

MINUTES OF AGC-DOT JOINT BRIDGE SUBCOMMITTEE MEETING
(Approved December 14, 2022)

The AGC-DOT Joint Bridge Subcommittee met on October 12th, 2022. Those in attendance were:

Brian Hanks	State Structures Engineer (Co-Chairman)
Victor Barbour	Carolinas AGC – Highway Division Director (Co-Chairman)
Kevin Lacy	State Director of Strategic Planning and Programming
John Pilipchuk	State Geotechnical Engineer
David Hering	Assistant State Geotechnical Engineer
Todd Whittington	State Materials Engineer
Wiley Jones	State Construction Engineer
Don Parker	Eastern Region Work Zone Traffic Control Engineer
Brian Hunter	State Laboratory Operations Manager
Gichuru Muchane	Assistant State Structures Engineer
Philip Creasman	Buckeye Bridge, LLC
Kerry Kennedy	Conti Enterprises, Inc.
Adam Holcomb	Dane Construction, Inc
Chas Hummel	Flatiron Construction Corporation
Pete Distefano	Balfour Beatty Infrastructure, Inc.
Chris Brown	Sanford Contractors, Inc.
Tom Meador	Lane Construction Company
Mark Newman	NHM Constructors, LLC
Erick Frazier	S. T. Wooten Corporation
Patrick Buckley	Crowder Construction Company
Chris Powers	Lee Construction Company of the Carolinas
Brian Weathersby	Reeves Construction Company
Nathan Thomas	Smith-Rowe, LLC
Thomas Santee	Geotechnical Unit – Eastern Regional Operations Engineer
Aaron Earwood	Construction Unit – Regional Bridge Construction Engineer
Aaron Griffith	Construction Unit – Regional Bridge Construction Engineer
Cabell Garbee	Materials & Tests Unit – Manufactured Products Engineer
Jason Civils	Materials & Tests Unit – Concrete Products Specialist
James Bolden	Structures Management Unit – Project Engineer
Trey Carroll	Structures Management Unit – Project Engineer
Tim Sherrill	Structures Management Unit – Staff Engineer
Nicholas Pierce	Structures Management Unit – Team Leader
Asa Godfrey	Structures Management Unit

During the review of the June 8th, 2022 meeting minutes, the following items were discussed:

1. Material Availability – Box Beams

Materials & Tests Unit is tracking material availability and is monitoring the effect product delays can have on project schedules through discussions with members of

Georgia/C Carolinas PCI . Mr. Earwood asked AGC subcommittee members if Division contracts are including additional contract time due to material lead times. Several Contractors noted that Division contract times are not as aggressive as previously noted.

2. Slope Protection Detail Beneath Deck Drains

Mr. Earwood noted the Construction Unit is still monitoring the slope protection repair on a bridge in Division 4. It was noted that SMU/Construction had recently visited a bridge in Division 9 with similar erosion damage to the slope protection. The draft repair details are still under review and consideration for implementing into design plans for new construction.

3. Maximum Superelevation, Profiles and Skews for Bridges

Mr. Carroll noted that SMU is working with the Roadway Unit to update the Roadway Design Manual.

4. Asbestos Program Update

Mr. Carroll stated that SMU will be coordinating with the Purchasing Section to setup contracts for asbestos inspections.

5. Other

It was announced that Mr. Kevin Lacy was promoted to Direct of Strategic Planning and Programming; Mr. Wiley Jones was promoted to State Construction Engineer; and Mr. Aaron Griffith was promoted to Western Regional Bridge Construction Engineer.

The minutes of the June 8th, 2022, meeting were approved.

The following items of new business were discussed:

1. Bridge Rehab Work Zones

Mr. Parker presented recently developed draft work zone traffic control (WZTC) plans for bridge preservation/rehab projects, which entail shorter closure times allowed and narrower lanes for work. Some of the changes discussed include variable speeds based on conditions to 45 mph when a lane is closed, as well as utilizing techniques such as weaving traffic control patterns, flashing speed signage, lights on drums, etc. There was also discussion of additional law enforcement presence, including utilizing the HAWKS program, where law enforcement actively monitor and target speeders. Mr. Parker also mentioned that WZTC is working with SMU on a checklist for preservation/rehab projects to ensure that additional items are being considered and that Division personnel will be involved earlier in the project development phase. Mr. Parker and Mr. Lacy discussed considering road closures as the first option and producing valid reasons why that can't be done before moving forward with alternative WZTC plans.

Contractors noted that additional traffic signage and devices often require increased exposure of personnel to traffic as they have to setup, take down and maintain those devices while needed. They also mentioned that having multiple lighted devices requires the use of portable generators, which have been stolen from the jobsites.

2. Pile Driving

Mr. Brown shared that OSHA completed their review of the incident that was discussed during the June subcommittee meeting and the findings resulted in a citation and a recommendation to monitor pile driving from a safe distance, through the use of equipment such as a Saximeter. Mr. Brown stated on projects since the incident, they have been stopping the hammer to mark piles and then restarting while monitoring from a distance. He asked if NCDOT would recommend using a Saximeter instead of stopping the hammer. Mr. Earwood noted that a Saximeter only measures blows and strokes, but not pile penetration.

Action Item:

Construction and Geotechnical Unit will continue to review projects where there were driving resistance issues and develop allowable method(s) for proving pile bearing.

2. Bridge Preservation Project Lettings

Mr. Carroll stated that the project letting list on SMU's website was recently updated, along with the replacement list. He noted that the Department anticipates Centrally letting 10 preservation projects consisting of 24 bridges and 187 replacement projects over the next 12 months.

Action Item: None

4. Girder Buildup Points and Pour Dry Runs

Mr. Weathersby inquired about the increased number of construction elevation points and if it is NCDOT's expectation that Contractors and inspectors verify each point during the screed dry run. Mr. Earwood stated that each point should be checked on exterior girders and the inspector's judgement should be used for checking interior girder points during a dry run. Mr. Weathersby also asked about negative cambers and/or buildups on bridges and if SMU reviews Consultant bridge plans. Mr. Hanks stated that SMU should be checking for negative cambers, and he discussed design and detailing considerations with sag vertical curves on bridges. He noted SMU's preference is to not have sag vertical curves on structures, but sometimes they do occur.

Action Item:

SMU will review the Design Manual to ensure it addresses sag vertical curves on bridges and prohibits girders with final negative camber.

5. Tensioning of Cored Slabs & Box Beams

Mr. Earwood shared the trial procedure of partially tensioning the transverse strands prior to grouting shear keys, then grouting the shear keys and then fully tensioning once the grout achieves strength, was successful. He also shared a draft revision of the Standard Specification language detailing the procedure.

Action Item:

AGC members to review the provided draft procedure and provide comments to Mr. Earwood.

6. Approach Slabs

Mr. Earwood shared revised roadway standard drawings for bridge approach fills based on feedback received from subcommittee members. He noted these drawings will be published in the 2024 Roadway Standard Drawings. Revisions include placing a layer of Type 5 Geotextile 6 inches below the bottom of the approach slab and relocating the approach fill drain pipe above the bottom of the end bent cap.

Action Item:

AGC to provide Mr. Earwood any additional comments before final publication.

7. FRP Institute Educational Opportunity

Mr. Garbee presented the group with an upcoming educational opportunity to learn about Fiber Reinforced Polymers (FRP) reinforcement and a site visit to the Harkers Island bridge replacement project.

**** Upcoming 2022 Meeting Dates:**

December 14th