

Location:
NHDOT- Large Highway Design Conference Room

Time:
10:00 AM to 11:30 AM

Purpose of Meeting: First Quarter Meeting 2019

Attendees:

Bob Landry, NHDOT
Angela Hubbard, NHDOT (Co-Chair) – absent
Joe Adams, NHDOT
John Poisson, NHDOT - absent
David Scott, NHDOT - absent
Tony Weatherbee, NHDOT

Tom Kendrick, MJ
Bob Durfee, D&K
Steve Hodgdon, HTA (Co-Chair)
John Watters, GPI (Note-Taker)
Adam Stockin, WSP
Tom Levins, GM2

1. Department staff changes (promotions, new-hires, retirements, etc.)

- a. Mike Mozer has joined the Bureau of Bridge Design in a CEV position.
- b. The Department has an external posting for a Project Manager to fill the position formerly held by Victoria Chase

2. Summary of In-House Design Section staff meetings – February 2019

- Synthetic fiber reinforcement
 - The fiber will be included in the concrete of expansion joint headers and concrete copings on a few test projects to see if it helps with shrinkage cracking. We will be using macro synthetic fibers with 3-5 lbs/cy dosage rate
 - Item 544.7, Synthetic Fiber Reinforcement is currently used in approach slabs. The same item will also be included in different locations for the test bridges.

| Project | Bridge # | Location |
|-----------------------------|----------|-----------------------|
| Roxbury-Sullivan 10439 | 093/060 | Copings |
| Ossipee 14749 | 153/268 | Copings |
| Portsmouth 27960 | 192/106 | Moment slab copings |
| Hinsdale-Brattleboro 12210C | 043/044 | Modular joint headers |

- Galvanic corrosion protection
 - Now incorporating galvanic protection in deck patching and expansion joint rehab projects. Using Item 540.511, Galvanic Corrosion Protection System (Distributed Anodes). Our special provision requires 0.6 pounds of zinc per linear foot of anode. Item 540.512, Galvanic Corrosion Protection System (Discrete Anodes) should be used for nonlinear concrete patching.
 - The proprietary issue of this system supplier still requires justification reports to be completed. Additional vendors may exist for similar products and Bob Durfee will provide the committee with information

- Fuel Adjustment
 - Need to include in each funding group that has items that require the fuel adjustment.
 - This item is FYI for consultants

- Weathering steel overpass bridges
 - A non-destructive testing project is underway in NH on interstate overpass bridges
 - Discussion is still underway if a policy should be made of not allowing weathering steel to be used for overpass bridges on the interstate/turnpike system. General observation (not quantified) has shown that haunches have been more prone to failure and spalling on weathering steel bridges

- Decorative light posts on bridges
 - A light pole collapsed on the Scammell Bridge (Route 4 in Dover) due to poor detailing and corrosion due to the salt environment.
 - Need to pay attention to fabricators details or any other manufactured item on the bridge
 - On Scammell Bridge the detail associated with a caulked joint may have allowed the accelerated corrosion on the interior of the pole due to either a design flaw, or over looked construction detail. It is noted that the anchor bolts and anchor details showed no corrosion.

- Decorative fixtures are still acceptable, but the material type, thickness, and details should be carefully considered during design and shop drawing phases, especially for projects located near salt spray and/or salt environments

3. NHDOT Information for Consultants

- NHDOT is in the process of changing the specifications of traffic signs and signals for LRFD design and MASH compliance for break-a-way-signs
 - If a consultant has these items in their projects, they should check with DOT for direction on how to proceed

- The 529-Precast Concrete Members special provision is getting revised
 - Allows for self-performance of all precast concrete except for prestressed members
 - Based on Maine DOT experience, the allowance of self-performance does require field staff to coordinate inspections at remote locations for the precast work, as compared to one centralized facility. This is important for communication and scheduling during construction based on limited field staff availability

- NHDOT Bridge Design Manual update
 - Still working on Rehabilitation section of Chapter 7

- The structural steel details including camber diagrams have been redrawn to follow NSBA steel girder details guideline. Since this is still in draft status, the Consultants should be drawing structural details as shown on the NSBA guidelines.

