

BUREAU OF ENVIRONMENT CONFERENCE REPORT

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

DATE OF CONFERENCES: June 6 & 11, 2013

LOCATION OF CONFERENCE: John O. Morton Building

ATTENDED BY:

NHDOT

Jason Abdulla
Sheila Charles
Kathleen Corliss
Jill Edelmann
Cathy Goodmen
Tom Jameson
Stephen Liakos
Jim Marshall
Christine Perron
Leah Savage
Peter Stamnas

**Federal Highway
Administration**

Mary Ann Nabor*
Jamie Sikora

ACHP

Najah Duvall-
Gabriel*

NHDHR

Laura Black
Edna Feighner
Beth Muzzy

City of Concord

Martha Drukker
Ed Roberge

City of Nashua

Lisa Fauteux
Kathy Hersh
Donnalee Lozeau

Hayner-Swanson

John Vancor

CHA

Rob Faulkner

Rob Pinckney

HDC

Richard Casella

**Consulting/
Interested Parties**

Geoff Daly
James Garvin
Audra Klumb
Nathan Holth*
Roy Schweiker

*via conference call

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

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June 6, 2013

Nashua Broad Street Parkway 10040A, NRBD-5315(021)

Participants: John Vancor, Hayner-Swanson; Donnalee, Lozeau, Lisa Fauteux, Kathy Hersh, City of Nashua; Peter Stamnas, NHDOT; Interested party; Geoff Daly

John Vancor of Hayner/Swanson, Inc. (HSI) provided an update on the City of Nashua's efforts to study alternatives for restoration of the Millyard chimney.

In 2010, a condition survey of the chimney was performed by Boston Chimney and Tower. This study included an estimate that the implementation of all recommendations would cost \$488,750.

Adding allowances for contingency and cost escalation, the City established a construction budget of \$650,000 for compliance with the MOA stipulation which requires the City to repair and preserve the structure to the extent practicable.

Subsequent to this condition survey, a structural analysis was performed by Weidlinger Associates. This study concluded that structural reinforcement would be necessary for the chimney to comply with current wind load requirements.

As reported at previous cultural resource coordination meetings, the City became concerned that addressing this concern could exceed the established budget. The City decided to evaluate several alternatives to better understand cost implications.

The City obtained bid prices for four alternatives. The difference between the alternatives is the height of the chimney after restoration. The alternatives studied and corresponding bids received included:

1. Chimney Height = 180 feet	\$921,700
2. Chimney Height = 165 feet	\$762,300
3. Chimney Height = 150 feet	\$736,073
4. Chimney Height = 120 feet	\$677,800

A handout was presented which included a summary of bids as well as a picture of the chimney marked to show the different alternative heights.

It was noted that two contracts have been completed to address immediate concerns with the chimney. With consideration of these contracts, \$606,900 remains in the budget. Bids for all four alternatives exceed the budget.

The City requested feedback regarding the alternatives. During the ensuing discussion it was noted that:

- After two bid solicitation efforts, International Chimney Corporation (ICC) was the only bidder which was determined to have been responsive to all requirements and therefore was the only qualified bidder.
- ICC proposes to remove an interior liner of the chimney. Gunite will be applied to the interior to provide additional strength. The extent to which reinforcement is necessary will be determined during ICC's final design effort.
- A comparison of the bid for the alternative which would maintain the chimney's current height (approximately 165 feet) with the cost to restore the chimney to its earlier 180 foot height seems disproportionately high, reflecting the apparent difficulty of reconstructing the chimney while working on a crane.

- It was observed that the savings for alternatives which called for reducing the height seemed lower than expected. It appears that this is indicative of the care which would be needed during the partial demolition required by these options.
- Elizabeth Muzzy stated that on the basis of discussion during this meeting, the option to maintain the chimney at its present height (approximately 165 feet) would be the preferred option of NHDHR.
- Mayor Lozeau stated that at this point City boards have not yet voiced a preference on how to proceed. The fact that each alternative exceeds the programmed budget will need to be considered as alternatives are evaluated.

