

MINUTES OF AGC-DOT JOINT BRIDGE SUBCOMMITTEE MEETING

(Approved October 14th, 2026)

The AGC-DOT Joint Bridge Subcommittee met on August 12, 2026. Those in attendance were:

David Snoke	State Structures Engineer (Co-Chairman)
Gichuru Muchane	Assistant State Structures Engineer
Trey Carroll	Assistant State Structures Engineer
James Bolden, Jr.	Structures Management Unit – Project Engineer
Nicholas Pierce	Structures Management Unit – Project Engineer
Doug Cantrell	Structures Management Unit – PRR Team Leader
Lukas Bender	Structures Management Unit – Engineer
Brian Skeens	State Construction Engineer
Liam Shannon	Assistant State Construction Engineer – Eastern
Aaron Earwood	State Bridge Construction Engineer
Aaron Griffith	Construction Unit – Bridge Construction Engineer – Western
Tyler Rogers*	Construction Unit – Bridge Construction Engineer – Western
Patrick Cheeves	Construction Unit – Bridge Construction Engineer – Eastern
Randy Hall*	Construction Unit – Bridge Construction Engineer – Eastern
Michelle Gaddy*	Construction Unit – State Construction Operations Engineer
Casey Bowman*	Construction Unit – Project Closeout Engineer
Nicholas Winters*	Construction Unit – Project Closeout Engineer
Todd Whittington	State Materials Engineer
Matt Hilderbran	M&T State Field Operations Manager
Brian Hunter	M&T State Laboratory Operations Engineer
Jason Civils	M&T Manufactured Products Engineer
Nichole Fletcher	M&T Unit Manufactured Products Staff Engineer
Natalie Bravo	M&T Concrete Products Engineer
Randy Griffin	Environmental Analysis Unit Head
Michael Turchy	Environmental Coordination and Permitting Group Leader
Majid Khazaei*	Geotechnical Unit – Eastern Operations Supervisor
Nicholas Tuttle	Geotechnical Unit – Eastern Senior Operations Engineer
Scott Hidden*	Geotechnical Unit – Support Services Supervisor
Erick Frazier	S. T. Wooten Corporation
Peter Distefano	Balfour Beatty, Inc.
Nathan Hedrick	Dane Construction, Inc.
Justin Carter	Sanford Contractors
Dan Paulsen	Blythe Construction
Terry Whitson	Branch Civil
Brian Weathersby	Reeves Construction Co.
Brett Dietrich	Lanford Brothers, Inc.
Brian Conrad	Fred Smith Company
Andrew Fulkerson	Buckeye Bridge, LLC
Jerrad Stewart	Conti Civil

* Joined Via Microsoft Teams

During the review of the June 10, 2026, meeting minutes, the following items were discussed:

1. Buy America

Mr. Snoke asked if anything has changed with the *Build America, Buy America* (BABA) guidelines since the last meeting. Mr. Shannon shared the Construction Unit has released a guidance document on the requirements and established administration processes for suppliers and contractors. Starting October 1st, the BABA requirements will move to Phase 2 implementation which is the full requirement for 55% of the manufactured component cost to be domestically sourced. Mr. Snoke asked if these changes will be for all projects or just Federally funded projects. Mr. Shannon noted the manufactured product requirements are only for Federally funded projects, steel and iron requirements are for all projects. He reminded the group that there will be a FHWA hosted webinar with more information about manufactured product requirements open to the entire industry in late September.

Action item:

Continue to monitor BABA changes.

2. Cored Slab Hold Down

Mr. Snoke asked if there are any updates on the Cored Slab Hold Down standard change to threaded rod. Mr. Pierce stated the SMU EDS group is working on this and there are no updates.

Action item:

SMU to continue investigating Cored Slab Hold Down Standards.

3. Projected Bridge Lettings

Mr. Snoke shared a presentation highlighting the Bridge Let List Update. In FY 2026 NCDOT delivered fewer projects than expected. The FY 2027 expected Let List data was shared. Mr. Snoke noted there are no big changes from the last presentation.

Mr. Pierce shared that SMU is updating the way the Let List is published on the Structures website. Moving forward there will be a webpage devoted to the projects, instead of posting PDF files with the lists. Mr. Carroll noted these let lists are typically updated every other month.

Action item:

None

4. Division Let Limit

Mr. Earwood stated the proposed increase in Division Let Limit will be implemented cautiously with increased reviews from Structures, Contracts, Construction, and other central units to ensure realistic contract times, procurement, and that overall projects are consistent statewide. He reminded the committee that the Divisions should be logging any questions that come up during procurement or pre-letting to share with the central units for monitoring.

