BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting
DATE OF CONFERENCE: May 18, 2011
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Carol Niewola
Cathy Goodmen
Chris Girard
Christine Perron
John Sargent
Jon Evans
Kevin Nyhan
Leah Savage
Marc Laurin
Matt Urban
Michael Hazlett
Michelle Marshall
Ralph Sanders
Wayne Brooks

Army Corps of Engineers
Rich Roach

NHDES
Gino Infascelli
Lori Sommer

NH Fish and Game
Carol Henderson

McFarland-Johnson
Jed Merrow
Jennifer Zorn
Tom Kendrick
Vicki Chase

Lebanon Airport
Rick Dyment

(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 April 20, 2011 Meeting Minutes

The April 20, 2011 meeting minutes were finalized via e-mail on May 25, 2011.

Haverhill, 14154 (non-Federal)

This project involves repairing a failing slope along the west side of NH Route 10, approximately 1 mile south of the intersection of NH Route 116. Work includes installation of riprap, and guardrail and drainage improvements. The Department provided a review of wetland impacts and a proposal to provide mitigation money into the DES ARM fund, and sought approval of the same.

This project involves repairing a slope on the western side of NH Route 10 in the Town of Haverhill. The project is located approximately one mile south of the intersection with NH Route 116 and is within 1,000 feet of the Connecticut River; although no impacts to river are anticipated. The side slope of the roadway is very steep and groundwater seeps are causing it to slough into the cow pasture below. This is causing the cable-guardrail to lean away from the road and the pavement to crack and sink on the western side of the roadway. The roadway currently has 11 foot travel ways and 1 foot shoulders. This layout will stay the same.

Cathy Goodmen and Chris Girard presented the Department's proposed design for this project. The proposal is to construct a 2:1 slope next to the roadway and carry that down to the approximate location of the existing electric fence, then change to a 4:1 slope.

The abutting property is in LCHIP Conservation and a hearing highlighting the impacts to this property was held in Haverhill. At this hearing the Department presented several variations of slopes, including a 4:1, a 3:1 and a 2:1 on the entire slope. After the hearing and discussions with the landowner and LCHIP, the above noted design was developed to as it satisfies all the stakeholders.

Lori Sommer asked how the Department determined mitigation for LCHIP. C. Goodmen noted that after discussion with LCHIP and the landowner, the proposed design was determined to satisfy LCHIP's mitigation requirements as it was agreeable to the landowner who requested a design which would still allow the cows to graze on the 4:1 slope, but protect them from going on a steep slope.

For safety reasons, District 2 forces replaced the existing cable guardrail with a w-beam guardrail last autumn. The proposed project will re-set this rail when all slope work is completed. A new ditch line will also be installed on the east side of the roadway.

The proposed project includes 10,761 sq feet of permanent wetland impacts. The Department attempted to contact the Haverhill Conservation Commission twice, to no avail, to determine if there were any local mitigation priorities. In-lieu of mitigation, the Department has proposed to make an ARM fund payment of approximately $35,000.

Gino Infascelli asked if there is any connection to the Connecticut River. Cathy Goodmen noted that there is no tributary that flows into the wetland, but there is an intermittent stream that flows out of the wetland into the Connecticut River. L. Sommer indicated that she was in agreement with the proposal to make an A.R.M. fund payment in-lieu of mitigation. Rich Roach indicated that the project would qualify for coverage under the NH Programmatic General Permit.

This project was previously reviewed on the following date: 4/16/2008.

Lempster, 2011M215-19 (non-Federal)

Christine Perron provided an overview of the project. The project involves a culvert replacement on an unnamed perennial stream on the Second NH Turnpike in Lempster. The watershed size at the crossing is 182 acres, which would be a Tier 2 crossing under the stream crossing rules. However, the project is located 800' from the Cold River, a Designated River, which makes this a Tier 3 crossing.

The existing crossing consists of twin 36" diameter x 60' long corrugated metal pipes. The pipes are in very poor condition and the road has been settling over the inlet side of the pipes. The outlet of the pipes is slightly perched. The slope of the pipes is nearly flat.

A stream assessment was completed in July 2010. Field data indicates that this is a Rosgen Type C stream. Based on bankfull measurements, the stream crossing rules would require a 10' span or 3-sided box at this crossing.

The project will be constructed by District 2 maintenance forces. Due to the high cost of a 10' structure, including the increased costs associated with a higher level of engineering and geotechnical investigations, and a longer construction time for a 10' structure, District 2 has proposed an alternative design: a 71" wide x 47" high x 60' long corrugated metal squash pipe. This pipe would be embedded one foot. There is no history of flooding at this site and no Natural Heritage Bureau records. Impacts would be temporary except for a 9 sq. ft. area of sediment at the outlet that would be removed. Prior to the stream assessment, District 2 had prepared a draft application package for a 64" x 43" squash pipe.