Several aspects of the proposed replacement of the Baldwin Street Bridge were also discussed. Historic Document Company (HDC) has completed documentation required by a MOA stipulation for this bridge trestle. This documentation has been submitted for review.

John Vancor reported that the contract to replace this bridge is scheduled to be advertised in late June 2013 and requested that NHDHR determine whether the field work and photographic documentation which has been completed by HDC is satisfactory so that this advertisement for bids can proceed. Elizabeth Muzzy responded that NHDHR will review this aspect of the documentation in time to support the advertisement schedule.

Another stipulation requires that the Baldwin Street and Fairmount Street bridge trestles be marketed for alternative use. John Vancor provided an update on the effort to comply with the intent of this stipulation. The City of Nashua has contracted with Fay, Spofford & Thorndike, LLC (FST) to conduct a feasibility study of several concepts for alternative reuse of the bridge components within the City.

The first step in the study was an evaluation of the structural members. FST's conclusion is that the beams and decking for the Baldwin Street Bridge may be suitable for reuse. The beams, but not decking, for the Fairmount Street Bridge may also be suitable for reuse.

The City proposes to include requirements in the construction contracts to dismantle the bridges and stack the reusable components on City land. This strategy will allow the construction contract to proceed without waiting for completion of feasibility studies. Should it be determined that these components will not be reused within the City, a marketing effort could then be undertaken for alternative reuse. Jamie Sikora said this approach is acceptable to him. Elizabeth Muzzy said this approach makes sense and noted that this effort will need to be clearly documented. The City agreed to provide updates at future Cultural Resource Coordination Meetings as studies of possible reuse of the bridge components proceed.

John Vancor also provided an update on a stipulation related to design of the Baldwin Street Bridge rail, lighting and fencing. The City is including in the bid documents for the Baldwin Street Bridge a bid alternative for an upgraded bridge rail. The base bid will include a standard rail. The use of this bid alternative will allow consideration of an enhanced rail design with an understanding of the cost implications. The bridge rail which the bid alternative is based on is similar to the bridge rail used on the Washington Street Bridge in Dover.

Presently, it is anticipated that there will be two light fixtures on the bridge. While the basis of bid will be acorn type fixtures, it is anticipated that the fixture type may be revisited when the final selection of bridge rail type is made.

Nine foot high fencing will be required to protect the railroad beneath the bridge. Above the Parkway, five foot high fencing is recommended by NHDOT. Alternative designs have been evaluated for this fencing. The conclusion is that alternatives to chain link fence would likely be cost prohibitive. For purposes of the bid documents, chain link fence has been specified. Because the fencing attaches to the rail, consideration of alternatives could be undertaken later. If an alternative to the fencing is determined to be desirable, a Change Order could be negotiated with the low bidder, or the fencing could be removed from the contract with a future contractor to install the alternative later.

Kathy Hersh handed out the draft design guidelines and reviewed them page by page. She noted that Nashua has always been about practical and functional and that the design guidelines reflected those qualities. She talked about the Millyard and addressed design features in photos from the 1940s. Various examples of fencing, lighting and landscaping were provided in the draft and discussed. She was asked to add the source and dates for each of the old photos in the draft, which Ms. Hersh agreed to do.

Jill Edelmann requested that the City provide a written update of the MOA stipulations which can be used to track overall progress. The City agreed to provide this update.

Tuftonboro 16280 (no federal number)

Participants: Jason Abdulla, Christine Perron, NHDOT

Jason Abdulla provided an overview of the project. The project currently does not have federal funding but will likely be moved to the federal culvert program in the near future. The project consists of replacing an existing 3'x7'x31' stone box culvert that carries NH Route 109A over Twentymile Brook. A No Adverse Effect Memo was issued in July 2005 when District 3 proposed installing a new culvert adjacent to the existing stone box culvert, leaving the stone box in place. When the project was transferred to Highway Design, it was determined that leaving the stone box culvert in place would not be feasible due to the extent of excavation that would be required for the new culvert. The project as now proposed involves removing the stone box and replacing it with a 6'x8'x80' concrete box. In addition, the existing 22 foot roadway would be widened to 32 feet (a 12-4 Typical) to accommodate steel guardrail that meets current safety standards. This widening would necessitate removing the existing roadside stone retaining walls and widening the slopes. Limits of the widening would extend 200 feet to either side of the culvert.