Action item:

NCDOT to continue implementation and review process.

5. Median Barrier Rail Rebar/Anchoring

Mr. Earwood discussed the desire to provide contractors with alternatives for installing median barrier reinforcing steel into the wet concrete immediately behind the deck screed. Structures Unit is continuing to work through evaluating these alternatives.

Action item:

SMU to continue to evaluate median barrier rail anchoring alternatives.

6. Steel Beam Availability

Mr. Earwood asked the group if there are still issues with availability of rolled steel beams. Multiple contractors responded there are still issues procuring HP14x73 piles but reported no issues acquiring other H-pile sizes. Mr. Earwood asked the group about current lead times for steel shapes and suggested M&T can reach out to various suppliers to determine lead times. Increased lead times will need to be accounted for in larger projects but may pose more impact on smaller projects. The Department has begun considering longer procurement lead times for structural steel shapes when establishing contract times.

Action item:

NCDOT to continue to monitor steel beam availability.

7. Barrier Wall Expansion Joints

Mr. Earwood asked contractors to use GFRP or other non-corrosive material to support temporary steel plates used to form expansion joint block-outs in slip-formed barrier rails. This will help minimize the potential for corrosion in areas that are difficult to properly finish. This topic will be addressed in a future Structures Bulletin.

Action item:

Contractors to use corrosion resistant methods for barrier wall expansion joints.

8. Timber Bridges

Timber Bridge details and potential revisions have been discussed at previous meetings. Mr. Earwood noted that the Timber Bridge Program provides some flexibility to adjust details during construction, particularly expansion joint details, to simplify construction and improve durability. Mr. Rogers is available as a resource to assist with potential revisions. Contractors were encouraged to bring forward ideas for addressing constructability challenges and improving details.

Action item:

None

9. Strip Seals

Mr. Earwood reminded the committee that strip seal glands are not compatible between different manufacturers. Glands are also not necessarily interchangeable between the revised

shapes now being offered by Watson Bowman. Contractors should work with their supplier to ensure the correct gland is being provided.

Action item:

None

10. Railroad Flagging

Mr. Earwood noted the Construction Unit is still working with Rail Division on getting the provision changed.

Action item:

Construction Unit work with Rail Division on changing Railroad Flagging Provision.

11. Median Barrier Rail Standard Update

Mr. Earwood asked for an update and noted the new median barrier rail will match the current roadway standard barrier at 46 inches tall. Mr. Pierce shared the standard figure that is still under development, and the barrier will match the roadway barrier height as well as rebar pattern.

Action item:

SMU to continue working on updating the median barrier rail.

The minutes of the June 10, 2026, meeting were approved.

The following items of new business were discussed:

1. Partial Payment of Girder Fabrication

Mr. Paulsen shared this topic on behalf of the girder fabricators. He stated that fabricators cannot receive material pre-payment for girders until they have been inspected and received the final approval stamp, which may not occur until the time of shipment. Since girders may remain in the fabricator's yard for an extended period while awaiting final finishing, he asked whether there is a mechanism that would allow material pre-payment prior to final inspection. Mr. Civils noted that some fabricators complete this finishing work shortly after casting, while others perform it closer to shipment.

Mr. Shannon, Mr. Earwood, and other NCDOT representatives discussed the Department's requirements for material pre-payments and whether M&T final approval is required before partial payment can be made.

Action item:

NCDOT to continue internal discussions for precast concrete girder material pre-payments and continue external discussions at upcoming PCI meeting.

2. FERC Permit Process

Mr. Distefano shared a project involving permitted construction access within a Federal Energy Regulatory Commission (FERC) regulated reservoir. The permitted access shown on

the bid plans consisted of a rock causeway with a bulkhead for a barge landing. Due to drought conditions, the lake level was lower than anticipated, resulting in insufficient water depth at the bulkhead to float a barge. The project team proposed replacing the rock causeway with a temporary work bridge/trestle that could extend farther into the lake and provide access for barges. Mr. Distefano noted that permitting agencies on previous projects have allowed similar modifications because a work bridge/trestle reduces impacts to the waterway by using piles rather than the larger footprint of a rock causeway. However, on this project, they learned that FERC does not allow permit modifications, requiring NCDOT to pursue a new permit and resulting in additional processing time and project delays.

