

Location:
Virtual

Time:
10:00 AM to 11:30 AM

Purpose of Meeting: Fourth Quarter Meeting 2021

Attendees:

Loretta Girard Doughty, NHDOT
Angela Hubbard, NHDOT (Co-Chair)
David Scott, NHDOT
Jennifer Reczek, NHDOT
Robert Juliano, NHDOT
Steve Johnson, NHDOT (Guest)
Bill Caswell, NHDOT (Guest)
Aaron Janssen, NHDOT (Guest)

Dan O'Connor, Collins
Kim Smith, H&H (Co-Chair)
Chris Cucco, AECOM
Dan Taylor, Stantec
Jaime French, F&O
John Byatt, BETA

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- **Department staff changes (promotions, new-hires, retirements, etc.)**
 - a. Staffing discussion
 - Some staff are working remote 1 day a week
 - Tim Dunn is a new PM in Highway Design
 - Lynn Paquette will be retiring at the end of the year
 - **Summary of In-House Design Section staff meetings**
 - Last staff meeting was December 8th.
 - **Bridge Design/NHDOT Updates**
 - The front office has been determining how to spend the Infrastructure Investment and Jobs Act (IIJA) funding. This funding is in the draft 10-year plan but now they are looking at staffing and how to process the work. The Department is also working with FHWA on funding constraints. There is some shuffling of funding going on now but in the next month they will have a good handle on individual project funding.
 - Timber soundwall panels are being changed to precast concrete. A notice will be sent out when the new Detail Sheets are put on the website.
 - Section 105 of the NHDOT Standard Specifications- is being rewritten for a different stamp that is to be used on shop drawings stamped by a professional engineer. A notice will be sent out once the policy has been finalized.
 - **NHDOT Information for Consultants**
 - a. **Open Roads & Connect CADD Update:** Bill Caswell and Aaron Janssen gave an update on the status of the Department's conversion to Open Roads Designer (ORD) and MicroStation Connect. Bentley is retiring V8 MicroStation and InRoads so the Department is transitioning to the new software. There are currently some pilot projects using ORD and the Department is looking for feedback from those currently using ORD.
 - Outdated library files are being updated for cells, line styles and fonts.
 - There is a new workspace available now for in-house staff and consultants. The intent of the workspace is for it to be easily implemented and be able for

users to easily switch from NHDOT to other clients. Version 15/16 of Connect, ORD 2020 R3 or ORD 2021 R1 are available. Contact Eric.D.Milliken@dot.nh.gov if you would like to receive the workspace.

- o Starting last month new projects were created in ORD/Connect. The Department is not pushing to upgrade existing projects to ORD/Connect but upgrades can be done on case-by-case basis. The decision to upgrade should be made with the DOT PM. Macros are available to do the conversions. Survey is now being processed in ORD.
 - o The Department is now working on the documentation for the new workspace. The overall CADD Manual from 2017 is being updated. They are essentially starting from scratch with this document due to Connect.
 - o Use of ORD and Connect will be required when the new CADD document is released. A date has not been set yet.
 - o DOT in-house staff training is now complete for ORD. There is no MicroStation Connect training as the interface is not that different.
 - o Some changes include using drainage profiles instead of just putting the drainage on the sections. There is not much change to roadway profiles but the roadway cross sections are very different. These proposed changes need the approval of the Plan Review Committee.
 - o The Department is not considering the use of Open Bridge yet. They may wait for Connect to be fully utilized then consider Open Bridge if there is a reason to do so.
 - o Aaron discussed the Bridge cell library updates. They are working to improve annotations such as weld symbols and are cleaning up the standards and details. US survey feet are currently not measuring to 100% and line styles are now 1:1. Annotation scale is being used and different models are being used. They are trying to get all bridge details into Connect by some time in 2022.
- b. **Sign Structure Footing Macro:** Angela asked the group if anyone used their Sign Structure Footing Macro and whether it should be converted to Connect. None of the consultants were familiar with it but noted that it seems useful and might use it in the future. Bill Caswell will look to see how involved updating the macro is before the Department decides to update it or not.
- c. **NHDOT Bridge Manual Update**
- o No revisions to the BDM or Details have been made
- d. **Expansion joint detailing** – There have been issues with the shop drawings and fabrication of expansion joints lately. Therefore, the designers need to pay attention that the expansion joint details on-line are not standards and need to be modified for each project, as noted on the webpage of the details. If the project is done in phases, the phasing joint locations for the joint need to be shown for the angles in the deck and the angles in the backwall. Need to confirm these locations work with the concrete barrier locations. The geometry of the joint needs to be looked at in regards of how it needs to follow the bridge profile, bridge skew, and the cross-slope changes. More details need to be shown on the plans than what is shown on the Detail Sheet on-line, so it is fabricated correctly. A check list may be created to help in detailing the joints.

