was in fact FHWA that makes that determination.

Audra Klumb (Consulting Party) asked if the design criteria could be reduced to keep the bridge: reduce load rating, reduce speed, and make travel lanes narrower, which would also help control sprawl. Ed Roberge responded that because the project uses federal funds, adherence to federal design standards is required so reduction in those design standards would not be acceptable. Audra then asked, “No exceptions?” While Ed responded that there couldn’t be any, Jamie Sikora noted that design exceptions are possible, although they have to meet certain criteria to be approved.

Martha Drukker noted that based on the City’s experience in working through similar Section 106 and 4(f) processes since the 1980’s, the USACOE provides guidance for project alternative analysis which needs to be based on a Least Environmentally Damaging Practical Alternative (LEDPA) basis. Based on that analysis, Martha noted that historic resources and their significance is only one piece of a project’s total impact analysis. With the exception of the removal of the bridge, the online replacement alternative has the least impacts to all other resources except the historic resource. She continued to note that none of the alternatives have changed through the project development process, but that additional engineering has since been done. She also noted that had the extent of rehabilitation on the bridge been know previously that it was highly likely that the rehabilitation option would not have been considered further.

Ed Roberge stated that the City Council is aware of the historic significance of the Sewalls Falls Bridge – in fact one of its champions, Councilor Shurtleff, expressed that concern to City Council at the February public meeting. Ed Roberge noted that Council concurred with the safety concerns of the existing bridge and specifically addressed the sustainability in terms of costs to rehabilitate, construct, and maintain the bridge. Ed Roberge noted that the City of Concord has carefully and diligently reviewed the alternatives and concludes that it is not practical to rehabilitate the bridge. He further noted that the City Council’s decision included all of the public comments received. Laura Black noted that one of the most important parts of the Section 106 process is formal public involvement. Open meetings encourage passive involvement in the project, where the Section 106 process allows active involvement. Ed Roberge concurred and noted the public process completed by the City to date. Martha Drukker noted that this process is a continuation of the public process that started back in early 2000’s which led to the previous Adverse Effect Memo. It was acknowledged that the shift of the intent of the project from Alternative H to Alternative 8 was dramatic enough that the Consulting Party process should have been opened back up to potential parties who may not have had concerns or had wanted to participate when the assumption was that the city was moving forward with a rehabilitation option.

Jim Garvin asked if there was an Environmental Impact Report. Martha Drukker responded that CHA is in the process of updating the previous report that was prepared by NHDOT in 2010. Responses and input from the regulatory agencies as well as proposed mitigation still need to be provided. The City wants to submit the completed documents, including mitigation options to minimize the review process. The updated study references CHA's Re-evaluation Report, dated 11/28/12.

Jim Garvin noted that as far as 4(f) is concerned, the City's preference does not trump the Secretary of Transportation 4(f) laws. Jamie Sikora noted that this meeting was to discuss the Section 106 review process associated with the project. FHWA is the agency with jurisdiction in determining the sufficiency of analysis developed for compliance with Section 4(f) and therefore is aware of the Section 4(f) process and related requirements. Roy Schweiker (Consulting Party) said that he would like to hear a discussion on mitigation options, which could help determine the preferred alternative. Jim Garvin asked what NHDOT has pledged to do regarding preservation of High Pratt trusses and noted VTrans' efforts of storing used bridges. Jill Edelmann noted that NHDOT does not have any intention of creating or maintaining a bridge graveyard. This issue has been explored in the past, and the Department has concerns with liability, lead-based paint contamination, and maintenance costs. The Department has been willing to store bridge members in the past, with the understanding that the storage is temporary and disposal date assigned.

