

# BUREAU OF ENVIRONMENT CONFERENCE REPORT

**SUBJECT:** NHDOT Monthly Natural Resource Agency Coordination Meeting  
**DATE OF CONFERENCE:** July 21, 2010  
**LOCATION OF CONFERENCE:** John O. Morton Building  
**ATTENDED BY:**

**NHDOT**

Kevin Nyhan  
Christine Perron  
Marc Laurin  
Matt Urban  
Don Lyford  
Pete Stamnas  
Mike Dugas  
Dave Smith  
Ron Grandmaison  
Michael Hazlett  
Charlie Blackman  
Chris Carucci  
Dan Prehemo  
Ralph Sanders  
Nancy Spaulding

**NHDES**

Lori Sommer  
Laura Weit-Marcum

**Army Corps of Engineers**

Rich Roach

**NH Fish and Game**

Carol Henderson

**NH Natural Heritage  
Bureau**

Melissa Coppola

**CLD Engineers**

Daniel Hudson

**The Smart Associates**

Jennifer Riordan

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

**PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH:**

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## NOTES ON CONFERENCE:

### Finalization of June 16, 2010 Meeting Minutes

Laura Weit-Marcum commented that she attended the June meeting, but her name was not reflected in the attendee list. In the final minutes, this was corrected and the June 16, 2010 meeting minutes were finalized.

### Manchester, 14966 (non-Federal)

Daniel Hudson gave a brief overview of the project using a progress preliminary design plan. Dan described the location of the project and that it included five “red-listed” bridges in the vicinity of the mill yard on I-293 at Exit 4 in Manchester ([project website](#)). The project is located along the west side of the Merrimack River and three of the bridges cross the Piscataquog River. Dan explained that the mainline bridges (over the northbound on-ramp and southern and northern channels of the Piscataquog River) will be rehabilitated by widening the abutments to the west and replacing the existing steel and bridge decks. The widening is necessary for traffic control during construction, but will be retained to enable improvements to highway geometry. Within the project area, I-293 carries over 70,000 vehicles per day; so two lanes of traffic are needed at all times. The northbound off-ramp bridge over I-293 will be replaced with a new bridge located northerly of the existing bridge so that the existing bridge can remain in service during construction. The northbound on-ramp bridge over the southern channel of the Piscataquog River will be replaced (steel and deck only), during which ramp closure will be required.

Jennifer Riordan reviewed the environmental issues that have been identified during the environmental process. The first issue discussed was wetland impacts, which total approximately 29,200 square feet. This includes approximately 8,100 square feet of bank impact and 21,100 square feet of wetland and riverbed impact. Jenn mentioned that at the Natural Resource Agency meeting on January 20, 2010, it had been discussed that bank impacts would not need to be mitigated since they are part of the highway embankment. Lori Sommer agreed that the bank impacts would not need to be mitigated. Rich Roach and Lori also agreed that the impacts to the Piscataquog River from the bridge widening would also not need to be mitigated. This would result in approximately 16,600 square feet of wetland impact that would require mitigation. Jenn asked if there are any known opportunities near the project area or if an in-lieu fee payment would be an option. Rich suggested contacting the Piscataquog River Local Advisory Committee (PRLAC) to determine if they have any planned projects in the area. Rich also suggested looking at an aerial photograph of the project area and along the Piscataquog River, upstream of the project area to determine if there are any opportunities for restoration, riverbank preservation, trail improvement, or other mitigation. Rich said that other opportunities need to be reviewed before deciding that an in-lieu fee is an appropriate option. Rich also asked if there is any opportunity to move the bridge abutments back from the riverbank. Dan replied that this is not an option since the existing bridge is being rehabilitated, not replaced. Kevin Nyhan estimated that an in-lieu fee for the proposed amount of impact would be approximately \$60,000. Lori and Rich agreed and Rich noted that not a lot of mitigation could be accomplished for that, but reiterated that potential options should be investigated with the estimated figure in mind. *Following the meeting, Kevin*

*checked the latest version of the ARM fund calculator. Sixteen thousand six hundred square feet of impact to wetlands in Manchester equates to a payment of \$63,081.83.*

Jenn then discussed the timing of construction with regard to bald eagles and fisheries. Jenn mentioned that for the bald eagles, it was suggested by NH Fish and Game that work be avoided during the winter season (December through March) near the northbound off-ramp. For fisheries resources, NH Fish and Game had suggested that in-water work be avoided during spring and summer. Jenn mentioned that work on the three mainline bridges will need to occur during the summer, but this work would not be located in the water. A construction phasing plan that includes in-water work during the fall and winter will be pursued.