Mr. Earwood invited Mr. Turchy, NCDOT Environmental Coordination and Permitting Group Leader, to the meeting and shared slides from a previous conference. Duke Energy publishes the Annual Normal Operating Range for its hydroelectric lakes, including monthly elevations for Normal Minimum, Normal Target, and Normal Maximum (Full Pond). Mr. Earwood discussed how the referenced project plans used the Full Pond elevation as the Normal Water Surface (NWS) elevation. Because lakes are generally maintained near the Normal Target Elevation rather than Full Pond, this resulted in the plans indicating greater water depths at the barge landing than would typically be available.

Mr. Earwood noted that for temporary construction access utilizing barge landings, the published Normal Minimum Elevation should be shown on the plans and considered in establishing the limits of the barge landing to ensure sufficient water depth during lower lake levels. For projects utilizing causeways or temporary work bridges in lieu of barges, the Normal Target Elevation or higher should be used to establish the elevation of the temporary access to help ensure it remains above water during construction. Mr. Stutts noted that the Normal Maximum Elevation (Full Pond) is typically used for permanent bridge design. Designers should therefore distinguish between the water surface elevations used for permanent bridge design and those used to establish temporary construction access and the limits shown on the FERC permit.

FERC typically delegates permitting authority to the entity that owns or operates the facility, which is Duke Energy for the referenced project. Duke Energy establishes its own procedures and review process and currently evaluates permit applications in the order received for all lake users, including private dock permits, which can result in lengthy review times. Mr. Earwood also noted other FERC-related challenges, including the requirement to obtain other necessary permits before beginning the FERC permitting process. The group discussed the desire to establish a separate process with Duke Energy for NCDOT projects and permit modifications to improve coordination between Duke Energy and the project team and reduce potential project delays.

Action item:

NCDOT to continue internal and external discussions about improving FERC permitting process.

3. Concrete Reinforcing Sampling

An updated structures plan note addressing the revised guidelines NCDOT Materials and Test Unit issued in the January 1, 2026 memo subject Steel Reinforcement for Concrete Acceptance Requirements for the sampling of concrete reinforcement was sent out to the

committee for review and comments. Mr. Whitson voiced concerns about draft language in the updated concrete reinforcement sampling note. He stated the note could be interpreted as requiring steel sample bars be cut from steel reinforcement that has already been tied on the project and replaced with splice bars. Mr. Earwood said the testing method is not changing significantly from previous methods, and the intent is to sample random bars delivered to the site, emphasizing the steel is to be taken from bars shipped to the site. He noted in the past some manufacturers have sent sample “coupons” with the project bundle to prevent the need for splicing bars after samples were cut, this practice doesn’t represent a random sample of bars delivered to the project.

Mr. Earwood suggested a convenient solution is to order a few extra bars to eliminate the need for splicing. He also stated the new guidance is to randomly sample two 36-inch pieces per straight bar size per million pounds from steel delivered to the site. Mr. Civils stated the second bar in the sample is to be used as a backup in case the first bar fails and reminded the committee that it’s in the contractor’s best interest to take those samples from different bars as opposed to cutting them both from a singular bar. Mr. Earwood asked about the “straight” part of the requirement and if the intent is to sample only straight portions of bar or only bars that were intended to be straight. He referenced an example of a project that had #11 hooked bars but no straight bars in that size and asked if that scenario would require a sample. The Materials and Test Unit provided clarification about Mr. Earwood’s question, stating that only straight bars size #11 and smaller delivered to the project site are to be sampled and that all bars larger than #11 bars, along with fabricated (bent/hook/spiral) bars, require Type 1 Certified Mill Test Reports for acceptance.

Mr. Earwood asked if the structure plan note has been updated to match the updated M&T guidance. Mr. Pierce showed the proposed Structures Management plan note that references the NCDOT – Material and Test Units’s *Acceptance Guidance for Concrete Reinforcement*. Mr. Civils suggested the phrase “The random sample bars should come from steel actually used in the project...” in the proposed note, may have caused confusion on the intent.

Action item:

Structures Management to revise language in concrete reinforcement sampling plan note.

4. Rolling Straightedge Requirements

Mr. Earwood stated that historically NCDOT has used a 10-foot rolling straight edge device to determine uniformity across the top of the bridge deck. He noted most rolling straight edges used across the Department are great at identifying high spots but fail to effectively capture low spots. This has led to not identifying low spots in the bridge deck until after grooving in which case the lack of grooves on a low spot becomes evident. Mr. Earwood is considering updating the standard to new High-Low Detector, rolling straight edge devices that utilize a gauge to determine both high and low spots.