Jamie Sikora suggested that a Preliminary Categorical Exclusion and Programmatic 4(f) document be submitted. Jamie Sikora outlined the next steps to keep this project moving forward:

1. Issue a Preliminary version of the Environmental Study and Programmatic 4(f) Evaluation Report for review (post to project website); Jamie Sikora would also provide a copy of this documentation to the ACHP so they might determine if they'd like to be involved as a consulting party during the remaining Section 106 review process for the project
2. Issue draft Memorandum of Effects (post to project website)
3. Pratt Truss Management Plan. There needs to be further discussion as to whether or not this draft document can be made public and posted to project website;
4. Identify Public Comment Period (30 days from document posting);
5. Attend the May 2013 Cultural Resource Review Meeting to review the draft environmental documents and discuss mitigation options;

Jim Garvin asked if the project information was easy to find on the City's website. Ed Roberge noted that it is listed under the Department of Engineering, City Projects. (www.concordnh.gov).

Jerry Zoller stated that he was speaking as a Concord resident and Sewalls Falls Bridge neighbor and not as a representative of NHDOT. Mr. Zoller noted that he was disappointed with the delays in the design process. He noted that he never understood why DOT did not do load rating/inspection prior to the 2004 meeting. He agrees that the rehabilitation of the bridge will be a "bottomless pit of costs", though he appreciates the intent to preserve it. Mr. Zoller agrees with the online replacement option, as a member of the public and applauds the City for preferring Alternative 8. He further appealed to the historic review process to stop delaying the project because time is of essence and the bridge is only deteriorating. Tom Jameson emphasized that Mr. Zoller was speaking as a Concord resident and not a DOT employee related to the project.

Laura Black noted that it was important that all parties follow the Section 106 Process and that the Consulting Parties can be actively involved. This situation underscores the importance of starting the public input process early and throughout the entire process. Rob Faulkner stated that if we were just starting this as a new project 16 months ago we would have engaged the public much more to review alternatives. However, as identified by the project team at the September 13, 2012 Cultural Resource Review meeting, this was seen as an amendment to the ongoing process which had a significant amount of public involvement based on new information and not as an attempt to circumvent the system. Roy Schweiker disagreed with seeing this as a minor amendment and noted that if you read newspaper articles dating back to original meetings, there were 2 goals: to save the bridge and to maintain traffic. So Alternative 8 is not what the public originally wanted but also indicated that the new engineering information concludes significant structural impacts and is most interested in discussing mitigation.

It was agreed that the group would meet at the May Cultural Resource Meeting following review of the draft Environmental Study and Programmatic 4(f) Evaluation Report and supporting documentation.

April 23, 2013

District 3, Statewide Guardrail, 24863, X-A002(978)
Participants: Jim Marshall, Bob Davis, Lee Rand, Amy Lamb, NHDOT

Jim Marshall provided an overview of the statewide program that allocates approximately $1 million per year to update outdated cable guardrail and end units, bringing it up to current safety standards. Statewide 24863 is the 2013 portion of the program.

Bob Davis then described the specifics of the project and the locations to be reviewed for cultural resource impacts:

The Tilton location includes about ½ mile of guardrail along US Route 3, starting at the Tilton Causeway and extending northeast towards the Lord Hampshire Hotel. Houses line the northwest side of the road, with Lake Winnipesaukee and access points on the southeast side. The traffic count in this area is approximately 17,000 vehicles per day and the posted speed is 40 mph. The existing guardrail at this location is 60-year-old two-strand cable rail mounted on wooden posts, ranging from approximately 25-27 inches in height. The proposed replacement is a steel post/steel rail configuration that requires less lateral space, but reaches approximately 31 inches in height (5” higher than existing rail). The purpose of the height increase is to accommodate SUVs and light trucks, the norm for today’s vehicles.

There are 5-6 openings in the existing guardrail so that landowners can access their docks across the street. Research has showed that this access is un-permitted. The proposed guardrail would be continuous and close off these openings to improve safety. For there to be openings in the new guardrail “x-tension” system and end unit configuration, a gap of 15’ would be required, and would allow a vehicle to pass through. Additionally, the Department does not want to imply approval of pedestrian crossings by retaining gaps in this unsafe area. There are no crosswalks and no boat launches in this stretch of roadway.

Laura Black commented that removing existing access points is parallel to constructing a fence around a private property and not including a gate. She asked whether it would be possible to post the speed limit at 30 mph since speed exacerbates the safety issue.