Jenn then reviewed the proposed floodplain impacts. Approximately 4,400 cubic yards of fill in the floodplain area are anticipated and approximately 5,425 cubic yards of fill are anticipated in the floodway of the Piscataquog River. Dan Hudson mentioned that additional coordination with the NH Office of Energy and Planning (OEP) would be conducted to determine if a full hydraulic analysis is needed since the proposed fill is not anticipated to significantly impact the floodway. Kevin Nyhan mentioned that for projects that involve more than 5 acres of development and will impact Zone A floodplains, the base flood elevation needs to be calculated. He suggested contacting Jennifer Gilbert at OEP for clarification.

Dan Hudson discussed water quality and stormwater treatment and mentioned that that project will involve an approximate 35,000 foot increase in impervious surface. The project area does not currently have stormwater treatment, so a net reduction in pollutant discharge to the rivers is anticipated. Kevin Nyhan asked if the Merrimack River has any 303(d) impairments. Jenn replied that it had several, including aluminum and *E. coli*, and that the Piscataquog River also had several impairments [*The segment of the Merrimack River within the project area is impaired for aluminum, dissolved oxygen saturation, pH, mercury, and E. coli. The segment of the Piscataquog River within the project area is impaired for pH, mercury, and E. coli.*] Kevin Nyhan suggested contacting Philip Trowbridge at NHDES to determine if there are any additional water quality requirements.

Lori asked about the timing of the project and when the wetland permits would be needed. Dan explained that the project would be constructed in two phases. The first phase, which includes the southern half of the project, is anticipated to be advertised in early 2012. The second phase, which includes the northern half of the project, is anticipated to be advertised in late 2012.

Carol Henderson asked if a tree inventory for bald eagles had been done. Jenn replied that it had been completed and that map showing the locations of the trees had been sent to Kim Tuttle at NH Fish and Game. NH Fish and Game had recommended preserving two oak trees near the northbound off-ramp. Carol suggested contacting James Kearns at PSNH, since they have a bald eagle management plan for a portion of the Merrimack River.

Laura Weit asked if the PRLAC had been contacted. Jenn replied that a meeting had been held with them last year and they did not express any concerns. The PRLAC was also invited to this meeting. Jenn said that copies of the preliminary plans would be sent to the PRLAC.

*This project was previously reviewed on the following date: [1/20/2010](#)*

## **New Castle, 15895 (non-Federal)**

Chris Carucci presented the project, which is located on NH Route 1B, on a 1,000' section of causeway between Goat Island and New Castle Island. The project scope involves replacement of approximately 2,600 lf of existing cable guardrail with beam guardrail, formalizing the typical section to reflect 11' travel lanes and 2' shoulders, paving existing gravel shoulders, full width overlay of the roadway, and repair of existing riprap slopes. The project is 100% State funded, with a tentative advertising date of early spring 2011.

The existing roadway consists of 11' paved travel lanes and 2' gravel shoulders. The speed limit is 30 mph, average daily traffic (ADT) is approximately 3,000 vehicles per day (vpd), with a peak of up to 6,000 vpd. No old plans for the causeway were available, but other records indicate it was constructed in the late 1700's. This route has a significant number of bicycle and pedestrian users. The existing causeway has riprap lined slopes along the majority of both shorelines, with one section of ledge outcrop, and small section granite block retaining wall along the southeast edge of the approach to the causeway. The existing causeway cross section is adequate to accommodate the project, with the exception of the small area adjacent to the granite block wall noted above. No additional expansion of the riprap is anticipated. The granite block treatment could be extended a short distance, if needed. Some of the existing riprap could be reset, and approximately 700 cubic yards of riprap would be needed to fill existing voids. Paving of the gravel shoulders would add about 4,000 sf of new pavement, and would be a significant safety benefit to the bicyclists and pedestrians.

Prior to the meeting, Mike Johnson of the National Marine Fisheries Service provided maps of recent eelgrass surveys. The eelgrass beds are along the north shore of the causeway. Melissa Coppola indicated that marsh alder is present along the southeast edge of Goat Island, near the high tide line. These resources are outside the anticipated project impact areas.

Rich Roach stated that a delineation of the high tide line is required to assess jurisdictional limits. If all the work is above high tide, no permit would be required. If there is work below high tide, an individual permit or confirmation under the PGP would be required. Rich also stated that the Department is unlikely to get a permit for expanding the footprint of the existing riprap.

Chris Carucci asked if there were time of year restrictions on construction, and if the use of a barge for construction equipment or delivery of materials would be feasible. Rich stated that fisheries would usually restrict construction after July 1, and that use of a barge was probably not feasible due to the depth of water and negative impacts to shoreline vegetation.

