

# BUREAU OF ENVIRONMENT CONFERENCE REPORT

**SUBJECT:** NHDOT Monthly Natural Resource Agency Coordination Meeting

**DATE OF CONFERENCE:** June 19, 2013

**LOCATION OF CONFERENCE:** John O. Morton Building

**ATTENDED BY:**

**NHDOT**

Christine Perron  
Steve Johnson  
Tony Weatherbee  
Mike Dugas  
Marc Laurin  
Pete Stannas  
Carol Niewola  
Charles Blackman  
Kevin Nyhan  
Bob Landry  
John Butler

**Army Corps of Engineers**

Rich Roach

**EPA**

Mark Kern

**NHDES**

Gino Infascelli  
Lori Sommer  
Steve Doyon  
Chuck Corliss  
Deb Loiselle  
Chris Williams  
Ted Diers

**NH Natural Heritage  
Bureau**

Melissa Coppola

**NOAA (via conference call)**

Mike Johnson  
Eric Hutchins

**Federal Aviation  
Administration**

Barry Hammer  
Tracey McInnis

**VHB**

Dale Abbott  
Peter Walker

**Hoyle, Tanner & Associates**

Kimberly Peace  
Tim Audet  
Nils Gonzalez  
Matthew Low

**McFarland Johnson**

Vicki Chase

**GZA**

Peter Baril  
Jim Guarente

**Normandeau Associates**

Jameson Paine

**Lebanon Airport**

Rick Dymont

**Maine DOT**

Eric Ham  
Dwight Doughty  
David Gardner  
Jeff Folsom

**Lamb-Star Engineering**

Keith Wallace

**Cianbro**

Chet Muckenheim  
Kaven Philbrook

**Figg Engineers**

Jay Rohleder  
Chris Burgess

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

**PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH:**

*(minutes on subsequent pages)*

Finalization of April Meeting Minutes.....	2
Sandwich, non-federal, 99056Z .....	2
Manchester, non-federal, 16099 .....	2
Lebanon Airport, 3-33-0010-47-2012 .....	4
Hampton Falls-Hampton 13408B .....	6
Portsmouth-Kittery, BH-1671(000), 15731 .....	8

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

## NOTES ON CONFERENCE:

### Finalization of April Meeting Minutes

The April 17, 2013 meeting minutes were finalized.

### Sandwich, non-federal, 99056Z

Steve Johnson, Bureau of Bridge Maintenance, presented a brief history of a prior project located in the Town of Chichester on Main Street over Sanders Brook. Work for the Chichester project consisted of constructing a concrete invert in which the Department placed the natural river stone in the wet concrete to mimic the natural streambed. Before and after photos were shown to illustrate how well this method worked. This history was provided as a preface to the work that Bridge Maintenance would like to propose in the Town of Sandwich on NH Route 113 over Eastman Brook. S. Johnson explained that in Sandwich the intent of the work is the same and that because of the site conditions the results are expected to be even better. Due to the size of the natural stone at this location, the Department will be able to cast around some of the larger boulders. By placing the larger cobbles in the concrete, the Department anticipates that the structure will better trap natural bed material and sediment.

Rich Roach asked about the process for placing the stones. S. Johnson explained that the work is typically performed by diverting half the stream to one side, piling the stones up, and then rolling them in place into the wet concrete. There is a rigid mesh that is also placed in the concrete to add strength and to hold the stones at a specific height so that they do not become completely submerged in the wet concrete. A second layer of reinforcing below the mesh will hold the concrete in place when the concrete cracks over time as the Department anticipates. R. Roach brought up about the potential for the loss of stone in some places. S. Johnson explained that when that happens there will be voids left that will likely fill in with natural sediments.

S. Johnson stated that alternatives to this approach would be to completely remove the natural streambed material under the structure and install rip-rap, or to construct an additional toewall, which is not anticipated to provide a long-term solution.

Gino Infascelli asked about the size of the structure and S. Johnson informed him that it is approximately 10' wide and 8' high.

No other comments or concerns were raised.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

### Manchester, non-federal, 16099

Dale Abbott and Peter Walker of Vanasse Hangen Brustlin, Inc. (VHB) provided an update on the Planning Study addressing transportation needs along approximately three miles of the F.E. Everett Turnpike [F.E.E.T.] (I293) in Manchester. The purpose of this Resource Agency Meeting was to provide the agencies with an update on the status of the project. The presentation consisted of an overview of the key environmental/cultural resources within the study, a summary of the conceptual alternatives that have been developed, a review of the alternatives analysis, and a request for feedback on any concerns or issues from the agencies.

