**BUREAU OF ENVIRONMENT**

**CONFERENCE REPORT**

**DATE OF CONFERENCES**: December 4 and 11, 2008

**LOCATION OF CONFERENCES**: J.O. Morton Building

**ATTENDED BY:** Jill Cunningham, Marc Laurin, Joyce McKay, Kevin Nyhan, Chris Waszczuk, Trent Zane, NHDOT; Edna Feighner, Linda Wilson, Beth Muzzey, NHDHR; Jamie Sikora, FHWA; Rich Roach, ACOE; Jennifer Riczck and Lisa Martin, Quantum Construction; Charlie Hanson, Center Harbor; Marty Bowers, Tim Higginson, Brian Clogston Louis Berger; Aaron Seaman, Jacobs; Mike Hansen, VHB; Patrick MacQueen and Pamela Laflamme, City of Berlin; Lynne Monroe and Kari Laprey, Preservation Company.

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

**Berlin, X-A000(052), 12958B**
**Bath Surplus Land**
**Center Harbor, 15403 (no federal number)**
**Lee, 14842 (no federal number)**
**Salem, 15592 (no federal number)**
**Salem 15593 (no federal number)**
**Salem 15596 (no Federal number)**
**Peterborough (no state or federal number)**
**Farmington (no state or federal number)**
**Manchester, X-A000(099), 13898 and X-A000(352) 14412**

*Thursday, December 4, 2008*

**Berlin, X-A000(052), 12958B. Participants: Chris Waszczuk, Joyce McKay, Trent Zanes, Marc Laurin and Jill Cunningham, NHDOT; Beth Muzzey and Linda Wilson, NHDHR; Jamie Sikora, FHWA; Rich Roach, ACOE; Patrick MacQueen and Pamela Laflamme, City of Berlin; Lynne Monroe and Kari Laprey, Preservation Company.**

C. Waszczuk started off the meeting with a brief discussion of the long history of the project. Its purpose has been and is to address safety and congestion of NH 110 in Berlin, to eliminate tight curves and to lessen the steep grades. Funding is earmarked for $7M (including the 20% City match). He pointed out that at the Public Informational meeting held in Berlin on August 28th there was a resounding public support for Alternative 4E.

T. Zanes gave a brief description of the preliminary design of the alternatives, indicating that a 12'-lanes and 4'-shoulders were proposed. The NHDOT attempted to connect to side roads at a 90-degree angle. He noted that north of 4th Avenue the two designs on Wight Street are the same for both alternatives. Since the completion of the replacement railroad bridge over Green Street, the three NH 110 truck detour routes are now consolidated to a single route. Since truck traffic is 11% of the traffic (approx 550 trucks per day), up from 10.8% in 2003, it has not declined since the closing of the mills. Alternative 2 acquires 12 properties (19 units) and Alternative 4E acquires 27 properties (48 units). The construction costs are similar for both alternatives, with greater ROW costs for Alternative 4E due to the greater number of acquisitions. Alternative 4E reduces the number of conflict points with only 10 driveways onto NH 110 versus 30 for Alternative 2. Alternative 2 has seven intersections, and 4E has six.

L. Monroe described the Berlin Heights Addition Historic District, and discussed those elements that made the district eligible. She noted the rapid platting and settlement of this district in the 1890s and early 1900s as the paper industry developed. The approximate location of Route 110 evolved from a road established prior to the 1890's subdivision. She emphasized that 3rd Avenue is a character-defining part of the District. It was designed to be a "grand boulevard." The character of the setting, the uniform house lots (50'X100') and compact housing density, superimposed on the hilly landscape at the foot of Mt. Forest, was noted.

Kari Laprey and L. Monroe noted that residents built a limited number of building types in the district, including both the single- and two to four family house. To understand the level of impact to each building, the character defining features of each type must be identified. Laprey and Monroe provided a handout and gave a PowerPoint presentation of the common building types located within the area of impacts of both alternatives. Most numerous, single-family homes are primarily side hall/gable fronts with a number of properties having garages. American foursquare homes are also prominent. The foundations were made of local rough-cut stones from the immediate area, and a number have painted lines details to resemble ashlar stones. Only a few side gables and only one Queen Anne are present.