A cemetery is located on the north side of the culvert inlet. It appears that the road alignment was once immediately adjacent to the cemetery. Edna Feigner commented that the dates on the headstones may provide some indication of when the original roadway existed. She asked what work was proposed adjacent to the cemetery. J. Abdulla replied that there would be slope work in front of the cemetery, which would involve fill and no excavation.

Work as proposed would require permanent easements from three adjacent properties: the common land of a trailer park off Willow Avenue; 174 Middle Road (1960 house); and 169 Middle Road (1839 house). E. Feighner asked that an inventory form be completed for 169 Middle Road. Based on a review of photographs of the 1960 house, it was decided that a form was not necessary for that property. If the

culvert was not included in the stone box culvert survey, then an inventory form would be required for the culvert as well.

E. Feighner asked if the cemetery wall would be impacted. J. Abdulla confirmed that the project would not impact the wall around the cemetery, and added that the town has plans to repair this wall this year. Christine Perron will send E. Feighner contact information so that she can contact the town about the need to monitor any earth disturbance that may be required for wall repairs.

Jamie Sikora commented that the easement on the property of the 1839 house would likely be considered a de minimis Section 4(f) impact, assuming federal funds are used on the project. The impact to the box culvert would likely qualify as a Programmatic Section 4(f). The Department would need to evaluate rehabilitation and avoidance alternatives to justify the proposed design.

E. Feighner asked that the proposed project be sensitive to the setting and limit the extent of tree clearing.

J. Edelmann commented that if it is determined that the project would have an adverse effect, an MOA would need to be executed. C. Perron said that the project would return to a future meeting once the inventory forms are completed, and mitigation could be discussed at that time. She asked if mitigation would likely be in the form of design elements, such as stone work, and E. Feighner agreed that this would likely be the case.

Followup: Jill Edelmann reviewed the Stone Culvert survey and found this location and a determination that the feature was National Register Eligible, with a survey number of TUF0007.

Barrington 16402, X-A002(738)

Participants: Kathleen Corliss, Cathy Goodmen, Leah Savage, NHDOT

Initial consultation on a culvert replacement on US Route 4 over Caldwell Brook, approximately one mile from the Lee traffic circle. The project involves replacing an undersized 54-inch corrugated metal pipe that carries Caldwell Brook under the road. This area floods often and the current pipe was originally installed in 1974. The project proposes to replace the existing culvert with two larger culverts spaced approximately 40 feet apart and realigned perpendicular to the roadway. The primary culvert, carrying Caldwell Brook, will be 8 feet in diameter and partially embedded in the streambed to allow fish passage. The second culvert will be 5.5 feet in diameter and placed higher to carry storm surge overflow. This project will have a large amount of excavation around the Brook.

The area is mostly residential with single-family homes and apartment buildings. There are two properties greater than 50 years old near the project. These are located at 54 Old Concord Turnpike (an apartment building) and 59 Old Concord Turnpike (a single family residence). There are also stonewalls located along US Route 4, but at this time it appears they will not be impacted by the project. There is a possible unused culvert feature that will be impacted, between the roadway and the culvert inlet. This structure will be impacted but it is not known what the purpose of the structure was.

Edna Feighner reviewed the RPR Form and project plans and determined No Historic Properties will be affected. E. Feighner also determined that the area is not archaeologically sensitive.