Using a PowerPoint presentation, D. Abbott reviewed the project study area and the study purpose, which is to consider transportation system modifications aimed at addressing capacity and safety related deficiencies along the mainline and at the interchanges (Exits 6 and 7) for a three-mile segment of I-293, including consideration of relocating and reconfiguring Exit 7 into a fully directional interchange. D. Abbott then described and highlighted on a map of the key environmental and cultural resource locations located within the project study area. D. Abbott noted a large wetland complex associated with Black Brook, the proximity of the project to the Merrimack River and its associated floodway/floodplain, sensitive receptors within the study area, the Amoskeag Mill Yard Historic District, and the approximate locations of rare species/habitat areas within the study area.

D. Abbott then discussed the conceptual alternatives that have been developed. He noted that two alternatives on the mainline have been developed for the southern end of the corridor between Bridge Street and Exit 5, five alternatives at Exit 6, and five alternatives at Exit 7. Four of the five alternatives at Exit 7 were located north of the existing location of Exit 7. D. Abbott noted that the reason why there are multiple alternatives in this location is to provide connection options to the Manchester Community College and to the Washington Heights apartment complex off Front Street. D. Abbott concluded by reviewing the results of the alternatives analysis that was completed for the Planning Study.

During the course of the presentation, the following discussion occurred:

Rich Roach recommended expanding the project study area further to the north to include all of the Hackett Hill area.

R. Roach asked which alternative at Exit 6 would have the least amount of new impervious area. P. Walker noted that the impervious area is in the same order of magnitude between all alternatives at Exit 6.

R. Roach asked if secondary development had been looked at for Exit 6, and if so, how would that impact the impervious area calculations. P. Walker responded that secondary development or induced growth was not part of this initial planning study, but would be addressed in the next phase of the project.

Regarding the existing grades in the vicinity of the Manchester Landfill, R. Roach asked if the grades would be better going over the landfill. D. Abbott noted that the grades would be worse going through the landfill. P. Walker followed up by stating that, in addition to the grades at the landfill, there is an existing plume and groundwater management zone associated with the landfill.

R. Roach noted that the planned development at Hackett Hill would need to be addressed in the next phase of the project. P. Walker noted that economic development has been identified as a key issue and will be studied further during the NEPA phase.

R. Roach asked if a decision had been made on the environmental classification of the project. P. Walker stated that a decision has not yet been made, but the thinking right now is to classify the project as an Environmental Assessment.

Mark Kern stated that the next phase of the project would need to contain a detailed analysis of induced growth, land uses, and future development in the study area.

R. Roach felt that the resource agencies would not have a problem with the economic development associated with the project as long as it was tied to a strong conservation plan.

Melissa Coppola inquired about the known cedar swamps located in the Hackett Hill area, and whether any were present in the study area. D. Abbott responded that the GIS information that was provided by the Natural Heritage Bureau did not include any cedar swamps within the study area.

*This project was previously reviewed on the following dates: [12/19/2012](#).*

### **Lebanon Airport, 3-33-0010-47-2012**

Lebanon Municipal Airport (LEB) seeks to remove trees, move their perimeter fence, remove obstruction lights, and install two hazard beacons, all on a hillside south of Runway 25. Approximately 7 acres of tree removal would be in wetlands.

Rick Dyment introduced the project. LEB is required to remove hazards that compromise the safety of the airspace around the Airport due to FAA AIP Grant Assurances. Although complete removal of all obstructions that currently exist is not possible, LEB must demonstrate that a good faith effort is being made to eliminate obstructions.

Nils Gonzalez provided information on what the project entails and when the projects are proposed to be constructed. An obstruction study was conducted in 2009 that identified penetrations of the “Part 77” surfaces. The hillside south of Runway 25 has both ground penetrations and trees that penetrate the “Part 77” surfaces. LEB proposes to remove trees on this hillside that are within Airport property. The ground penetrations will not be removed due to cost. Because the existing obstruction lights and the existing perimeter fence would become obstructions with the trees gone, LEB proposes to remove the obstruction lights and install two hazard beacons (115-foot and 130-foot) on city-owned property south of the airport, and to install a new perimeter fence along the Airport property line south of the airport. The project is funded in part by FAA (90%), in part by the NHDOT (5%), and in part by the city (5%). The timber harvest is expected to be a revenue generator, and will potentially provide the city’s share of the cost of the rest of the project.

