

**Location:**  
Virtual Meeting

**Time:**  
10:00 AM to 11:30 AM

**Purpose of Meeting:** Second Quarter Meeting 2020

**Invitees:**

<input type="checkbox"/> Loretta Girard Doughty, NHDOT	X Dan O'Connor, Collins
X Angela Hubbard, NHDOT (Co-Chair)	X Kim Smith, H&H
X Joe Adams, NHDOT	X Steve Hodgdon, HNTB
<input type="checkbox"/> John Poisson, NHDOT	X John Watters, GPI (Co-Chair and Note Taker)
X David Scott, NHDOT	X Adam Stockin, WSP
X Tony Weatherbee, NHDOT	<input type="checkbox"/> Tom Levins, GM2
<input type="checkbox"/> Michael Mozer, NHDOT	
X Robert Juliano, NHDOT	

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

- a. Staffing discussion
  - Bridge Bureau is fully staffed
  - Currently a hiring freeze due to Covid
  - Loretta's old PM position might be filled internally

**2. Summary of In-House Design Section staff meetings**

- a. March 2020 (no meeting)
- b. April 2020 (no meeting)
- c. May 2020 (no meeting)

**3. NHDOT Information for Consultants**

- a. NHDOT Bridge Manual Update
  - Recent changes were sent out to Consultants through the email blast.
  - Chapter 11, Section 11.8 was updated:
    - Item Number Changes
      - Two new items have been added for concrete rehabilitation projects per Contractor's request. The list is enclosed along with a description for their use. This information is in Chapter 11.
      - The items and special provision were approved by the Spec Committee
      - New items should be used on all future rehab projects
  - Adam suggested to send the current draft of Chapter 7 to ACEC members to review even though all the policy decisions have not been made. Consultants could provide feedback/suggestions to help make the decisions along with a review.

- Angela thought this is a great suggestion but would like to take a couple of weeks to finish the last section (Rehabilitation). With projects being a priority, the Bridge Manual work is on hold until July.
  
- b. Details Update
  - Updated all expansion joint details on 4/27/20
    - Revised stop bar welds and anchor detail per request of Fabricator
  - New Temporary Bridge Portable Concrete Barrier sheets are completed and approved
    - The transition piece was revised to match into the new Highway MASH Temporary PCB which is the Roadside Pooled Fund F-shape barrier, 12.5-ft. long and has been approved by FHWA and is on the website for fabrication of a new pcb.
    - The new and old Bridge PCB sheets are listed on the website specifying what highway pcb it connects to (old GR-23 or new GR-24 &25). The Contractor can use the current highway pcb until 2034 or it's useful life.
    - Bridge Design will be sending out a memorandum notifying the designers and Contractors that the bridge pcb sheets will no longer be included in the contract plans and are available on the website for use of fabrication. Continue to include the barrier sheets into the contract plans until notified otherwise.
    - Maine DOT may be implementing the same highway temporary pcb
  - Wood Panel Soundwall Sheets:
    - Notes were revised to clarify that water repellent applied to the precast surfaces is subsidiary to Item 594.2 and water repellent applied to the concrete drilled shafts is subsidiary to Item 509, Drilled Shafts. The special provision was also revised for this clarification and is located in the Specifications special provision folder.
    - A Fabricator requested to chamfer the top of the precast post to help with any possible spalling when removing forms. The details and notes were changed to 3/4" chamfer typical outside corners and top.
  - Partial-depth Precast Panel Sheet:
    - Revised overhang detail for overhangs less than 2.5' to show a curb hoop bar with both legs that extend to the bottom of the deck to closely match the crash testing of the bridge railing. The 1st leg of the hoop bar is hooked since there is no room for the leg extension near the precast panel. The detail was approved by the Contractors.
    - Added straight reinforcing bar tied to the top mat is needed for all overhangs with a precast panel to match the area of steel in the deck

overhang for the bridge railing crash test since the bottom mat of reinforcing doesn't develop into the deck due to the deck panels.

- Revised Steel Girder Haunch Detail note since the wording of a grout bed greater than 2.5" wasn't required if the flange is 12". A min. 1" grout dam is needed for any size flange.
- Concrete Girder Sheet: Revised the overhang detail.
- Revision to Item 544.7 Synthetic Fiber
  - The dosage rate for the approach slab changed to 5 lb/cy and not the 7 lb/cy noted in the Spec Book.
  - If approved by the Design Chief, the fiber can be placed in the sidewalk and bridge coping and expansion blockouts at the rate noted in the Special Provision. If used at these locations, it needs to be noted on the plans.
  - Special Provision located in the Specification's folder shall be used on all future projects until the Supplemental Spec is approved by FHWA.
- c. Steel Bridge Railing
  - NHDOT steel bridge and approach railing (T2, T3, and T4) were computer simulated for MASH crash testing through NETC. The New England states that participated were MA, VT, ME, CT, RI, and NH.
  - There are some differences in the steel railing between the states. The simulation looked at all the differences and analyzed the worst case details.
    - T2 bridge and approach railing *passed* the TL-3 (car and pickup truck) AASHTO crash testing requirements
    - T3 bridge and approach railing *passed* the TL-4 (car, pickup truck, box truck) AASHTO crash testing requirements but has some recommended improvements.
    - T4 bridge and approach railing *passed* the TL-4 (car, pickup truck, box truck) AASHTO crash testing requirements with considerable damage to the system. Design changes are recommended. (Note: we typically use T4 railing on low speeds with a sidewalk so the TL-4 crash requirements may be too conservative).
  - ME concrete to thrie beam transition was analyzed for TL-4 but did not meet the requirements
  - NHDOT will be deciding on what our policy will be regarding when to use T2, T3, and T4 and if we want to make the recommended changes to the railing
  - You can find the final report, fact sheet and poster for NETC 18-1: Development of MASH Computer Simulated Steel Bridge Rail and Transition Details on the [project page](#) on the [NETC website](#)