Mr. Paulsen asked if low spots are identified, what is the standard repair practice. Mr. Earwood noted the *Standard Specifications* was updated in 2024 to direct contractors to grind down high spots and submit a repair method for low spots and for the worst-case scenarios, cut out the area and perform a class II repair. He stated crews should watch their rollers on the screed during the deck pour and ensure there is adequate concrete on the rollers at all

times to avoid low spots and achieve the desired grade. Mr. Earwood and Mr. Cheeves noted it is best practice to avoid repairs and achieve the desired grade when placing the deck.

Mr. Paulsen asked for clarification on the Departments concern with low spots on the bridge deck. Mr. Earwood stated the primary concerns are rebar cover and ride quality. Depending on the extent of the low spot and how the area rides it may or may not require a repair.

Mr. Paulsen asks if these gauges must be calibrated. Mr. Cheeves described that typical calibration includes pulling a string line between the wheels and verifying the gauge reads zero and adjust the gauge accordingly to read zero. Mr. Whitson advised the group to store these High-Low Detectors with care, as they can damage easily. Mr. Cheeves noted that maintenance is also important with these devices. Mr. Hildebran reminded Mr. Earwood that M&T has a walking profilometer that can be utilized as a quality assurance resource if additional verification of the deck riding surface is necessary on a project.

Action Item:

Construction to continue evaluating the implementation of new rolling straight edge gauge.

5. Cored Slab Shear Keys Leaking

Mr. Earwood shared with the group a revised AASHTO precast concrete shear key detail. He stated his intent is not to change the shear key size but address leakage in the shear key. The AASHTO committee is proposing to grout to the top of the shear key and use an elastomeric sealant along with compacted sand to fill above the keyway. Mr. Earwood asked the group for cost-effective suggestions on waterproofing the top of the key to avoid reflective cracking in the asphalt. In the past some repair projects used FRP tape with epoxy but that may be cost prohibitive for all projects.

Mr. Whitson noted a Sika epoxy product they use for concrete pavement spall repairs may provide effective waterproofing, he has used this product on I-40 for repairs that have been in service for ten years with no issues. Mr. Paulsen recommended using a product used for sealing the rubber membrane with the hold down plate on Expansion Joint Seals may provide adequate waterproofing. Mr. Civils noted that requiring calcium nitrite inhibitor (CNI) in all cored slabs may work as a preventative measure in coastal or mountain areas to protect against corrosion. Mr. Earwood agreed this is an option but also suggested epoxy coating the cored slabs. Mr. Civils noted that the epoxy coating would be significantly more expensive than including CNI in the cored slab units. Mr. Civils suggested investigating using a higher quality grout than the current specification to alleviate these issues. Mr. Earwood suggested that the new tensioning sequence for Cored Slab and Box Beams (tensioning after placing grout) should help minimize shrinkage and reduce leakage.

Action Item:

Construction Unit to continue investigating precast concrete shear key sealant options as well as other ideas to increase durability of cored slab and box beam bridges.

6. Bit size for Chipping Question

A contractor noted that the Concrete Overlay Surface Preparation Project Special Provision requires the chisel bit cannot be larger than the shaft width and asked the group for clarity on this requirement. Mr. Earwood stated that rule has been in place for a long time but was not

confident in the original intent. He stated this may have been required to reduce the chance of striking rebar when chipping out the existing concrete.

Action Item:

None

7. Drilled Shaft Casing Issue

Mr. Distefano and Mr. Earwood mentioned a CMCG project at the coast in a highly corrosive environment where a decision was made to cast drilled shafts all the way to the bottom of the cap since the columns would be very short if constructed. NCDOT is concerned about leaving the drilled shaft steel casings above the low tide elevation exposed to salt water after the project is complete. Mr. Earwood noted how these casings will rust and could impact the NBI inspection ratings later despite not being a structural element. To resolve this issue, he stated they have been exploring using removable column casings to extend above the steel casing. It was stated Florida Department Of Transportation (FDOT) previously used the removable casings but currently require cutting off the casing two feet below the surface of the water. Mr. Earwood discussed concerns with peeling the casings off the drilled shaft and asked the group if anyone has experience removing steel casing from drilled shafts. Mr. Distefano added they are concerned about the appearance of the concrete after removing the casing and are planning a trial. Mr. Earwood noted they have been in contact with FDOT and are exploring information they have provided. No additional feedback was provided by the committee.

Action Item:

NCDOT and CMGC Team to continue to explore options on removing drilled shaft casings on this project.

**** Upcoming 2026 Meeting Dates:**

October 14th

December 9th