Multifamily houses in Berlin are overwhelmingly divided horizontally rather than vertically. They typically have exterior stairs to upper stories, which are associated with multi-story porches. Many of the once open porches were enclosed. The foursquare multifamily is larger than the single families of the same style. There are also side hall/gable fronts, and only one side gable, 2-family. The French and Boulay blocks are unique to Berlin and have exterior access on the porches to each of three stories.

There are only a few commercial properties, many of which related to the growth of the use of the automobile. The bus garage on 3rd Avenue is an important early example of a car dealership with a showroom. In several cases, a grocery was attached to or incorporated within the dwelling unit. There is one institutional property, the Sessions School, which was later converted into a multi-family dwelling. Most dwellings have very limited decorative treatment, often on a bay or porch. They also noted that the rubble and concrete retaining walls along the property's front were character-defining features of the setting.

There are a total of 522 contributing buildings in the district (336 primary and 186 secondary, mainly garages). Of the 73 non-contributing buildings, 33 are primary. In response to R. Roach's query, a brief discussion of what criteria were used to determine the contributing status of the buildings ensued. If the buildings retained their general form and was identifiable by type, it was found eligible under Criterion A, contributing to the pattern of settlement. If the building also retained its general fenestration, exterior stair if extant, porches, and some of its original

materials, and had not received significant additions, it was found eligible under both Criteria A as well as C, as a representation of its building type. There are almost no new intrusions within the district.

L. Wilson stated that all 88 "yellow sheets" were reviewed, and NHDHR agrees on all the designations for the properties. There are most likely a number of individually eligible properties, but individual assessments have not been done. L. Monroe stated that she can point out the ones that have the potential to be individually eligible, but Individual eligibility does not have to be determined since they would contribute to the district. J. McKay stated that these properties could be used to document the best examples of a building type. L. Wilson noted that the Berlin Heights Addition District represents the "American dream" of an in-town suburb. Building forms convey the aspirations of those who settled there. There is a mix of populations and architectures with individual amenities; compact buildings; and an attractive and stable neighborhood, which has perpetuated itself. All site features have been retained and the district continues as a neighborhood. Good planning has been manifested through time. L. Monroe concurred that although some properties are run down, most are well maintained throughout the district.

The format of the review for the effects determination was discussed. B. Muzzey suggested that minimization of impact to each affected properties should be addressed as the review progresses. Determination of effects on each property affected by Alternative 2 was reviewed. The "yellow sheets" for each property were handed out. The DOT parcel numbers and corresponding NHDHR numbers were verified. A photograph of each property was displayed, the property's location on the preliminary plans was noted, and the impacts of the project on each property was discussed until a consensus on the effect was reached between NHDHR, FHWA, ACOE, and DOT. In general, the existing streets, apart from 3rd Avenue, which is considerably wider, are 24 to 26 feet in width with 5-foot sidewalks. As currently proposed, Alternative 2 will be 32 feet curb-to-curb with 6-foot sidewalks. The speed limit will remain at 30 mph. P. McQueen interjected that even though the speed limit is the same for the new configuration, with no sharp turns, the project would effectively raise the speeds in the neighborhood. It would allow trucks to go through the residential neighborhood without slowing down. It would become a thoroughfare, which would no longer retain the feeling or setting of a residential neighborhood. In response to an inquiry by B. Muzzey on the possibility of providing a less straight alignment that would slow down traffic, C. Waszczuk replied that this approach was investigated and assessed as Alternative 1. This alternative was rejected because it was more curvilinear. There were geometric concerns because the design was unable to safely match the grades at the 3rd Avenue intersection. This resulted in tightening the curves, which would not eliminate the impacts to property. Some larger trucks would still have a more difficult time negotiating the curves, and they would most likely have to track over the centerline.

