

BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting

DATE OF CONFERENCE: December 16, 2015

LOCATION OF CONFERENCE: John O. Morton Building

ATTENDED BY:

NHDOT

Matt Urban
Ron Crickard
Anthony Weatherbee
Joe Adams

Army Corps of Engineers

Michael Hicks

NHDES

Gino Infascelli
Lori Sommer

NH Fish & Game

Carol Henderson

NH Natural Heritage

Bureau
Amy Lamb

FST

David McNamara

Normandeau

Ian Broadwater

**Belknap County
Conservation**

Lisa Morin

PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH:

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

NOTES ON CONFERENCE:**Finalization of November 18, 2015 Meeting Minutes**

Matt Urban indicated that he had received some minor editorial comments via email and motioned to finalize the meeting minutes following this meeting provided that no additional comments were received by the end of the day.

Sugar Hill 163/048, non-federal, 40489

Tony Weatherbee provided an overview of the project. The scope of the project is to replace the bridge that carries Rte. 18, 116 over Indian Creek (212/126). The existing structure is an 8'-9" by 6'-0" metal pipe arch that is 58'-0" long. Proposed work consists of the following: replace the pipe with a 22'-0" span concrete slab bridge.

T. Weatherbee explained that the existing pipe is undersized and is too far deteriorated for an invert to be installed. Installing a concrete box was considered. It was determined that the location was inadequate for such a structure because the roadway would have to be raised and this was not desirable. From a stream assessment conducted by the Bureau of Environment it was determined that a 22'-0" span is required by the Stream Crossing Rules. A 22'-0" span also satisfies the 100-year flood. A nearby property owner has verified that the location floods frequently and the larger structure is expected to better pass flood waters.

Carol Henderson asked if the channel could be wider. Gino Infascelli said that a bridge located upstream was 31' long. T. Weatherbee said that a bridge located just downstream has just a 10' span.

Mike Hicks said that tree clearing will require coordination for the North Long Eared Bats.

Carol asked if existing boulders would be used in the proposed stream channel and T. Weatherbee said yes.

G. Infascelli said that there are a lot of other requirements besides the span that need to be met in order to be in full compliance.

Lori Sommer said that there is no mitigation required as proposed, as long as we provide vegetated banks outside of the structure.

Amy Lamb said that some plants in the area require review. T. Weatherbee said that construction is planned for this summer and A. Lamb said that will allow enough time for a review.

G. Infascelli said to consider blending the existing bank into the proposed structure sooner than shown on the plans to reduce impacts. He also said that the plans should be further detailed for additional clarification. T. Weatherbee said that vegetated areas can be shown on the plans.

C. Henderson asked that the proposed stream channel bed not have riprap exposed and T. Weatherbee said that the riprap in the channel can be buried.

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

Gilford 121/102, non-federal, 40799

Tony Weatherbee provided an overview of the project. The scope of the project is to rehabilitate the bridge that carries Rte. 11B over Gunstock River (121/102). The existing structure is a concrete slab bridge that has a 23'-0" span and 28'-0" width. Proposed work consists of the following: replace concrete deck and place riprap.

Lisa Morin of Belknap County explained that the project in the area as proposed by Dubois and King was for a 2-year storm. L. Morin feels that the design as proposed is inadequate. T. Weatherbee said that the Bridge Maintenance project is only proposing riprap near the bridge. L. Morin said that in 2012 a fluvial study and wetland delineation were completed. T. Weatherbee said that riprap placed under the structure at the abutments can be placed in such a way so as to not restrict the flow. G. Infascelli said that if riprap will be placed at or below the streambed then to have it shown that way on the plans.

Lori Sommer said that there is no mitigation required.

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

Hampton 146/087, non-federal, 40800

Tony Weatherbee provided an overview of the project. The scope of the project is to rehabilitate the bridge that carries US Rte. 1 over Taylor River (146/087). The existing structure is a prestressed concrete slab bridge. Proposed work consists of the following: patch the concrete deck and substructure. The project requires a wetland permit strictly to access the substructure. Concrete on the north abutment at the waterline is eroding and it will be faced by raising the footing. Silt booms and a tremie pour will be utilized to facilitate construction. There is sheeting at the location that was previously left in place.

Carol Henderson asked what time of year the project was taking place and T. Weatherbee responded with summer of 2016. C. Henderson said that mid to late summer is the best time for this project.

