# MINUTES OF AGC-DOT JOINT BRIDGE SUBCOMMITTEE MEETING (Approved: February 14, 2018)

The AGC-DOT Joint Bridge Subcommittee met on October 11<sup>th</sup>, 2017. Those in attendance were:

Brian Hanks	State Structures Engineer (Co-Chairman)
Berry Jenkins	Carolinas AGC – Highway Division Director (Co-Chairman)
John Pilipchuk	State Geotechnical Engineer
Gichuru Muchane	Assistant State Structures Engineer
Adam Holcomb	Dane Construction, Inc.
Aaron Bogner	Dragados USA
Tom Meador	Lane Construction, Corp.
Chris Powers	Lee Construction Co.
Chris Brown	Sanford Contractors, Inc.
Ben Bishop	Sloan Construction
Don Tutterow	Thalle Construction Company
Larry Cagle	Thompson-Arthur Div., APAC-Atlantic, Inc.
Lewis Icenhower	Young & McQueen Grading Company
Cameron Cochran	Construction Unit – Regional Bridge Construction Engineer
Aaron Earwood	Construction Unit – Regional Bridge Construction Engineer
Cameron Cochran	Construction Unit – Regional Bridge Construction Engineer
Dan Muller	Structures Management Unit – Project Engineer
David Snoke	Structures Management Unit – Project Engineer
Bill Goodwind	Structures Management Unit – Staff Engineer
Trey Carroll	Structures Management Unit – Team Leader

#### 1. <u>Approval of Minutes</u>

The minutes of the June 21<sup>st</sup>, 2017 meeting were reviewed and approved.

# 2. <u>Approach Slab Detail for Integral End Bents</u>

Addressing the action item from the June meeting topic *Integral End Bents Pushing Approach Slabs*, Mr. Hanks shared an approach slab detail Structures Management Unit is proposing to use at integral end bents. The proposed detail has the approach slab as two individual slab segments separated by a foam joint seal. The two segments of the approach slab are supported by a sleeper slab with the segment bordering the roadway connected to the sleeper slab. The segment connected to the bridge is allowed to slide on the sleeper slab and moves with the bridge.

Mr. Hanks stated the proposed detail will allow for movement at the joint which should address the current detail's in-service issue of the approach slab pushing the roadway.

Mr. Pilipchuk discussed concerns with the sleeper slab and future maintenance activities. Mr. Pilipchuk stated past experiences have shown that it is difficult to uniformly jack an approach slab that is supported by a sleeper slab.

# **Action Item:**

# Subcommittee members will review the proposed detail and provide comments to Structures Management Unit.

3. <u>12 Month Let List</u>

Mr. Hanks discussed the 12 Month Let List and instructed Contractors on how to access the list on the Structures Management Unit's webpage. Mr. Hanks stated this list only included Central let projects and does not include Division let projects.

## Action Item: None

## 4. <u>PCG Top Flange Continuity Bar detail at Integral End Bents</u>

Mr. Brown discussed previous experience with inadequate concrete cover for the continuity 'S' bars projecting out of the top flange of prestressed concrete girders due to the approach slab blockout in the integral end bent diaphragm. Mr. Hanks questioned if this issue only occurred with certain girder types and Mr. Brown stated he had experienced the issue with all girder types.

Mr. Brown discussed a project where the cap width was increased to allow for additional cover and suggested this could be a possible solution going forward.

## Action Item: Structures Management Unit will investigate current details.

#### 5. ADA Compliance for Sidewalks on Bridges

Mr. Bishop stated that per the Americans with Disabilities Act (ADA) the maximum allowable cross slope for sidewalks shall be 2 percent. Mr. Bishop noted current Structures Management Unit sidewalk details result in a 2.08 percent cross slope without considering construction tolerances and discussed a previous experience where a sidewalk cross slope was out of compliance.

Mr. Bishop proposed adjusting sidewalk dimensions to result in a 1.5 percent cross slope which would allow for construction tolerances. Contractors recommended keeping the current 6 inch dimension from the gutterline to the nose of the sidewalk curb and varying the dimension from the nose of the sidewalk to the barrier rail.

# Action Item: Structures Management Unit will investigate current detail and consider revising.

## 6. <u>Tooled Joints at Rail Posts</u>

Mr. Holcomb inquired about the Department's preference for placing tooled joints in concrete at metal post locations for rails with sidewalks. Mr. Holcomb discussed a project in which his personnel were instructed to place a tooled joint in both the parapet and sidewalk at each post location for a two bar metal rail with a sidewalk.

Mr. Earwood responded by stating the tooled joint should only be placed in the sidewalk at each metal post location and not in the concrete parapet.

#### Action Item: Structures Management Unit will provide additional guidance in the design manual.

#### 7. Use of Silane on Bridge Decks

Mr. Earwood discussed previous experiences with using silane to seal cracks in bridge decks. Mr. Earwood stated that, per section 420-14 of the NCDOT Standard Specifications, when corrective actions are taken to achieve an acceptable deck finish and those actions extend below the limits of the top layer of grout the deck should be sealed with an approved sealing agent. Mr. Earwood shared that there has been inconsistency in enforcing this requirement and Contractors should be aware that the Construction Unit is discussing requiring the use of silane to seal decks when corrective actions are taken.

#### **Action Item:**

# Construction Unit and Structures Management Unit will continue discussing the use of silane on bridge decks.

# 8. Joint Training at Winter Conference

Mr. Jenkins informed the subcommittee about the upcoming Winter Conference and stated the conference would focus on program and project delivery. Mr. Jenkins requested subcommittee members submit discussion topics for the conference.

Tentatively the locations and dates for the Winter Conference are: Raleigh: February 5<sup>th</sup> & 6<sup>th</sup> Atlantic Beach: February 21<sup>st</sup> & 22<sup>nd</sup> Asheville: March 13<sup>th</sup> & 14<sup>th</sup>

Action Item: None

#### 9. Bridge Program

Mr. Hanks discussed the new bridge program that Structures Management Unit will be managing. Mr. Hanks shared that tentatively between Central and the Divisions there are approximately 1,000 bridge projects scheduled to be let within the next five years.

# Action Item: None

#### 10. <u>Structure Bulletin</u>

Mr. Cochran spoke briefly about the Construction Unit's use of a monthly Structure Bulletin newsletter to keep employees informed on current issues. Mr. Cochran requested that Contractors notify him or Mr. Earwood when construction related issues occur so that they may address the issue through a Structure Bulletin and prevent recurrence on other projects.

#### Action Item: None

#### Next Meeting

The next meeting is scheduled for December 13<sup>th</sup>, 2017 in the Structures Management Conference Room C.

#### Post Meeting Note:

Due to scheduling conflicts and a limited agenda, the December 2017 meeting was canceled. The next meeting is scheduled for Wednesday, February 14<sup>th</sup> 2018 in the Structures Management Conference Room C.