Effect determinations for Alternative 2 were reviewed and completed for 52 individual properties along Green Street, 2nd Avenue, and 3rd Avenue (see attached table). Potential mitigation was also discussed for a number of individual properties, in particular for those whose lawns would more than double in size and adversely affect the setting. Identified mitigation was the retention of sidewalks at their current location. Low plantings were also suggested. Mitigation discussions for some properties and consideration of impacts and potential mitigation for the district as a whole were deferred at the request of B. Muzzey. She requested that T. Zane reconsider the current design to include 12- foot lanes and 10-foot shoulders on 3rd Avenue to preserve the "grand boulevard" setting. He will present this redesign on the January 7th meeting, which will focus on the Berlin project.

The impacts to the properties along Wight Street located within the District, which extends to 6th Avenue, are the same for either alternative and were described by T. Zane. The design avoids impacts to the properties as much as possible, with no permanent impacts along the west side of Wight Street. Along the east side, the sidewalks would be formalized, necessitating temporary construction easements. Retaining walls would be constructed along two properties, DOT Parcels # 129 and 133 (NHDHR #s 90 and 91 respectively), resulting from the addition of a curb and raising of the sidewalk. It was agreed that, except for the two properties where the retaining walls are proposed, "yellow sheets" are not needed for the remaining properties along Wight Street (DOT Parcels # 122, 125 to 128, 130, 132, and 134 to 140). The evaluation of contributing and noncontributing properties had not extended this far north. The impacts to the two properties will be evaluated at the next effects meeting. (*Note: subsequent to the meeting, it was determined by DOT that the effects on DOT Parcels # 67 and 69 (along 2nd Avenue), and 75 and 77(along 3rd Avenue) were not evaluated and will also need to be discussed at the next effects meeting).*

Other forms of general mitigation were discussed. For example, the creation of a small park serving as a meeting area at the intersection of Madigan with Third and Second under Alterative 2 was suggested. The park would include low plantings, benches, and interpretive panels explaining the significance of the district. In addition, a walking tour of the area and exhibit or website detailing images, history, and significance of the area were considered.

*Thursday, December 11, 2008:*

## Bath Surplus Land. Participants: J. McKay

J. McKay reviewed the archaeological sensitivity of a NHDOT surplus parcel on Rabbit Path Road in Bath, which is about 5 acres in extent. The barn and house were determined not eligible for the National Register when assessed for the Bath-Lisbon project (10425). The house is now removed. Because the terrace is well above the Connecticut River, because its terrain is quite rolling, and because the removal of the house created considerable disturbance, E. Feighner agreed that the parcel was not sensitive. No further cultural resources study is necessary.

## Center Harbor, 15403 (no federal number). Participants: Jennifer Reczek and Lisa Martin (lmartin@quantum-cc.com), Quantum Construction Consultants, Charlie Hanson, Center Harbor Selectman

An initial review was presented. The Town of Center Harbor contracted with Quantum Construction Consultants, LLC (QCC) for the design of a replacement bridge structure for High Haith Road over Squam Lake Canal (126/139). It is a concrete slab deck on stone masonry abutments built in 1936. There are remnants of a timber deck still visible on the underside of the existing concrete deck, and the town's road agent believes that the concrete deck was cast in 1935, the year the NHDOT bridge report lists as the year of construction. The dry-laid stone abutments and concrete slab deck are severely deteriorated and are in need of replacement.

QCC presented plans for the proposed 23-ft wide bridge and temporary detour road. The vertical roadway alignment will be raised and the road will be widened to accommodate the width of the new bridge. The construction of the new bridge and roadway alignment will be concentrated within the right-of-way. The temporary detour road that is required because the bridge serves as the only means of access to High Haith Island will be

constructed on existing grade utilizing geotextile fabric and concrete blocks to minimize the impact to the wetland area. Although the roadway slopes extend beyond the right-of-way in several areas, the disturbance will be as fill, not excavation.