Gino Infascelli said that this area is on the boarder of Hampton and Hampton Falls and it is located within a Prime Wetland. He also said that it is within the 100' buffer and a previously disturbed Tidal Buffer Zone. This project will have to go to Governor and Council which will add 30 days to receiving approval.

Amy Lamb noted that the project location is within an Exemplary Salt Marsh and there are two rare plants located to the southwest of the project.

Mark Hicks said to consider Long Eared Bats. Lori Sommer said that there is a vernacular located at Odiorne Point in Rye.

Lori Sommer said that there is no mitigation required. Mike Hicks said the project is OK SPGP provided no temporary sandbags.

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

Bedford, 16156, X-A001(160)

Stantec presented an update to the 16156 - Bowman Brook culvert project. It had previously been presented at the July 16, 2014 meeting. The project involves the addressing of the red listed culvert, which crosses under NH Route 114 and the Old Bedford Road bridge at a 45 degree skew. At the time, two options were presented:

- The preferred option was to shorten and then slip line the remaining length of existing 87”x 83” corrugated metal pipe.
- The alternative was to construct a 23’ wide box culvert off line.

The purpose of this meeting was to confirm concurrence with the preferred option of shortening and sliplining the existing culvert and discuss potential mitigation options. The two options were briefly reviewed by Stantec. There was concurrence on the preferred option. The alternative to build a new box culvert was determined not to be practicable. While the 23’ width met Stream Crossing criteria, the need for a bend, and length of culvert negated some of the benefit.

The preferred alternative is to remove approximately 40’ at the inlet and outlet ends of the existing pipe, and slipline the remaining 130’ of pipe. Proposed mitigation was presented as follows:

- Cutting back of the existing pipe will create an additional 80’ of natural streambed, which will be constructed to mimic the existing streambed.
- An overflow pipe in the 3-4’ diameter range will be installed, crossing perpendicular to NH Route 114, and then under the Old Bedford Road bridge to mitigate any changes in flood elevations due to the sliplining. The diameter will be determined during final design modeling, but will be sized to match or lower flood elevations upstream of the culvert.
- An existing perch at the outlet of the current pipe will be corrected during construction of the new pipe end.
- Pending ROW approval, plantings are proposed along the stream edge to provide shade. These would be located on private property, so will require concurrence of the property owner.

Following the presentation, there were several questions and discussion:

Michael Hicks asked – Could the overflow pipe run parallel to the existing culvert?

Stantec – No, the overflow will be too large to fit between the existing culvert and the bridge piers and foundations.

Gino Infascelli recalled a 48” overflow had been discussed.

Stantec noted it may have been, based on current modeling it looked like the pipe would need to be in that general range of 3-4’ in diameter.

Carol Henderson asked if the plans were the same as before, and if the perch would be addressed.

Stantec confirmed the perch would be addressed. The plans are generally the same, the final length of pipe had been extended to accommodate an existing sewer force main. At the previous meeting a reduction of approximately 100’ of existing pipe had been discussed, due to the force main, that number is now 80’.

M. Hicks noted this brook is an Essential Fish Habitat.

Normandeau confirmed the steps proposed at the outlet will improve passage through the corridor.

M. Hicks asked about tree clearing.

Stantec confirmed there would be some, mostly on the inlet side. The project will need to address Northern Long Eared Bats as part of the permitting process.

It was confirmed that this is a Tier 3 stream.

Lori Sommer asked about the stream design in the sections where the pipe is removed. Stantec responded that the existing channel widths and slope will be mimicked to the extent practical, and stream bed materials will also be designed to match the existing bed in the immediate vicinity.

Amy Lamb noted the NHB request needs to be updated, and that there had been no hits initially. She would also like to review any proposed plantings. Stantec agreed with both points.

C. Henderson asked if there were a way to roughen the sliplining. Stantec noted it is possible. General discussion about the topic followed, including the possibility of differing sliplining or pipe rehabilitation methods that may allow for the sliplining. Stantec agreed that roughening of the bottom will be included. If it is not feasible due to hydraulics the project will return to a future Natural Resource Coordination meeting to discuss additional options.

The meeting concluded with the following agreements:

- The four mitigation measures presented would be acceptable, and no additional mitigation will be required.
- The sliplining will include a roughened bottom.
- NHB review will be updated.
- Plantings will be submitted for review.
- There will be further coordination regarding tree clearing due to the Northern Long Eared Bats during the permitting process.