- e. Project Viewer and Project Plan Inventory** – Project plans are not readily available on the GIS viewer anymore. However, project plans can be found here: [NHDOT Project Plans by Project](#) which is part of the GIS inventory and can be found on the Plan information webpage: <https://www.nh.gov/dot/projects/index.htm>
- f. ITS Structures and Sign Structures, plans and calculations** – The Bureau of Bridge Design are the record keepers of the CCTV pole, and Overhead sign structure plans, calculations, and shop drawings. Therefore, all ITS and Sign Structures plans, calculations and shop drawings, even if they are not part of a Bridge projects, need to be sent to the Bureau of Bridge Design for record keeping.
- g. Consultant access to iPDweb** – Consultants can receive access to the Departments iPDweb database which is used to calculate weighted average prices for bid items. Features include the ability to set the type of project, exclude individual bids from the average and receive the A, B and C bidder prices. A report feature is available to convert the results to several file types such as pdfs. Caution should be taken when converting to Excel files as the results have been substandard. The link and password will be sent out by the Department. The Department may explore setting up individual accounts for users to enter quantities for projects or input a file. A notice will be sent to Alex Koutroubas to notify all Consultants.
- h. LRS for bridge rehabilitation projects** – If there is excavation around the pilaster, wingwall or guardrail area for rehabilitation, this soil falls under the *de minimis* LRS requirement as long as the soil is placed along the slopes and not stockpiled. The following wording is put into the POW:
- “LRS shall be reused within property under permanent control of the Department (e.g., right-of-way and/or permanent easements adjacent to the right-of-way), in the immediate area of its point of generation. The LRS generated can be scraped off the surface of the ground, spread along the adjacent slope, permanently stabilized with seed and mulch as needed, and sufficiently protected with appropriate erosion and sedimentation control best management practices.”
- **Technical Topics - Tabled**
 - a. UHPC/PPC (Polyester Polymer Concrete) Overlays
 - PPC Overlay Performance in other states
 - UHPC overlay Laconia
 - b. Cost Estimating Guideline
 - **MaineDOT Bridge Subcommittee Update**
 - a. Complex bridge constructability reviews – MaineDOT asked (through Dan Taylor) if NHDOT receives constructability input from any local contractors on complex projects. It was mentioned that some consultants have brought on construction specialists for some complex projects. Some of these specialists are divisions of contracting firms. It is used on ABC projects and the Contractors that provided input are the only ones eligible to bid on the project. The input is received early - preliminary design.

- b. Bare concrete deck cracking – MaineDOT also asked if NHDOT has seen a lot of cracking in bare decks that are less than a year old. Steve Johnson offered that they have seen less cracking when using lightweight concrete.

- o **Business Topics - Tabled**

- a. Update for online shared reviews
- b. Opportunities to streamline project deliveries
- c. NHDOT evaluating Sharepoint implementation in the future
 - o Modify project delivery
 - o Modify interaction with consultants

- o **Potential NHDOT and Consultant bridge training opportunities**

- a. Bentley – Open Roads Training
- b. Other conferences
 - o WTS Awards – Commissioner Speaking – December 21
 - o ACEC Winter Technical Exchange – January 14
 - o SENH meeting with NHDOT Bridge – mid to late January
 - o Bridge Issues of Common Concern - March

- o **Bridge Bureau workload and anticipated consultant support needs**

Loretta reported that some Bridge projects had to be pushed back in order to deliver them. The Bridge section is currently looking at all the upcoming projects to decide which ones will be developed by on-call consultants and which ones will go out to RFP. RFPs for more Statewide On-Call Bridge contracts may come out in early 2022.

- o **Subcommittee membership rotation / new members**

Kim Smith, Dan O'Connor, Bob Juliano	Sept. 2019 to Sept 2022
Chris Cucco, Jaime French	Sept. 2020 to Sept 2023
John Byatt, Daniel Taylor	Sept 2021 to Sept 2024

- o New DOT members have not yet been selected

- o **Upcoming meetings - scheduled Fridays from 10:00 to 11:30 AM**

- a. 2022 meeting dates (calendar invites will be sent out):
 - March 11, 2022
 - June 10, 2022
 - September 9, 2022
 - December 9, 2022