Edna Feighner was concerned about the possibility of Native American settlements along the shore of Squam Lake. Although most of the project consists of work in existing fill areas or filling additional area, she felt that the weight of construction equipment and the detour road could adversely affect any items of archaeological significance that may be present.

L. Wilson and B. Muzzey determined that there were no architectural impacts, but they requested that an archeologist be hired to perform a preliminary assessment of the project's disturbance area (Phase IA) and determine if a Phase IB archaeological survey would be required. QCC will hire a consultant to perform the required archaeological sensitivity assessment. QCC will follow up with the NH Department of Historical Resources once the required work has been completed.

**Lee, 14842 (no federal number). Participants: Jennifer Reczek and Lisa Martin (lmartin@quantum-cc.com), Quantum Construction Consultants**

An initial review was presented. The Town of Lee contracted with Quantum Construction Consultants, LLC (QCC) to design a replacement bridge structure for High Road. High Road over North River, BR 063/045, is a steel I-beam bridge with a corrugated metal deck, founded on stone masonry abutments. The Town of Lee wishes to replace the bridge due to reoccurring flooding that has caused major roadway damage on the easterly approach.

The bridge is believed to have been built in 1935 through the WPA program. Representatives from NHDHR concurred that this may be likely because the concrete mortar used in the construction of the abutments is indicative of WPA construction. In 1987, creosote wooden beams and deck were removed and replaced with the existing steel superstructure.

QCC presented the two most feasible alternatives being considered. For Alternative I, the existing stone abutments would be rehabilitated and capped with a concrete bearing seat to support a new pre-cast concrete voided slab deck superstructure that will accommodate the new raised vertical roadway alignment. This would increase waterway clearance under the bridge. The horizontal roadway alignment would be unchanged with a similar roadway width. This alternative will require structural analyses of the existing abutments to ensure that they can resist the additional earth pressure caused by raising the roadway. It is likely that they are not capable of sustaining that load. A new flood relief structure would be constructed in the easterly approach to provide additional hydraulic capacity under high flow conditions.

For Alternative II, QCC evaluated a single span replacement structure. QCC is proposing a new span of 45 feet with a raised vertical roadway profile to provide the proper waterway opening. The new waterway opening would be sufficient to pass the required 50-year design flood with one foot of clearance, as required by NHDOT, and would also pass the 100-year flood event. This Alternative includes a slight horizontal roadway realignment to the south (downstream). Excavation on the project is limited to the area of the abutments and roadway.

QCC stated that are no National Register-eligible historic properties or structures are located near the project. E. Feighner and L. Wilson determined that there were no archaeological impacts and

that the bridge structure was not eligible for listing on the National Register of Historic Places because the superstructure has been previously replaced. Although they found that No Historical Resources are affected, NHDHR did request that a historian be hired to record the abutments with a reconnaissance level form. QCC will hire a consultant to perform the required reconnaissance level form and follow up with the NH Department of Historical Resources, once the required work has been completed.

**Salem, 15592 (no Federal number). Participant: Marty Bowers, The Louis Berger Group, Inc. (mbowers@louisberger.com).**

Under initial review, this project involves replacement of the existing corrugated metal plate pipe arch (094-060) that carries Cluff Crossing Road over Policy Brook. Preliminary plans call for a new 12-foot span, 10-foot high structural dimension box culvert with two feet of stone fill and natural materials within the channel. The roadway approach sections would consist of two 13-foot travel lanes, two-foot shoulders, and 5-foot sidewalks. There are no buildings in or immediately adjacent to the project area. However, the project is within an archaeologically sensitive area along Policy Brook identified as "Wetland Mitigation Site #30" in the early 1990s in association with expansion of I-93.