June 11, 2013

Concord 12004 BRF-X-5099(021)

Participants: Martha Drukker, Ed Roberge, City of Concord; Robert Faulkner, Rob Pinckney CHA; Cathy Goodmen, Tom Jameson, NHDOT; MaryAnn Nabor, FHWA; Najah Gabriel, ACHP; Consulting Parties: James Garvin, Nathan Holth, Audra Klumb, Roy Schweiker,

Jamie Sikora facilitated the meeting and distributed sections of FHWA's Section 4(f) Policy Paper. He opened a discussion on the use of the Programmatic 4(f) Evaluation, and whether it is appropriate. He noted that under normal circumstances, a Section 4(f) document wouldn't be produced until the Section 106 Process was complete. He said that the Section 106 Process was not complete for Sewalls Falls because there is no concurrence on the project finding or discussion of mitigation for the proposed action. He said the evaluation as submitted should be considered preliminary as there is no such thing as a "draft" Programmatic 4(f) evaluation. Jamie further noted that there are additional 4(f) resources in the project corridor which have been identified in the NEPA Study and that individual 4(f) evaluations do not need to undertake for these as there was originally a *de minimus* finding as part of the NHDOT lead effort which concluded in 2010. Since the current preferred On-Line Replacement alternative includes similar impacts on the approach spans and substructure, which resulted in an adverse effect finding; adding the truss replacement, and lessening the impacts to the surrounding LCHIP property would also result in an adverse effect finding Thirdly, Jamie noted that comments on the Least Harm Analysis are not usually included in a Programmatic 4(f) Evaluation.

Ed Roberge said he has received the comments on the document from Consultant Parties and NHDHR and is ready to address them. He noted that he hoped this meeting could move forward to include addressing the technical comments raised by Consulting Parties and NHDHR then begin a discussion on mitigation.

Jim Garvin stated that he was not aware that Consulting Parties could comment on the document.

Rob Faulkner reviewed the Technical Comments. R. Faulkner responded to the comment related to the minimum vertical clearance (VC) requirements and the need to modify the bridge portal to increase it to 16'6" to accommodate large trucks. He acknowledged that per NHDOT's design criteria, the minimum required VC was 14'9" as a local road. However, since the long term plan for the City needs to be taken into account which includes the potential for a new Exit 16 1/2, the proposed bridge (whether new or rehabilitated) should not create a VC restriction being so close to the potential interchange. He further noted that while the current I-93 overpasses had a VC of 14', if the new interchange were constructed, that VC would be increased to 16'6".

Roy Schweiker disputed the need for a minimum of 16'6" especially for historic bridges and noted several examples of where the VC was less.

Steve Liakos noted that the 16'6" VC accounted for 6" of future overlays and further notes that the minimum requirements for VC do not necessarily *have* to be adhered to (could be grandfathered in and posted) yet it would leave the bridge vulnerable to damage from being hit. He also noted NHDOT would not necessarily require the VC to be raised for this bridge.

Audra Klumb asked what impact to not having to modify the portal would have on the construction cost.

Jamie Sikora pointed out that vertical clearance is not the only issue and that Mr. Faulkner's comment was towards the long-term goals and needs of the City. Ed Roberge added that the current bridge does not meet the City's goal to improve this area for commercial development and to be a major transportation link. It was also noted that a discussion of the substandard vertical clearance was not discussed early enough in the process and should have been raised back in 2002.

Jim Garvin asks whether Programmatic 4(f) meets the program requirements needed because it is his understanding that Programmatic 4(f)s are intended to be used for minor projects. He noted that because this is a complicated project, it should require a standard 4(f) Analysis and Least Harm Analysis. He further noted that the current drafted 4(f) document reflects a 180 degree shift from the 2010 project for which vertical clearance issues were driven by the motive to save the truss superstructure.

Mr. Garvin also noted that the adverse effect finding in the 2010 Study included removal of the approach trestle as well as stone masonry substructure units. Mitigation for those adverse effects was to rehabilitate the bridge. He further questioned why the removal of the substructure and approach trestle was not included as an adverse effect in the current study.

MaryAnn Nabor responded that the Programmatic 4(f) is not just for minor projects, but the other 4(f) resources also need to be dealt with and addressed. She referenced a recent Programmatic 4(f) Evaluation FHWA just completed for National Register of Historic Places eligible bridge in Indiana that was adjacent to a National Historic Landmark. She also noted that it needed to be emphasized as to why there is no prudent and reasonable alternative to preserve the bridge and that it needed to be tied into the purpose and need statement in the documents.

