

BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting

DATE OF CONFERENCE: March 18, 2009

LOCATION OF CONFERENCE: John O. Morton Building

ATTENDED BY:

NHDOT

Bob Landry
Cathy Goodmen
Charlie Blackman
Chris Waszczuk
Christine Perron
Dave Scott
Don Lyford
John Butler
John Corcoran
Jon Evans
Keith Cota
Kevin Nyhan
Mark Hemmerlein
Michelle Marshall
Mike Dugas
Pete Salo
Randy Talon
Steve Johnson

**Federal Highway
Administration**

Jamie Sikora

NHDES

Gino Infascelli
Lori Sommer

NH Fish and Game

Carol Henderson

**NH Natural Heritage
Bureau**

Melissa Coppola

**US Fish and Wildlife
Service**

Maria Tur
Vernon Lang

EPA

Mark Kern

Army Corps of Engineers

Rich Roach

**Clough Harbour and
Associates**

Rob Faulkner

University of NH

Paul Henry

Maguire Group

Tony Ciolfi

(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 February 18, 2009 Meeting Minutes

The February 18, 2009 meeting minutes were finalized.

Hampton-North Hampton, 15678 (Non-Federal)

The proposed project will modify the existing Interstate 95 (I-95) Hampton toll plaza for open road tolling (ORT) (high speed tolling). ORT allows vehicles with EZ Pass to bypass the conventional toll plaza and pay the toll without having to reduce speed. To accomplish this, a new northbound and southbound lane would be added to the outside of the existing toll plaza, six interior conventional toll lanes would be eliminated at the interior of the toll plaza and replaced with four high-speed lanes (two northbound and two southbound, separated by a concrete median).

Chris Waszczuk gave an overview of the project, which was initiated through the legislature as HB 2 and HB 391, and is currently scheduled to be open in June 2010. The project would greatly reduce the congestion at the toll plaza and improve air quality, as there would be less idling of vehicles at the toll plaza. C. Waszczuk distributed a handout summarizing a simulation that was done to estimate queuing and emissions at the existing and proposed toll plazas. Some of the results included a projected reduction in queuing from 2,400 feet to 400 feet on a typical summer Sunday, and a projected 20% reduction in motor vehicle emissions on Saturday travel with ORT.

John Butler then presented details of the project. The project begins approximately one mile south of the toll plaza and extends approximately one mile north of the plaza, with advanced signing installed even further away so that vehicles wishing to exit I-95 to NH Route 101 have enough decision time. The traffic through the toll plaza will be split, with EZ Pass holders bearing left into the ORT lanes, and cash paying vehicles bearing right to access the conventional plaza (6 booths in each direction). After the toll plaza, the six lanes of cash payers will be merged into two lanes; and the ramp carrying vehicles from NH Route 101 will enter the I-95 traffic. The ORT lanes will then enter, creating five total lanes, merging to the existing four lanes, approximately one mile north of the toll plaza. This would work both northbound and southbound. There are several bridges over I-95 that constrain the amount of widening that can be done, however 12 to 20 feet of widening is required in several areas. In addition, the northbound on- and off-ramps will need to be shifted easterly to accommodate the plaza widening.

There are wetlands adjacent to the roadway, and some impacts are anticipated. The Department intends to keep the total permanent wetland impacts under the mitigation threshold of 10,000 sf. Proposed slope lines have not yet been developed and additional delineation is required in some areas. The widening associated with the project will increase the impervious surface area by approximately four acres. The project area is lined with invasive plant species; primarily *Phragmites sp.* and any work will be conducted so as not to cause the spread of invasives.

John Corcoran noted that this project has a very aggressive advertising schedule. The Department proposes to submit the wetlands application at the end of April with the hope of having the permit in-hand by June 15, 2009. The project is scheduled to advertise on June 30, 2009 in order for construction to occur over the fall, winter and spring with completion by June 2010.

Carol Henderson asked if there is an existing and/or proposed wall (jersey barrier) between the high-speed lanes and how long the walls will be, as NHF&G has concerns with wildlife trying to cross the roadway. John Butler noted that there currently is not a concrete barrier separating the northbound and southbound

lanes in the area of the existing toll plaza as it allows for adjustments to the number of lanes in either direction, depending on traffic volumes. The proposed project includes the construction of a concrete median between the north and southbound lanes and a concrete barrier between the ORT lanes and the tollbooths (three parallel barriers in total). The center median barrier is proposed to be approximately 4,500 feet long and the barriers between the ORT lanes and the conventional toll plazas are approximately 2,500 feet long.

Kevin Nyhan noted that there is still outstanding mitigation associated with approximately 17,620 square feet of wetland impact from two previous projects that upgraded the ramps and toll plaza (Hampton-North Hampton, 13689 & 13760). The Bureau of Environment feels that sufficient efforts have already been made to coordinate with the towns' conservation commissions, as required by the mitigation rules, allowing the Department to mitigate the impacts via an in lieu fee payment of approximately \$62,600.00 to the Aquatic Resource Mitigation (ARM) fund. If mitigation were needed for the proposed project, the Department would propose an additional in- lieu-fee payment for these impacts.