NHDHR determined there were no issues regarding architectural resources. Due to the sensitive nature of the project location, it will be necessary to complete Phase IA and IB archaeological investigations. NHDHR requested additional engineering information about the project, specifically about construction methods and limits of construction/disturbance, to determine the geographic extent of the required archaeological surveys. Berger will provide this information to J. McKay and NHDHR. The additional information was sent to Edna subsequent to the meeting, resulting in the signature of a No Historic Properties Affected municipal memo.

**Salem, 15593 (no Federal number). Participant: Marty Bowers, The Louis Berger Group, Inc. (mbowers@louisberger.com).**

Under initial review, this project involves replacement of the existing 21-foot jack arch bridge and 5-foot diameter concrete pipe relief structure (113/070). Preliminary plans call for a new span nearly equal to the bank-to-bank width of the Spicket River (approximately 63 feet) to reduce future scour potential and also risk of flooding on Lawrence Road due to large storm events. There are no buildings within or immediately adjacent to the project. Nearby residences date to the late 1950s and early 1960s, and are generally of the ranch type. J. McKay noted that the bridge was built in 1935 according to NHDOT records.

The subject bridge is the only historical architectural resource of concern for this project. NHDHR specified that an individual inventory form be completed for the bridge, utilizing information from J. McKay's file on jack arch bridges and NHDOT bridge files. The form should include comparative evaluation (for example, two jack arch bridges of similar date in Derry were mentioned). Additionally, NHDHR specified that Phase IA and Phase IB archaeological investigations would be required, unless additional information about the engineering of the project (specifically construction methods and geographical extent of anticipated ground disturbance) indicates to NHDHR that they are not warranted. Berger will provide this information to J. McKay and NHDHR.

**Salem 15596 (no Federal number). Participant: Marty Bowers, The Louis Berger Group, Inc. (mbowers@louisberger.com).**

NHDHR reviewed this project at the Cultural Resources Meeting of February 1, 2007. At that time, Edna Feighner requested USGS maps identifying the project location for her determination regarding potential Historic or Native American resources. Jason Gallant of Berger subsequently submitted the requested map to E. Feighner. To effect closure of the review process for this project, Berger will draft a Cultural Resources Memorandum of Effect for execution by NHDHR and NHDOT.

**Peterborough (no state or federal number). Participant: Tim Higginson (THigginson@louisberger.com) and Brian Clogston (bclogston@louisberger.com), Louis Berger.**

- LBG made the initial presentation of the proposed Union Street Reconstruction project at the cultural resources meeting to review any potential effects by the project as required by the planned NHDES minimum impact expedited wetland impact application. The project is a municipally funded project without any state or federal funding.
- LBG presented the request for project review form with a package of information including USGS maps, corridor photos, soil mapping, proposed site plans and written narrative. A brief project summary is included in the following; refer to narrative for more detailed description.

The Town of Peterborough is planning to rehabilitate and improve Union Street within the West Peterborough District from NH Route 101 to Scott Winn Road. The project involves the pavement reclamation, improvements and repaving of approximately 6500 feet of roadway.

The existing Union Street, formerly NH Rte 101, was previously a concrete paved roadway that was upgraded to bituminous pavement in the 1970's. The roadway is on average 24' to 26' in width with a sidewalk separated from the roadway by vertical granite curb from Wilder Street to Scott Winn Road. There is an existing stone arch bridge over the Nubanusit River near the intersection with Wilder Street that is not a part of this project. There are existing concrete cross culverts, closed drainage systems, and utilities within the roadway through the corridor.