The project components and schedule will be as follows:

- 1) Beacon installation - fall 2013
- 2) Obstruction light removal - fall 2013
- 3) 34 acres tree removal - winter 2013-2014
- 4) Fence installation and removal – service road construction- spring 2014
- 5) Stump grinding in wetlands, grub in uplands - winter 2014-2015

Vicki Chase provided a description of wetland resources on the hillside to be cleared. There are seven intermittent or ephemeral channels that flow north from Poverty Lane to the airport. The channels are rocky and narrow, and all the channels have relatively small watersheds. There is also an area of forested wetland in the western portion of the project area, with red maple, elm, white pine, and hemlock. There are no deep organic soils or vernal pools. There is also an area of emergent wetland along the power lines south of the airport property, in an area that will provide access for installing one of the hazard beacons.

Wetland impacts will result from tree removal, fence and obstruction light removal, fence installation, and road construction. The stream crossings will utilize an interlocking concrete block system that will allow the streams to flow over the service road (which will be used infrequently). The fence will have a wildlife “skirt” along the bottom to prevent animals from digging under the fence. Vegetation will be maintained annually to prevent regrowth, and will be kept as scrub–shrub or emergent wetland. As currently proposed, impacts total as follows:

<b>Lebanon Municipal Airport Obstruction Removal Project - Wetland Impacts (square feet)</b>						
	Permanent Direct Impacts	Temporary Direct Impacts	Land conversion within 100' of intermittent stream channels - <i>within jurisdiction</i>	Land conversion within 100' of intermittent stream channels- <i>upland</i>	Land conversion in forested wetlands	Total
Beacon Installation		2,004				2,004
Obstruction Light Removal		32				32
Tree Removal		*Temp. impacts not yet calculated	144,259	345,646	137,294	627,200
Fence Installation & Service Road Constr.	15,741					15,741
Fence Removal		460				460
Total Square Feet	15,741	2,496	144,259	345,646	137,294	645,437
<b>Total Acreage</b>	<b>0.4</b>	<b>0.1</b>	<b>3.3</b>	<b>7.9</b>	<b>3.2</b>	<b>14.8</b>
<b>Mitigation Percentage discussed</b>	<b>100%</b>	<b>0%</b>	<b>15%</b>	<b>10%</b>	<b>10%</b>	
<b>Acreage to Mitigate</b>	<b>0.36</b>	<b>0.00</b>	<b>0.33</b>	<b>0.79</b>	<b>0.47</b>	<b>1.96</b>

It was determined that a forestry notification could not be filed for this project. All impacts would be included in the major impact wetland permit application.

In previous communication between LEB, ACOE, and NHDES Wetlands, it was discussed that because the wetlands at the site would be converted to a different wetland type, the Airport would be required to pay partial mitigation for the land conversion impacts. Percentages to be used for mitigation that were presented at the meeting are listed above. 1.96 acres of impact would require a \$366,300 in-lieu fee, based on the 2013 ARM calculator.

The filing fee was discussed. DES will likely request a filing fee for the full seven acre area, which will total about \$61,000. FAA may seek evidence that other projects have been required to pay the full filing fee.

Rich Roach discussed the need for an Individual Army Corps permit vs. qualifying under the general permit. According to R. Roach, if there is over 3 acres of direct or indirect impact, the NH Programmatic General Permit states that the project requires an Individual Permit.

In addition to the Individual Permit, the project will require a major impact NHDES wetland permit, an NHDES Alteration of Terrain permit (for upland grubbing), and an Environmental Assessment for NEPA clearance. The airport has a rare plant, fringed gentian, which grows in emergent wetlands. The plant will not be affected, and in fact there will be favorable habitat created for the species.

R. Roach asked Gino Infascelli if a hearing would be required. G. Infascelli said he was unable to determine that answer now.

Mark Kern said that the individual vs. general permit, and the total mitigation that would be required, could be discussed with Ruth Ladd (Chief of Policy Analysis and Technical Support at the Army Corps), as there was a meeting scheduled for the next day (June 20) at NHDES with the Army Corps.

Melissa Coppola asked if the conversion would create flooding issues at the airport. The clearing would not likely change peak storm flows or flooding regimes and is not expected to create flooding at the airport.

R. Roach said the Airport might get credit for creating additional habitat for the gentian. He also mentioned that calculating the mitigation is somewhat subjective and is not an exact science.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

### **Hampton Falls-Hampton 13408B**

Matt Low gave a brief overview of the status of the road, bridge, and dam alternatives. The permanent roadway alignment is expected to stay along the existing alignment. The bridge replacement location remains over the existing Taylor River crossing location. Alternative sites for a new bridge were explored; however, geotechnical data indicated settlement of a new structure may occur in places other than the existing site. The existing dam structure is deteriorating and the team is reviewing alternatives to either replace or remove the dam. In the event a dam replacement alternative is chosen, the team is at this meeting to receive agency comments about a dam and to move forward reviewing those concerns.