Jamie Sikora pointed out that the purpose & need was stated in the NEPA and Programmatic 4(f) document and included the city's long-term needs and anticipated growth in the area.

Rob Faulkner commented in response to Jim Garvin's comment, that the project has shifted *360 degrees* since the project began, not 180; as the original intent was to remove the bridge. The rehabilitation option was considered and selected as the Preferred Alternative in 2010 as a result of the public process without fully knowing the condition of the existing bridge.

MaryAnn Nabor noted that the Programmatic 4(f) does not do away with the Least Harm Analysis.

Jim Garvin suggested a review of the bridge inspection and asserted that the bridge can be rehabilitated. As previously discussed, if the bridge is rehabilitated, it would still be eligible for historic register. He also referenced the AASHTO Guideline for Rehabilitation of Historic

Structures noting that that was not applied as part of the alternatives analysis and should have. He suggested that another consultant be retained to further review the rehabilitation of the bridge applying the AASHTO guidelines.

Ed Roberge responded to Mr. Garvin's question as to why the trestle and substructure was not identified in the 4(f) document was due to their poor and unsafe condition. He further referenced recent failures of the I-5 and the I-35 bridges to emphasize the importance of considering safety in the analyses of the Sewalls Falls Bridge. Rehabilitation cannot address the safety concerns of fracture critical members. Had more detailed information on the bridge's condition and rehabilitation needs been known in 2010, it would be very likely that the rehabilitation option would not have been selected as the preferred alternative. He further noted that he did not feel that they needed another consultant to review the rehabilitation of the bridge.

Roy Schweiker commented that a public hearing has not been held, only a City Council meeting. Ed Roberge responded that a Section 106 Public Meeting was held on 1/23/13.

Roy Schweiker also asked whether the other impacts for the on-line alternative were less than the rehabilitation option.

Rob Faulkner gave a brief review of slope impacts and reduction to the LCIP property and noted that under the rehabilitation option, the City would need to acquire LCIP property. Under the on-line replacement alternative, only slope easements are necessary.

Martha Drukker addressed a second technical comment regarding the trail system on the east side of the bridge. Martha noted that while the trail is not identified on the City of Concord trail map, the trail exists, with a 25 ft. right of way and that the Greenway Bike Route goes over the bridge. Audra Klumb noted that there was a "No Trespassing" sign on that trail. Martha said that she would investigate that.

Roy Schweiker commented that there needed to be more discussions on mitigation. Rob Faulkner noted that some initial ideas were included in the preliminary document and that it was the City's intent to discuss mitigation options at this meeting. Roy also advocated that the bridge be preserved on land as a learning tool.

Laura Black addressed NHDHR's comments, noting the comments' intentions apply regardless of whether it is a Programmatic 4(f) or not. Regarding Purpose & Need and associated impacts of the alternatives, she feels more specific discussion needs to be made and a stronger Purpose & Need statement is needed. Laura added that a detailed analysis of all the different options and impacts would help strengthen an argument for the preferred alternative. She also asserted that the document is too vague. As an example she cited the phrase "convenience of community" and noted that it is an ambiguous term and up for varied interpretations. Roy Schweiker agreed that the Purpose & Need should be reviewed in terms of safety and the City's Master Plan.

Laura continued stating that draft's distribution (prior to the final) may have caused more confusion than help. The analysis is not objective enough, since it emphasizes the "scary" safety issue, rather than giving objective analyses of all the alternatives.

Jamie Sikora disagreed.

Martha Drukker responded with a review of DHR involvement since 1999, that 14 alternatives had been investigated which led to four feasible alternatives, which received further detailed analyses. She noted that all of those reviews should be in DHR's files.

Rob Faulkner continued stating that under the previous study those alternatives were evaluated and screened with comparative summary matrix's developed to demonstrate respective impacts, costs as well as pros and cons for each alternative. The majority of those alternatives were dismissed during that study and only the "No Build", "On-Line Replacement", "Off-Line Upstream", and "Rehabilitation" options were carried forward. The current study reflects those alternatives as well and it didn't seem necessary to start from scratch with the review and analysis of all of the previously developed alternatives. He suggested that all of the alternatives could be listed in the document with reference to the project files.