Due to the narrow width of the causeway, the Department would probably pursue a road closure for approximately 2 weeks to accomplish the construction. Subsequent discussions indicate that the least impacting time for a road closure would be early spring, with a completion date prior to Memorial Day weekend.

Matt Urban and Chris agreed to determine the high tide line so that the jurisdictional limits could be determined and buy-in received from permitting agencies. Once this information is gathered, the design will be refined and impacts calculated. These impacts will be presented at another meeting.

## **Errol, A001(122), 15925**

Dave Smith provided an overview of the project, which is similar to the recent Dummer project, except that the intent of the subject project is to address concerns before a catastrophic roadway failure occurs. The impetus for the project is the localized slope failures occurring on the east side of NH Route 16 along the Androscoggin River (district forces repaired two slope failures in October 2009). In addition, the roadway shows signs of sloughing. The roadway should have a cross slope of 2%; however, in one area the cross slope is 16%. It is especially critical to avoid a catastrophic failure along this section of roadway because the shortest detour is 66 miles.

The proposed project involves moving 3,000' of NH Route 16 approximately 15' to 20' away from the river (beyond the failure plane). The Department owns a Controlled Access Right-of-Way (ROW) 75' from the existing centerline. This allows all construction impacts to occur within existing ROW. The west side of the road where the new alignment will be located is a plateau that is 15' to 20' higher than the roadway. The property adjacent to the ROW to the west of the road is owned by the "13 Mile Woods Association," with a restrictive easement on the property. The Department is trying to avoid all impacts to this property. Due to the scenic qualities of the project area, the intent is to make all new 2:1 back slopes green (covered with humus and seeded). However, to avoid impacts to the adjacent property, a 500' long, 9' high gabion retaining wall is proposed.

The consensus of those in attendance was that the proposed gabion wall would be aesthetically displeasing and inappropriate for this scenic road, and that it would be preferable to simply omit the wall and project the slope into the easement. D. Smith stated that the wall was being proposed in order to allow the project to be expedited by avoiding property impacts. Melissa Coppola added that the adjacent property received Forest Legacy funds and there is an extensive snowmobile corridor along the property. D. Smith said that he would be discussing the project and proposed wall with the 13 Mile Woods Association. There is also a public meeting scheduled for August 25 in Errol to get input from public officials and the general public. M. Coppola said that Susan Francher, DRED Forest & Lands, should be included in any meetings with the 13 Mile Woods Association since she works with Forest Legacy funds.

Christine Perron gave an overview of environmental resources and issues. The project is located along the Androscoggin River and will require a shoreland and wetland permit. There are no impaired waters and no Natural Heritage Bureau records in the vicinity of the project. There is one stream crossing in the project area that is a Tier 1 crossing with a watershed size of 147 ac. Preliminary wetland impacts total 4,670 sq. ft. of wet ditch; 4,576 sq. ft. of wetlands; and 191 sq. ft. of stream.

Rich Roach said that the project would qualify for coverage under the SPGP. He considered moving the road away from the river to be self-mitigating, and felt that the further away the road could be moved the better.

There was discussion about vegetation along the river. District forces will be cutting dead, diseased, and dying trees on the riverbank adjacent to the road (leaving stumps intact) to relieve stress on the bank. Carol Henderson asked if vegetation could be planted along the banks as part

of the realignment, as DOT agreed to do for the Cambridge project. C. Perron said that this could be incorporated into the overall planting plan when the abandoned alignment is revegetated.

### **Alton, X-A001(051), 14121D**

Kevin Nyhan provided a brief introduction to this project, which consists of safety improvements at the intersection of NH Route 28 and Stockbridge Corner Road in Alton ([project website](#)). He discussed the environmental resources at the intersection, which consist of several historic properties, wetlands and an intermittent stream.

Mike Dugas presented the improvements, which will reconstruct a ¼ mile section of NH Route 28 at the intersection with a 12-12-4 typical section. The slip ramp for northbound traffic entering Stockbridge Corner road east of the intersection is confusing and will be replaced with a standard right-turn lane. The culvert along the east side of Stockbridge Corner will be replaced, in accordance with recently adopted stream crossing rules. Drainage will be improved throughout the intersection, with primarily ditches. One late addition to the project will provide safety improvements, limited slope work for improved sight distance, at the intersection of NH Route 28/Ham Woods Road. Although wetlands will be impacted by this project, no wetlands will be impacted at the Ham Woods Road intersection.