This project will be presented at the April 15, 2009 Natural Resource Agencies Meeting as more definitive impact numbers should be available by then.

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

Rochester, NHS-027-1(36), 10620D

This project involves the reconstruction of NH Route 16 (Spaulding Turnpike) between Exits 11 and 16. Kevin Nyhan provided a history of the permitting for this project: the Final Environmental Assessment (FEA) was published in July 2001, the Water Quality Certificate (WQC) was issued on August 16, 2002; the Army Corps Permit was approved on January 16, 2003 and the DES Wetlands permit was approved on June 7, 2007. The water quality measures incorporated into the design were consistent with the FEA, permits and rules that were in effect at the time of permitting.

Rob Faulkner, CHA, provided specific details of the project's water quality treatment measures. The overall project is broken into 6 construction contracts, several of which are under construction and several of which are still in design. The FEA indicated that the overall project would construct 7 vegetated treatment swales, 1 level spreader, 5 basins and 2 technology treatment devices (Vortech units). As designed, the overall project will have 42 vegetated swales, 2 level spreaders, 4 basins and 3 technology devices (1 of which substitutes for a basin given the presence of a landfill at Exit 15). In addition, drainage will also discharge to 13 natural treatment areas. R. Faulkner then identified the treatment measures on a project plan. Vern Lang asked why/when technology units are used. Peter Salo and Keith Cota responded how they work and that the Department uses them as a last resort when there are constraints to designing other treatment measures. They remove approximately 80% of suspended solids.

Rich Roach acknowledged the Department for extending a bridge over the Cocheco River to accommodate wildlife.

Gino Infascelli asked about the design of the vegetated swales and if any were greater than 10 feet wide, as some empirical evidence shows that the basins start to rill greater than 8 feet in width.

Mark Kern asked if there are surface water impairments associated with the Cocheco River. K. Nyhan responded that he did not know but would look them up. *Following the meeting, K. Nyhan found the following impairments in the project area: Cocheco River – Aluminum, E. coli, lead dissolved oxygen saturation, benthic macroinvertebrates; Axe Handle Brook – E. coli.* M. Kern asked if the water quality features being considered as part of the contracts still in design could incorporate other treatment measures, such as gravel wetlands. K. Nyhan responded that the consultant could consider these measures in the areas still in design within the existing constraints for the project, such as available right-of-way width.

This project was previously reviewed on the following dates: 10/20/1999, 1/17/2001, 7/17/2002, 12/17/2003, 11/17/2004, 5/21/2008, 8/20/2008, & 2/18/2009.

Conway, HDPPE-9117(1), 11339A

This project involves the construction of a 12-mile bypass around NH Route 16 & US Route 302 in Conway. The Department is hoping that redistribution from the first phase of American Recovery and Reinvestment Act (ARRA) funds could allow this project (Southern Bypass Segment) to move forward in 2010. As requested at the last resource agency meeting, this project was presented to review wetland and stream crossings under the bypass. Kevin Nyhan stated that the project was reviewed in June 2007 with DES and NHF&G. It was agreed, and design reflects, the following:

- All wetland/stream crossings would be at least 36" culverts and the invert elevations would be at-grade.
- The culvert that would carry Small Brook under the bypass will have excessive flows for fish passage. Stone from the impacted channel would be used at the outlet to provide as much naturalized habitat as possible.
- The mitigation package would include a single culvert at least 6' X 8' in dimension. This is reflected in the design at Sta. 182+40.

Peter Salo discussed each crossing along the bypass corridor. Vern Lang asked if "unnamed watercourse" as depicted in the table that P. Salo distributed, were intermittent streams and if the culverts are intended to be embedded. P. Salo responded that they are. *Following the meeting, P. Salo provided updated information that indicates that the crossings at Sta. 127+15 (unnamed watercourse) include baffles to slow the water flow and will not be embedded due to the slope of the pipe.*

Rich Roach recognized the Department for including the wildlife crossing that is proposed as part of design and indicated that the Department considered its inclusion, as well as the culvert upsizing as part of the overall mitigation for the project impacts.

R. Roach then discussed the mitigation, with emphasis on the West Side Road creation site. K. Nyhan stated that the Department would move forward with obtaining a new DES Wetlands permit with the approved mitigation package. Any modifications to the mitigation would be considered as part of the central and northern segments.

R. Roach then asked Jamie Sikora to provide a written statement indicating that the traffic analysis supported the continued need for a bypass. Mark Kern asked Don Lyford to include excerpts from the FEIS regarding the Level of Service at intersections along the existing NH Route 16 corridor and what would be expected following construction of the bypass.

K. Nyhan stated that he would include a summary of the mitigation for the project in the minutes, which can be found below.