Rich Roach asked about fisheries. Carol Henderson said that this area of the Cold River is part of the Cold River habitat restoration project. She said that the river is stocked but did not know if this tributary was ever stocked. C. Perron said that this is a relatively short segment of stream with many associated wetlands. Coordination with the Cold River Advisory Committee was discussed. C. Perron explained that the local advisory committee would typically be invited to the coordination meeting but this project had been a late addition to the agenda. The advisory committee would receive a copy of the application package for review and comment.

Rich Roach indicated that the project would qualify for coverage under the NH PGP. No other questions or concerns were raised.

Lori Sommer asked about data collected during stream assessments. C. Perron said she, Kevin Nyhan, and Matt Urban have been completing the assessments thus far. John Magee's culvert

protocol form has not been utilized because it does not address the requirements of the stream crossing rules. Instead, assessments are completed using a field worksheet that C. Perron put together based on the rules. K. Nyhan went through an example of a worksheet that had recently been completed in Eaton. He noted that stream assessments are completed most efficiently with three people. Gino Infascelli expressed an interest in joining the BOE on a future stream assessment to review the protocol used.

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

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

This project involves the widening of Interstate 93 between Salem and Manchester. The Department provided an update on the changes in the mitigation creation design of the Windham median mitigation site, and sought agency feedback.

Wayne Brooks provided an update on the changes in the mitigation creation design of the Windham median mitigation site. The removal of the fill from the existing northbound barrel to reconnect the large wetland area on the west side with the wetlands on the east side, as previously proposed, would increase the headwater and cause a concern for flooding of the nearby West Shore Road. A memorandum from LBG that discussed this concern was handed out. There are also concerns with this effort causing flooding uses in the nearby Pennichuck Water Community water supply well and pump house. To address these issues, a new concept was evaluated that would remove the fills and restore 3.3 acres of wetlands, but leave a berm in place so the wetland on the west side would not be directly connected to the east wetland. The water from the wetland on the west side would be metered out through the existing 24 inch pipe thereby retaining the same hydraulic connections as presently exists.

Rich Roach and Lori Sommer both expressed concerns with the new concept. They were concerned that this concept would not allow the wetlands to be re-connected. R. Roach wondered if fixing West Shore Road would be appropriate, then the previous design could be built. W. Brooks pointed out that there is a further hydraulic problem with the culvert under W. Shore Road and its connection to Canobie Lake is problematic. R. Roach questioned the environmental benefits that would occur if the 3.3 acres were constructed and he suggested that the money would be better spent by the DOT participating in the ARM fund. L. Sommer agreed that it would be preferable not to do this restoration effort and to participate in the ARM program.

Gino Infascelli suggested that the existing culvert that outlets water from the west side wetland under the ±30 feet of fill of the existing northbound, could become a future maintenance liability if left as is. He stated that its length should be reduced by removing some of the fill and leaving a smaller length under less fill. Another option would be to remove the culvert and replace it with an open channel and have the flow metered by a weir to replicate the existing hydraulic conditions. W. Brooks and M. Laurin agreed that the options and costs discussed with not removing the fill, ARM fund contributions, providing an open channel, shortening and/or replacing the outlet culvert will be evaluated and will be discussed at a future meeting.

This project was previously presented on the following dates: 1/20/2010, 3/17/2010, 5/19/2010, 7/21/2010, and 9/15/2010.

Portsmouth, STP-X-5379(025), 13455

Tom Kendrick of McFarland-Johnson described this project's first construction contract (13455A) which involves the reconfiguration of the US Route 1 Bypass interchange with US Route 1 (Lafayette Road). The existing southbound US Route 1 overpass will be removed and the interchange replaced with an at-grade, signalized T-intersection of US Route 1 with the bypass. As the project area floods at less than a two year storm, the existing US Route 1 culvert to the Sagamore Creek tidal marsh will be repaired. The outlet is silted in and buried and in order to pass a ten-year storm requires the re-establishment of an existing ditch line in the tidal marsh. This ditch was previously permitted with the previous project several years ago and Phragmites have built up in the ditch. The impervious area will end up being slightly less than existing, however a gravel wetland will be constructed to treat some of the runoff from the northern portion of the project prior to outletting to the Sagamore Creek tidal marsh.