Jamie Sikora suggested that maybe a separate analysis be taken out of the document, but retained on file as back-up. He also noted that the alternative summaries should reference the seven factors found at 23 CFR 774.3(c)(1) per DHR's comments.

Jim Garvin disagreed with Jamie, citing the sanctity of the Section 106 and 4(f) and national precedence as support for his stance. He asserted that the FHWA needs to "place their thumb on the scale" in favor of historic preservation.

MaryAnn Nabor added that safety from an AASHTO perspective is related to operational safety and not safety issues related to fracture critical structures. If there are operational safety issues associated with any alternative, it should be noted in the review. MaryAnn also questioned the zero sufficiency rating of the bridge noting that if it was truly zero, the bridge should be closed.

Ed Roberge confirmed the sufficiency rating of zero and noted that it included other deficiencies.

Ed Roberge then summarized action items thus far:

1. Separate Existing Conditions from Purpose & Need
2. Reference the alternate studies more clearly
3. Refer to the document as "Preliminary" and not "Draft"

Ed further suggested that the mitigation discussion begin.

Jim Garvin said that we were not ready to move to mitigation as the Section 106 Process has not been completed to date. He stated that the CHA and HDC reports noted that the bridge could be rehabilitated to carry legal highway loads and still retain eligibility for the National Register of Historic Places. He asked Richard Casella to expand on his findings noted in the report.

Rob Faulkner emphasizes that no one was disputing that the bridge can be rehabilitated as it was stated in CHA's report as well as HDC's. He added that rehabilitation it did not meet the long-term needs of the City based on the City's Master Plan and Long-term Transportation Plans. It was

reiterated that the site has less than desirable roadway alignment and operational safety concerns would be created under the rehabilitation alternative.

Audra Klumb questioned the “new use” of Sewalls Falls under the City’s Master Plan and concern of increased traffic.

Ed Roberge noted that the Master Plan establishes regional connectivity

Laura Black said that the discussions during the Public Meeting focused on safety at the exclusion of preservation and that the many of the public emphasized the desire for traffic calming.

Ed Roberge said that sustainability and safety are of paramount importance stating that what is built today needs to last 50-100 years. He used the Memorial Bridge as an example of how it was determined not a reasonable investment for rehabilitating that bridge.

Edna Feighner and Jim Garvin began to question the change on use of Sewalls Falls Road based on the Master Plan noting the current single lane bridge versus a two lane bridge that would be constructed under the on-line alternative and whether further environmental studies should be conducted.

Jim Garvin noted that some of the public commented on how the rehabilitation option would create a certain degree of traffic calming and further noted that the City’s Master Plan was not mentioned in the 2009 / 2010 discussions. Martha Drukker added that any alternative including the rehabilitation alternative would result in two lanes of traffic, whether they are carried on a single bridge or two separate bridges. Jamie Sikora noted that indirect impacts would be looked at during the Section 106 review.

Jim Garvin reiterated the statement that no rehabilitation means no federal funds, a statement he said was made by now retired FHWA Environmental Manager Harry Kinter which was noted in the in the meeting minutes in 2006. MaryAnn responded that such a statement was likely made because rehabilitation seemed within reason at that time.

It was agreed that CHA, working with the City, DOT and FHWA will update the Purpose & Need statement and provide more detailed analysis on the alternative and send around for review prior to the next meeting. The City’s concern with losing another construction season was noted and it was agreed to meet at the July Cultural Resources meeting to continue moving the project along.

Laura Black said that DHR has not reached conclusions on the question of whether to rehabilitation was prudent or reasonable. She hoped that the next iteration of the report addresses the issue of lack of objectivity and allows the DHR to come to a conclusion. Jamie Sikora said that FHWA will then get the information it needs and it will make a decision.

Next meeting to be held on July 11, 2013 at the regularly scheduled Cultural Resources DOT meeting.

Submitted by: Sheila Charles and Jill Edelmann, Cultural Resources

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