Mitigation Site Name	Type of Mitigation	Parcel Size (ac)	Status
Pequawket Pond Creation Site	Wetland creation/ replacement	13.30	Construction complete
West Side Road Creation Site	Wetland creation/ replacement	25.50	Negotiation phase
NH Route 113 Preservation Site	Wetland preservation	60.10	Purchased by DOT
West Side Road Preservation Site	Wetland preservation	38.00	Negotiation phase
Mineral Springs Preservation Site	Wetland preservation	150.00	Actively sought by DOT
Pudding Pond Preservation Site	Wetland preservation	307.60	Purchased by DOT
Culvert upsizing to 36" or greater	Design elements – wildlife	N/A	Incorporated into design
Wildlife crossing at Sta. 182+40	Design elements – wildlife	N/A	Incorporated into design
Total:		594.50	

Total Wetland Impacts: 45.50 Acres

Total Wetland Mitigation: 594.50 Acres (with other design elements)

In addition, K. Nyhan provided a map of the mitigation areas in an email dated 3/26/2009.

This project was previously reviewed on the following dates: 3/23/1995, 1/17/2001, 9/19/2001, 5/15/2002, 3/18/2004, 11/15/2006, and 2/18/2009.

Lebanon, NH - Hartford, VT, A000(627), 14957

This project involves the replacement of the US Route 4 Bridge over the Connecticut River between Lebanon, NH and Hartford, VT. The condition of the bridge has deteriorated and the weight limit has been decreased.

Christine Perron started the discussion by explaining that the project has been reviewed a number of times already, first to discuss all of the alternatives being considered for the rehabilitation or replacement of the US Route 4 bridge, and most recently to discuss the advance temporary detour bridge that will be placed downstream from the existing bridge. On this date, discussion would focus on the preferred alternative that has been selected. The Department is still coordinating with the NH and VT SHPOs and was seeking feedback on the preferred alternative from the Natural Resource agencies.

Steve Johnson gave an overview of two alternatives: the refined online alignment and the upstream alignment. The upstream alignment would have allowed traffic to be maintained on the existing bridge during construction, therefore providing a cost advantage by eliminating the need for a

temporary bridge. However, with the advance placement of the temporary bridge, this cost advantage is eliminated. Furthermore, the upstream alignment would require the acquisition of Stateline Sports in the northeast quadrant of the bridge. For these reasons, the preferred alternative for the project is the refined online alignment, which avoids Stateline Sports.

Both alternatives result in similar wetland impacts. Abutments of a new bridge would be placed further back from the channel than the existing abutments. Riprap would be necessary for scour protection. A slightly larger area of riprap would be needed in the northeast quadrant because of existing bank erosion. Class B stone would be used for bank protection.

No concerns were raised about going forward with the preferred alternative.

This project was previously presented on the following dates: 9/17/2008, & 1/21/2009.

Durham, X-A000(345), 14405

This project involves the construction of sidewalks, multi-use paths and bicycle shoulders along NH Route 155A and Main Street approaching UNH campus and downtown. The project creates safe bike and walking routes from UNH core campus to West Edge neighborhood and US Route 4 adjacent to Main Street, Old Concord Road and NH Route 155A. The project was originally funded for \$491,000 (total), but was recommended for additional funding (\$360,000 total) at the December TE Committee meeting.

The project was presented to the Cultural/Historic Resources Group earlier in March, and has been submitted to DOT for 60% design review with advertising scheduled for June 2009.

Paul Henry (Project Manager) presented on behalf of UNH-Durham and provided notes as well as CE handout with project information.

The project includes shoulder modifications and an overland trail section on the south side of Main Street. The design team looked at various overland routes and strategies and the route presented in preliminary design has the least wetland and floodplain impact. Wetland mitigation is required as impacts exceed 10,000 square feet. UNH is currently working on the details of a 4 acre off-site mitigation preservation area: College Woods. This project might be wrapped into the discussions regarding College Woods as formal mitigation bank for UNH planned (not DOT funded) South Drive. UNH will be meeting in April with the Strafford River Conservancy which would hold the easement.

There were no Threatened or Endangered species or exemplary or critical habitat in the project area. The project does not impact any Section 6(f) properties or properties protected by Section 4(f). UNH College Woods is not impacted by the project.

Apart from the overland trail sections, the majority of project work will be in the existing disturbed/right-of-way sections of current roadways.

There was concern noted for further chloride impacts as a result of year-round maintenance of the recreational trails and shoulders. The current proposal is for asphalt trails to be maintained for

year-round use by mechanical and salt/sanding methods. Discussion ensued regarding use of porous asphalt to ameliorate the need for salt/sand and reduce project chloride impact. P. Henry agreed to work with UNH Stormwater Management program to evaluate porous material use – and will revisit design/cost implications with Maguire Group.

Vern Lang asked if the trail could be on the north side of the road. This was evaluated but would have had greater wetland impact and complicated design considerations and therefore was rejected.

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