Melissa Coppola asked if the Ham Woods Road intersection was included in the latest Natural Heritage Bureau request. It was not, and Kevin indicated that he would recheck the project area.

Once the area of wetland impacts is known, the project will be presented again.

### **Salem-Manchester, IM-IR-93-1(174)0, 10418C**

Marc Laurin provided an update on the Lupine relocation status. He handed out a locus map of the site. The Salem Meadows conservation land site was chosen in coordination with Melissa Coppola. The Salem Conservation Commission holds the conservation easement. The Department presented the plan to the Salem Conservation Commission, who is amenable to the transfer of the plants onto the site. The Commission is reviewing the easement language to ensure it meets the conditions of the easement and will be coordinating with the owner. The relocation will be done in late fall, prior to construction with the Department's District 5 maintenance and roadside development inputs. Melissa Coppola inquired about seed collection. M. Laurin replied that VHB is tasked to collect them, he will check to see if they have collected seeds (*subsequent inquiry with VHB confirmed that seeds were recently collected*).

Peter Stamnas inquired if there were any comments on the South Road mitigation plans that were sent out to the agencies for their review. Rich Roach had no concerns, but he will need to make sure that the Corps' Environmental Resource Unit (ERU) reviews the plans. Carol Henderson stated that Mike Marchand has reviewed them and did not have any major changes to propose. L. Sommer inquired about the South Road culvert replacement. P. Stamnas has been coordinating with town staff, and will be going back to the Town of Londonderry Planning Board to present the design. The Department's engineering consultant is designing a natural bottom culvert for the

crossing, which will be incorporated into the project. The project will be advertised in November 2010.

R. Roach asked about the status of the Final Supplemental EIS and Supplemental Record of Decision (SROD). The Department is working on responses to the comments received and targeting publishing of the SROD by the end of August/early September. R. Roach brought up EPA's concern with the increased impacts to wetlands and the need for greater mitigation. He feels that this should be discussed before the SROD is issued. P. Stamnas stated that these points have been discussed in past meetings. He felt that the Department needs to advance the design of the project through the Slope & Drain submissions and at that time would have real information on the overall additional impacts, rather than a projection. L. Sommer pointed out that the Department is going to receive credit for providing the remaining amount to fully fund the Cobbetts Pond Middlesex compensation project. P. Stamnas stated that in-lieu fee would be considered if additional mitigation is warranted.

Regarding Haigh Avenue, the Town of Salem has purchased 7 of the 9 properties for the first phase of acquisitions along this flood-prone development located adjacent to Policy Brook. The Department will begin design when on-going survey of the entire site is completed. The Phase II FEMA application for an additional 14 homes is being advanced by the Town of Salem. P. Stamnas reiterated that written concurrence from the Corps and Wetlands Bureau on the change in mitigation from the waste water treatment plant site to the Haigh Avenue is needed. L. Sommer stated that she will be responding for DES and asked that the information that was sent to Gino be forwarded to her. R. Roach is unsure if this requires a permit modification, he will need to get familiar with the proposal and the mitigation package. He would like to go to the site and suggested setting up a field visit after Labor Day.

R. Roach commented on the Exit 3 Park-and-Ride. He reiterated that this should be a stand-alone project and not brought into the overall I-93 project. He stated that it would qualify as a SPGP with mitigation provided by in-lieu fee as long as the impacts were less than 3 acres. P. Stamnas indicated that the Department would agree to do this. The wetland impacts are being minimized and once plans are developed would present the project to the Natural Resource Agencies. The schedule would be to take the project to a Public Informational meeting in early summer of next year. Due to its location, the work itself would not be constructed until the tail end of the overall I-93 widening.

*This project was previously reviewed on the following dates: 8/10/1995, 1/10/1999, 2/16/2000, 5/17/2000, 6/14/2000, 7/19/2000, 8/10/2000, 9/20/2000, 10/18/2000, 1/17/2001, 2/14/2001, 3/21/2001, 4/18/2001, 5/10/2001, 8/15/2001, 9/19/2001, 10/17/2001, 11/21/2001, 1/16/2002, 2/20/2002, 5/15/2002, 6/18/2003, 10/15/2003, 12/17/2003, 10/20/2004, 11/17/2004, [1/18/2006](#), [12/19/2007](#), [2/20/2008](#), [10/15/2008](#), [12/17/2008](#), [1/21/2009](#), [4/15/2009](#), [5/20/2009](#), [7/15/2009](#), [8/19/2009](#), [10/29/2009](#), [1/20/2010](#), [2/17/2010](#), [3/17/2010](#), & [5/19/2010](#)*