Jamie Paine provided an update for the ongoing environmental review. Wetlands delineations and invasive species reviews have been completed and locations have been collected. Due to concerns with sediment migration, the team has brought on HDR/HydroQual to complete a sediment migration model. The team is calibrating the model and will be working through the summer to develop their findings. Normandeau staff has completed two separate vibracoring efforts that will be used with the model. Cores were taken 1,000 ft upstream and every half mile for 4.5 miles downstream, to the US Route 1 bridge crossing. In addition, a UNH team is completing a long term series of sediment monitoring at the dam structure. Normandeau staff will be commencing a sampling effort to review dissolved oxygen concerns upstream from the dam. Ted Diers provided that NHDES will want to receive a copy of the data and requested that the team work with NHDES' technology staff.

Rich Roach asked whether the team has analyzed hydraulics for a dam removal alternative yet. M. Low said that the sediment transport modeling efforts include an evaluation of the dam removal alternative.

Eric Hutchins asked the group to describe the highest predicted tide. J. Paine stated that Normandeau is collecting tidal elevation data now and expect to have data within a month. E. Hutchins stated that if salt water is already reaching impoundment, habitat for river herring is that much worse.

Peter Stamnas commented that the Department's legal counsel has reviewed the project and determined that the Department does not have the rights necessary to dredge if the dam is removed, which would complicate the hearing process.

R. Roach stated that if the area was tidal prior to 1950, then the area would be public land. P. Stamnas reiterated that it was the Attorney General's determination, not the Department's, that the abutters own to the thread of the channel. Ted Diers added that the Department gained flowage rights (rights to flood) when the dam was constructed, so that may have impacted the rights of the State. He recommended that DOT and DES meet with the Attorney General's office. R. Roach commented that it would be very important to get this issue sorted out before going to hearing.

P. Stamnas noted that land rights issue raises concerns with the project's schedule; therefore the Department is strongly considering decoupling the bridge replacement portion of the project from the dam alternatives portion. This would allow both projects to move forward in parallel paths, but would allow more time for the Department to work out land rights relative to dam removal or replacement. The Department was seeking input from the resource agencies on these considerations.

R. Roach commented that he is very concerned about not replacing the I-95 Bridge as soon as possible, as it is clear to him that the bridge should be addressed, and he would be in favor of decoupling the bridge and dam efforts. He indicated that he would like to know if the Department received permits for the existing structures.

J. Paine asked R. Roach if a bridge-only project would qualify under the ACOE's State Programmatic General Permit (PGP). R. Roach stated that the project may be eligible for the PGP for discharge of fill (e.g., rip-rap). He provided that the US Coast Guard has authority over the bridge. It would need to be determined if the project is consistent with the PGP. Christine Perron stated that the Coast Guard had previously determined that no Bridge Permit would be required for the project.

Mark Kern asked what the next step would be for the dam. P. Stamnas explained that the Department would receive comments from the public. M. Kern asked if modifications would be needed to the existing dam to build the bridge. M. Low stated that dam modifications would be needed.

M. Kern asked if separating the dam and bridge projects would result in a lack of momentum in addressing the dam. T. Diers stated that if the dam and bridge projects are separated, there would actually be better clarity from a permitting perspective. There would need to be an understanding between the Departments that dam modifications would be temporary and a timeline would need to be established.

J. Paine provided that the feasibility study identified declining numbers of fish passing over the fish ladder. With a permanent or temporary dam solution, the responsible agency overseeing the fish ladder would need to ensure proper maintenance.

M. Kern asked about the funding for the project. P. Stamnas stated that this is a Turnpikes project utilizing State-only funds.

Melissa Coppola asked whether sensitive plant surveys were done. J. Paine provided that Normandeau would be completing the surveys in the near future.

Chuck Corliss stated that he is available to give input when needed for dam-related concerns. Steve Doyon added that the NHDES Dam Bureau would need to provide a detailed review of any proposed plans, once they are available.

*This project was previously reviewed on the following dates: 12/19/2007, 1/16/2008, 2/20/2008, 3/19/2008, 8/19/2009, 10/29/2009, 12/10/2009, [1/16/2013](#).*

**Portsmouth-Kittery, BH-1671(000), 15731**

Please contact the Maine Department of Transportation for meeting minutes.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*