- Also, our steel railing is currently being researched for In-Service Performance Evaluation by a NETC committee so we can have information regarding the performance of the railing over the years in service. ME is also involved in the NETC research.
- d. NHDOT has received the new 9<sup>th</sup> ed. of the AASHTO LRFD Bridge Design Specifications and has implemented it's use for new projects.
  - i. Generally, if a project is past preliminary plans then the 8<sup>th</sup> edition can continue to be used. If a project is still working on preliminary plans, it probably makes sense to shift to the 9<sup>th</sup> edition.
- e. COVID 19 impacts (meetings, funding, other)
  - i. Gas tax and toll revenue are down with no immediate impact to projects, but long term implications are not yet understood.
  - ii. The state is currently prioritizing projects with federal funding, then turnpike funding, then state.
  - iii. Zoom has been used for Public Officials and Public Information meetings, with limited in person meetings.
  - iv. On the shelf projects are emptied except for 3 painting projects in development. Some on shelf projects would be helpful if federal stimulus money is provided due to the pandemic impacts.

#### **4. Technical Topics**

- a. Update on local GRFP project for site visit
  - i. There are 2 projects in Maine that might be viable, but NHDOT needs to check with the front office for out-of-state travel restrictions
- b. Cost Estimating procedures from other states
  - i. In CT, they use larger contingencies and miscellaneous items that sometimes causes the issue of estimates that are too large and holds up projects
  - ii. NJ used SF estimating processes
  - iii. CT, VT, ME, NJ, use the AASHTOWare Estimator program with various levels of success, but still have challenges keeping up with the changing bid environment
  - iv. NH is hoping for guidance on level of estimating at each level of the job - a documentation of process is desired
- c. PCI has a new Full-Depth Precast Panel Guideline for download that was created by PCI-New England
- d. Vermont recently bid a field metalizing project (120 foot span steel beam) – instead of a 3 coat - \$450k for metalizing wasn't too much more than 3 coat system.

#### **5. ACEC-ME / MaineDOT meeting notes**

- a. Sharing of information to find common issues
  - i. Met on 3/10, the 6/10 meeting has been postponed for one month
  - ii. Maine is working on bridge design guide as well – trouble finding time

1. Using surveys to determine which sections are in highest need to get updated
- iii. The railing tube wall thickness on 4 bar may be increasing from 1/4 to 5/16
- iv. Maine is starting to use 3 bar transition rail and not concrete end post (didn't pass crash test)

## 6. Business Topics

- a. Online plan review (bluebeam or other)
  - i. VT process – upload plans to a shared site, then VT PM sends it out, 30 day review period, PM consolidates review, consultant responds in PDF. This has worked well.
  - ii. Durham project is using Bluebeam review process and is also working well
  - iii. Many other agencies and consultants have used similar plan review software

## 7. Potential NHDOT and Consultant bridge training opportunities

- a. NHI Courses availability, rescheduling, online, etc.
  - The NHI Strut and Tie course was rescheduled to September but was canceled with no new date.
  - NHI has moved many training courses to a live web based platform that could become more common in the future

## 8. Bridge Bureau workload and anticipated consultant support needs

- a. Possible Action Projects
  - i. Active projects are still moving forward
  - ii. Possible action projects are Campton (41472 NH49 over Pemigewasset – PE funds in 2021) and Rollinsford (42578 – Oak Street over Pan Am RR - PE funds in 2023)
  - iii. Complex bridge inspection – should be soon
- b. Future funding/project issues

## 9. Subcommittee membership rotation / new members

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
Kim Smith, Dan O'Connor Bob Juliano, Mike Mozer	Sept. 2019 to Sept 2022
new consultant members new NHDOT members	Sept. 2020 to Sept 2023

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- a. September 2020 new consultant and NHDOT members
    - i. The committee accepted Jaimie French and Chris Cucco as new members
    - ii. The committee and Joe Adams accepted to stay on as a member. NHDOT is still in process for finding a replacement for John Poisson.
  - b. September 2020 new consultant chair
    - i. The committee accepted that Adam Stockin will be the next consultant chair
- 10. Upcoming meetings - scheduled Fridays from 10:00 to 11:30 AM**
- a. September 11, 2020, December 11, 2020
  - b. 2021 meeting dates:  
March 12<sup>th</sup>, June 11<sup>th</sup>, September 10<sup>th</sup>, December 10<sup>th</sup>