Vicki Chase of McFarland-Johnson described the wetlands and the proposed impacts. To create the gravel wetland will impact ±1,700 sq ft of a degraded Forested wetland, the reestablishment of the Sagamore Creek culvert will require ±1,800 sq ft of Phragmites dominated Emergent wetlands impacts, and the re-establishment of the ditch will impact ±334 sq ft of the Tidal Marsh for a total of ±3,800 sq ft permanent impacts. Additionally, there will be ±3,800 sq ft of temporary impacts and ±1,700 sq ft of impacts within the developed Tidal Buffer Zone. For a total of ±9,300 sq ft of jurisdictional Wetland Bureau impact.

Gino Infascelli stated this would be a Major Permit and mitigation would need to be discussed. He stated that a permit was issued to District 6 a few years back to maintain the outlet from US Route 1 into the tidal marsh. This design incorporated a forebay and he was wondering on the status of these repairs as the concern is the discharge should have treatment. Marc Laurin stated that it does not appear that anything was done by District and he would review the files to see what the permit was for and when it was issued (*subsequently Permit 2006-00742 was found to have been issued on February 21, 2007 and expires on February 21, 2012*). Michelle Marshall will coordinate with Ralph Sanders of District 6 on the status of this maintenance activity and whether there are plans for District to complete this activity prior to the project. M. Laurin asked whether the tidal marsh impacts of this project would qualify for an SPGP as it is maintenance of an existing ditch and outlet. R. Roach stated that he would need to coordinate with National Marine Fisheries Service and it would depend on the impacts. He asked about consideration of mitigation by removing some existing fills in the vicinity of the project. V. Chase will contact the DES Coastal Office and the City of Portsmouth to see if there are any mitigation opportunities in the vicinity of the project.

R. Roach asked about the other bridge replacement contracts and how these would affect an ultimate widening of the Bypass. M. Laurin and T. Kendrick stated that the remaining contracts will be for the replacement on essentially the same location and within the existing footprint of five individual red-listed bridges that span the Bypass. All the contracts have independent utility and do not preclude any options. There has been a master plan study that discussed options for

ultimate widening of the Bypass, but there is no funding for this project and it is not on the State's Ten-Year Transportation Improvement Plan.

This project was previously reviewed on the following date: 5/16/2007.

Lebanon Airport Runway Safety Area, 3-33-0010-42-2009

This project involves improvements to runways and safety areas to bring Lebanon Airport into compliance with FAA safety standards. McFarland-Johnson provided an update on project alternatives and impacts and sought input on how to approach wetland mitigation in the Environmental Assessment.

Jed Merrow, consultant for the City of Lebanon, introduced attendees and noted that the purpose of the presentation was threefold: to update attendees on the status of the alternatives; to discuss wetland mitigation ratios; and to discuss the method of proposed wetland mitigation. A copy of the slide show was handed out to attendees.

Jed provided a brief summary of the previous Natural Resources Agency meeting in which the following were discussed: purpose and need, screening of alternatives and wetland mitigation.

The alternatives currently under consideration for the north-south runway include P10M (extending the north-south runway 1,000 feet south), P11M (constructing an EMAS bed on the north end and extending the runway 600 feet south) and P11M with EMAS beds on both ends of the runway (an alternative suggested by Maria Tur of USFWS at a previous resource agency meeting). The east-west runway alternative is C14, and was not discussed as it has no resource impacts.

Aerial photographs were shown illustrating each of the alternatives and proposed wetland impact areas, earthwork limits, and tree clearing areas. Jed provided details on the types of wetlands to be impacted as well as the nature of those impacts. He explained that the wetlands to be impacted within the airfield are mowed turfgrass and those outside the airfield (south of the RW 36 end safety area) are naturally occurring but the vegetation is cut every 2-3 years. The wetland impacts would include direct dredge and fill; draining where excavation will occur within wetlands; and tree clearing (without grubbing) in wetlands. At the request of Mark Kern (USEPA), acreage of proposed tree clearing that would occur within 100 feet of wetlands was also determined. There will also be tree clearing (with grubbing) in uplands and earthwork and grading in certain areas south of the runway. These areas were illustrated on the aerial photographs, and the data was summarized in two tables. Estimates of earthwork quantities and construction costs were included in the tables.

The discussion then was opened to questions and answers focusing on the three objectives set forth at the beginning of the meeting.

1. Status of the alternatives, including P10M, P11M and P11M with 2 EMAS beds:

Jed noted that the cost of P11M with 2 EMAS beds was substantially higher than the other alternatives, while resource impacts were only marginally better. The cost is estimated at $30.7 million, while alternatives P10M and P11M are estimated at $13.4 million and $22 million, respectively. He requested concurrence that it was appropriate to eliminate this alternative. Rich Roach (USACE) agreed and stated that, since no substantial environmental benefit would be realized, the cost made the alternative not practicable. A consensus was then reached that eliminating P11M with 2 EMAS beds from further evaluation in the EA was appropriate, but that the screening analysis for this alternative would remain in the EA.