4. Technical and business-related topics

- Discussion on the use of metalizing steel girders with other DOT's.
 - Shop metalizing is locally available at Casco Bay Steel (Portland, ME) and Canam Steel (Claremont, NH). Other fabrication shops have some capability as well.
 - Metalizing costs for small members and complicated geometry like truss bridges are quite a bit higher than larger surface area projects like plate girders
 - Maine has been using more metalizing, MassDOT has been using it quite regularly for 8 to 10 years
 - Vermont has done very little
 - Overall project cost should consider the life cycle recoating cost interval and the associated maintenance of traffic and disruption issues. An example was a bridge that is very low to the water, where field painting operations are almost impossible due to limited working space
 - NHDOT is considering using metalizing on all interstate bridges, instead of weathering steel, but may still use weathering steel on bridges over local roads where roadway salt spray contamination is less of an issue
 - Many DOT's allow both galvanizing and metalizing options.
 - Galvanizing is limited based on the available galvanization kettle lengths available in New England. For plants outside of New England, transportation costs add to the coating costs.
 - Metalizing can be field touched up, with remote metalizing operations, as well as brush applied high solids zinc paints
 - Field application of a complete metalized bridge has been done in NY, FL, and other states, but is limited by the number of qualified contractors.
 - VT has pulled back on allowing field metalizing.
 - The Rainbow Bridge at Niagara Falls was cleaned and field metalized about 15 years ago and the coating is performing very well. Some locations under leaking joints do show deterioration.
 - Bid prices for metalizing a project in Alstead were very similar to painting bid prices
- Anodes for Galvanic corrosion protection: Is it worth the cost? Performs as the manufacturer states? Other DOTs use it?
 - Maine and Vermont haven't used the anodes much, if at all
 - NHDOT first project using them was the sound walls on the high-level bridge on I-95

- MassDOT has used them recently and apparently has some stockpiles of them in the districts for maintenance use
- As stated under Item 2 above, NHDOT has been using them on some projects recently and possibly more in the future.

5. Potential NHDOT and Consultant bridge training opportunities

- The NHI Curved Girder Design course is still under consideration
- There was generally very positive feedback on the ABC training that occurred on January 8, 2019 at Hazen Drive.

6. Bridge Bureau workload and anticipated consultant support needs

- The Department has recently redesigned the bridge mounted sign support Detail Sheet for the current LRFD code and is looking for a consultant that has a bridge mounted sign support in one of their projects to check the updated design using a 3D model.
- The Red List is due on April 1. The State bridges are done and they are waiting on information from the municipal list.
- NHDOT is looking at a different funding mechanism that will allow the Bureau to give consultants task orders under the on-call contracts. Currently assignments are funded through projects only. Examples are:
 - 1st preliminary bridge cost estimates to help with programing cost. Currently the department has a backlog of about 40 bridges that need estimates.
 - Having consultants prepare FOPIS (Front Office Project Information Sheets) and possibly attend more Front Office meetings as well
- Bridge Bureau is trying to get 2 years of preservation projects on the shelf. Currently the shelf is empty.
- ACEC Tech Transfer Conference is coming up on April 18
- Adam Stockin is on the ACEC Maine Bridge subcommittee and will begin presenting ACEC NH topics at the Maine meetings, as well as a summary of the Maine meeting at NH meetings.
- A joint meeting between Maine and NH may be beneficial in the future as well.

7. Subcommittee membership rotation / new members

- Alex K has submitted two firms with candidates to NHDOT to join the committee
- It was discussed that the person is more important than the firm and that a resume/bio should be submitted to confirm the person has qualifications and experience to help the committee. Bob Landry will follow up with Alex for additional details on the candidates.
- The new members may be invited to the September 2019 meeting to create a transition from old members to new members as the term expires.

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| Tom Kendrick, Bob Durfee, Bob Landry, Angela Hubbard | Sept. 2017 to Sept. 2019 |
| Steve Hodgdon, John Watters, Joe Adams, John Poisson | Sept. 2017 to Sept. 2020 |
| Adam Stockin, Tom Levins, David Scott, Tony Weatherbee | Sept. 2017 to Sept. 2021 |

8. Upcoming meetings are scheduled on Friday's from 10:00 to 11:30 AM on the following dates: June 14, 2019, September 13, 2019, December 13, 2019.

I have attempted to summarize discussions held during this meeting as accurately as possible. If there are any items discussed herein that are misrepresented in any way, please contact me by March 25, 2019. In the absence of any corrections or clarifications, it will be understood that these minutes accurately summarize the discussions at the meeting.

Respectfully Submitted,

John Watters