Proposed improvements include an extension of the sidewalk from Wilder Street to Robbe Farm Road and new sidewalk along Wilder Street. The roadway will be reclaimed, re-graded and re-paved with vertical granite curbing reset and existing sidewalks repaved. The profile, elevation and location of the roadway will remain the same as the existing roadway. Traffic calming and streetscaping are important aspects of the project to beautify, slow traffic, and create a more pedestrian friendly corridor. Traffic calming will include 10' wide median islands at either end of the corridor. Sidewalks will be set back from the roadway with a grassed panel in certain locations and with pedestrian level streetlights constructed for safety. Raised speed table crosswalks will be incorporated to slow traffic. On-street parallel parking will be constructed at locations through the corridor as warranted by pedestrian activities. Adjacent commercial parking lots will be reconstructed to incorporate more green space and public parking opportunities. Teixeira Park will have a path installed to promote access. The waterline will be replaced in its existing location from Wilder Street to Old Dublin Road, while drainage systems will be upgraded and replaced as required to adequately convey stormwater runoff. There will not be any building alterations, and any areas of ground disturbing activities will be limited to the

roadway and directly adjacent side slopes for minor widening for the project. Wetland impact areas are minimal and limited to minor widening and reconstruction of drainage. There are not any known archaeological resources within the project roadway area.

- There are no adverse effects on architectural resources. A recommendation was made for the proposed lighting fixtures to parallel the historic context through the use of radio wave type fixture. LBG will evaluate their use.
- If work is included in plans for Teixiera Park, which includes a natural terrace, then a phase IA/IB archaeological survey is required. This includes proposed paths and stormwater rain gardens. LBG will follow up with the town and determine if proposed work will remain and follow up with Joyce McKay on the status of the path. If the work in the park is not included, then no archaeological survey is required. There would be a finding of no adverse effect as noted on the request for project review form.
- LBG to email and obtain municipal memo from Joyce McKay for the project.

## Farmington (no state or federal number). Participants: Aaron Seaman (aaron.seaman@jacobs.com), Jacobs

There is not a state project number at this time, but there will be a state project number assigned and when it is assigned J. McKay will be notified. An initial review of the project was presented.

The Old Bay Road Bridge (060/144) over the Cocheco River is a jack arch bridge built in 1930. As a result of the spring flooding in 2007, this structure was damaged and is in need of replacement. During the 2007 flood, water scoured the downstream side of the structure, eroded roadway material exposing the backside of the abutments, and damaged the loosely laid stonewalls. There will not be a traffic detour for this project; however, the road will be closed to traffic at the project location throughout construction of the new structure. This project is planned to be bid in December of 2009 and begin construction in June of 2010.

Due to the potential historical significance of the type of bridge construction, jack arch bridge type, it was determined that an architectural historian was needed to complete the "Individual Inventory Form" for this structure. The architectural historian shall perform the following tasks: complete the 'Individual Inventory Form'; take black and white photos and document the details of the structure; compare this jack arch bridge with others in the surrounding area; and search historical records at the state and town levels.

Extra photos may be requested if this structure is determined to be eligible for the state historical registrar. No archaeological survey was requested.

Jacobs will E-mail J. McKay with the Memorandum of Effect after the architectural historian completes the Individual Inventory Form and associated research.

## Manchester, X-A000(099), 13898 and X-A000(352) 14412: Participant: Mike Hansen (mhansen@vhb.com), VHB. Jamie Sikora, FHWA

An initial description of the project was presented to the Cultural Resources Committee. Mike Hansen from VHB explained the project. This portion of the Hands Across the Merrimack Project would be the last piece of the trail heading to Goffstown. The trestle over the

Piscataquog River is the major portion of this piece. VHB plans to reuse the bridge and just to re-deck it and add railings for safety. It was explained how this project is a continuation of the Phase I & II Piscataquog Rail Trail that was built from I-293 to South Main Street, and that eventually it will continue to the Town of Goffstown. The following points and questions were addressed.

- It was asked if there would be any excavation in this part of the project. The design calls for trail to be built on top of the existing ground to avoid any potential contamination from the old rail line. The railroad ditch would be re-established, and grading would be minimal.
- VHB was asked to fill out a Request for Project Review by the NHDHR. VHB will send a hard copy of this to DHR.

**Memos/MOA's**: Andover-Wilmot-Danbury, X-A000(551), 14823; New Ipswich, X-A000(695), 15334.