2. Wetland mitigation ratios:

Jed requested input on the appropriate mitigation ratios. The impacted wetlands include various levels of disturbance, the nature of the impacts would differ (e.g., tree clearing vs. dredge and fill), and the mitigation ratio requirements of the NHDES and USACE differ.

Lori Sommer noted that the mowed turfgrass wetlands had lower value than other wetlands. She felt it would be appropriate to consider those impacts as full wetland impacts but balance it by discounting the tree clearing impacts. That is, if mitigation compensates for dredge and fill impacts to the turf wetlands and the managed vegetation wetlands at a 1.5:1 ratio, then direct mitigation for tree clearing impacts would not be necessary. There were no objections to this approach. Rich Roach wasn't sure how differences in NHDES and USACE mitigation ratios are resolved, but suggested Jed speak directly with Erika Mark from his office for input on this matter.

3. Method of wetland mitigation:

Previous Lebanon Airport projects, especially the South Ramp project, have encountered difficulties in finding wetland creation, restoration, and preservation sites. Jed had spoken with various NGOs (Upper Valley Land Trust, Forest Society, The Nature Conservancy) regarding available preservation sites, and all expressed reservations about the proposed project time frame. Given these circumstances, Jed suggested that In-Lieu Fee mitigation might be appropriate for this project.

Lori Sommer acknowledged that the time frame of this project makes it difficult to identify viable preservation sites. She felt that In-Lieu Fee mitigation using a 1.5:1 ratio is appropriate. She agreed that documenting the South Ramp project mitigation efforts, with some updating, would be appropriate to justify the In-Lieu Fee approach.

Rich Roach said that, based on past experience at the airport, restoration and preservation options are unlikely to be found, so in the end, In-Lieu Fee would likely be preferred. The EA must demonstrate that no restoration is possible so that justification is provided for the proposed In-Lieu Fee mitigation.

A question arose relative to the funding of the project and the timing of any In-Lieu Fee mitigation payment. Carol Niewola (NHDOT) detailed the procedure that is followed by FAA and NHDOT on past projects wherein "a shovel does not hit the ground until the In-Lieu Fee payment is made." She provided details on what has recently occurred at Nashua Airport pertaining to this matter.

This project was previously reviewed on the following dates: 9/17/2008, 7/15/2009, and 9/15/2010.

Hampton, 2011M612 (non-Federal)

This project involves the replacement of existing drainage from NH Route 1A under Little Jack's restaurant parking lot. The proposed effort involves the installation of a 15" diameter, 198 foot long HDPE culvert across the parking lot that outlets into the adjacent salt marsh. The existing culvert would be plugged and abandoned. A 2' deep sump will be constructed in a 10'x10' area for future maintenance purposes.

Ralph Sanders has informally presented this project to various members of the agencies in the field on numerous occasions. R. Sanders briefly tried to explain the history and stalemate that this project has endured. R. Sanders stated that the Department has had to look at two build options due to differing views of the agencies. National Marine Fisheries wanted the outlet to go towards the ocean, while others like NHDES and ACOE agreed with the Department that the outlet to the salt marsh was a more feasible alternative. Matt Urban mentioned that the Department had done a cost estimate for both projects but noted that the alternative that oulets towards the ocean would be substantially more expensive than the project proposal. Gino Infascelli recalled that the ocean side alternative would have posed more complications such as underground sewer, gas, and overhead utilities. R. Sanders mentioned that another complication to the ocean side alternative would have been getting an adequate pitch to the pipe to drain the water.

The benefit to doing the work on the salt marsh side is cost, constructability, and future ease of maintenance. Rich Roach mentioned that mitigation would be necessary since this effort would impact tidal waters. He thought a good solution to this would be to clear an area of the existing phragmites. R. Sanders stated that he could get an excavator with enough reach to work from the edge of the parking lot to clear an area approximately 30'x30'. Lori Sommer expressed concern that the phragmites would likely come right back. G. Infascelli suggested that if the first 2' or so of sediment and soils were removed from this area that the tidal waters should be able to inundate the area enough to reduce the opportunity for phragmites reestablishment. Everyone agreed that removing the prhagmites using this approach would be an appropriate form of mitigation for the proposed effort.

R. Roach stated that this project would not require an individual permit and that it would qualify for coverage under the NH Programmatic General Permit. G. Infascelli stated that because the project is located within tidal waters that it would automatically be a major impact project and that it would require G&C approval. Carol Henderson stated that the impacts were minimal and that she had no concerns.

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