J. Marshall responded that a speed study that determines the 85th percentile of travelers' speeds is used to establish posted speeds; posting at 30 mph in this location would be impractical. Jamie Sikora added that enforcement of a lower speed would be an issue.

B. Davis noted that the road has an 11' travel way and lakeside shoulder that is 1' wide, with nowhere to stand to cross over. J. Sikora added that this configuration warrants a guardrail.

L. Black explained concerns, from the Section 106 perspective, about secondary impacts resulting from the extension of guardrail across lake access points:

The guardrail could have an adverse effect by creating a condition that leads to disuse and eventual neglect and deterioration of a property. For example, could the hotel lose business or would a homeowner have trouble finding a buyer if these properties are advertised as "lakefront" properties and no longer have access? From a Section 106 perspective, what is the history of use?

She recommended doing inventories of the potentially impacted properties to determine National Register eligibility. If not eligible, the project can continue from a Section 106 standpoint. If eligible, determine the character defining features, ie. if the property has historical ties to the lake.

J. Sikora responded that the chance a property would be neglected as a result of the guardrail extension is remote. Guardrail has been at this location for 60+ years. Appraisal value would be very similar with or without guardrail, and noted that the added guardrail would not eliminate access to the properties. If the properties in question were noted as having lakefront and/or access to lakefront property, nothing would change in that regard as a result of the project.

B. Davis commented that they are not advocating adding a shoulder due to potential environmental impacts.

L. Black replied that Section 106 is a legal process, and we need to move forward and investigate each property. Public involvement is required as part of the process, and Black recommended offering property owners the opportunity to be consulting parties to gain perspective on use, access, and historic designation of properties. A public hearing may not be necessary but public involvement is required.

J. Marshall described another project where two landowners were given a choice about where to place a single access point, which resulted in a feud. He also noted that the directive from the front office has been to close off all access points for the Statewide 24863 project.

B. Davis described the Gilford NH Rte. 11 portion of the project. The existing rail is a rotting wood rail system, and contains 7 openings. The road is straighter at this location and the posted speed is 35 mph; actual speeds are 40-45 mph. The travel lane is 11' with a 1' shoulder. Property owners initiated the request to replace rail at this location, through consultation with District 3. Existing openings to docks would be closed off, but driveway access in would be retained.

J. Sikora suggested that a Programmatic Agreement be formulated to for future projects. J. Marshall added that there is a need for consistency among situations.

J. Marshall commented that property owners have requested access, but have not been involved in the process thus far. Sheila Charles asked if owners assume that access will be the same as before the project. Lee Rand commented that the Department has the right-of-way and that Route 11 was built in 1918-1920.

J. Marshall asked what the next steps would be. J. Sikora and L. Black recommended inventorying properties to determine eligibility. Jill Edelmann noted that we cannot move forward until we know whether or not this is a historic area. B. Davis asked about the time frame for an inventory and eligibility study and what this means for project scheduling. J. Edelmann replied that a statewide consultant could be used to do the inventory, depending on funding. Amy Lamb has already taken photos and pulled approximate construction dates from tax records.

L. Black replied that the photos show that some properties are probably not eligible, at least under Criterion C, based on integrity issues depicted in photos. DOT should prepare a short memo identifying the properties that are older than 50 years with justification why they aren't likely eligible and didn't warrant inventory forms at this time. Several others appear potentially eligible. Inventory forms should be completed for those appearing potentially eligible. We need to determine what is changing about the setting of these properties; is it a major modern intrusion? She also noted that SHPO is not trying to be contrary to safety, but is instead aiming for more informed decision-making.

B. Davis asked if ADA compliance is necessary. Several commented that it is not.

J. Sikora mentioned a Vermont project that used a box beam rail.

J. Sikora suggested that this project be used to eventually develop a programmatic way of handling these situations. L. Black and J. Marshall discussed how the approach should be consistent, but the treatment would be location-specific.

Submitted by: Sheila Charles and Jill Edelmann, Cultural Resources