

## MINUTES OF DOT-AGC BRIDGE DESIGN SUBCOMMITTEE MEETING

(Approved: 10/16/13)

The DOT-AGC Joint Bridge Design Subcommittee met on August 14<sup>th</sup>, 2013. Those in attendance were:

|                 |   |
|-----------------|---|
| Greg Perfetti   | State Structures Engineer (Co-Chairman)                     |
| Mike Robinson   | State Bridge Construction Engineer                          |
| Allen Raynor    | Assistant State Structures Engineer                         |
| Rodger Rochelle | Director of the Transportation Program Management Unit      |
| John Pilipchuk  | State Geotechnical Engineer                                 |
| Randall Gattis  | Sanford Contractors, Inc.                                   |
| Chris Powers    | Lee Construction  |
| Larry Cagle     | Thompson-Arthur Div., APAC-Atlantic, Inc.                   |
| Don Tutterow    | D.H. Griffin Construction                                   |
| Bill Heston     | Balfour Beatty Infrastructure                               |
| Ben Bishop      | Crowder Construction Company                                |
| Dan Nickel      | Carolina Bridge Company                                     |
| Erick Frazier   | S.T. Wooten Corporation                                     |
| Philip Creasman | NHM Constructors  |
| Brian Hanks     | Structures Management Project Engineer                      |
| Paul Lambert    | Structures Management Project Engineer                      |
| Scott Hidden    | Support Services Supervisor – Geotechnical Eng. Unit        |
| Steve Walton    | Metals Engineer – Materials and Test Unit                   |
| Ken Pace        | State Environmental Operation Engineer – Roadside Env. Unit |
| Gichuru Muchane | Structures Management Engineer                              |

The following items were discussed during the review of the June 12th, 2013 minutes:

### 1. *Native Fill Material in Multiple Box Culverts*

Mr. Hanks informed the committee that the Structures Management and Hydraulics Design Units have revised and coordinated the notes shown on culvert plans for improved consistency and completeness regarding the fill material required in culverts.

The minutes of the June 12th, 2013 meeting were approved.

The following items of new business were discussed:

### 1. *Permanent Sheet Piles*

Mr. Walton reported that the Department has revised the policy on the use of A690 steel sheet piles. Based on Contractors' concerns and field observations, the Department will now require galvanized A572 steel sheet piles for permanent applications, except that metallized A572 steel sheet piles will be required for permanent applications where the sheet piles are subject to splash or tidal wetting and drying cycles. Galvanized or metallized A690 steel sheet piles will be permitted as an option.

Mr. Hanks added that beginning with the October letting, contracts will include a standard provision for Sheet Piles detailing the material requirements. He advised that Contractors may request permission to replace A690 steel sheet piles with galvanized or metallized A572 steel sheet piles on existing projects.

Mr. Walton requested Contractors ensure suppliers of steel sheet piles employ good workmanship when cutting lifting holes in the sheet piles and areas around the holes are properly galvanized or metallized.

### 2. *Disposal of Concrete Grooving/Grinding Slurry*

Mr. Pace distributed a special provision for Diamond Grinding Concrete Pavement. He noted that that the provision details options for disposal of diamond grinding slurry, which shall be in accordance with

the Statewide Permit for Land Application of Diamond Grinding Slurry. He briefly discussed the slurry disposal options which include:

- A Contractor proposed method which must be reviewed and approved,
- Disposal of dewatered concrete grinding residue (CGR) at a municipal solid waste landfill,
- Dewatered CGRs utilized as alternate daily cover or reused within DOT controlled areas at agronomic rates suitable for establishment of vegetation.

He noted that in order for the slurry to be land applied it must have a pH  $\leq$  12.5 and he noted that the statewide permit was published online.

### 3. *Cap on Fuel Adjustment(Design Build and Ready Mix)*

Mr. Cagle discussed Contractors' concerns with the cap on fuel adjustment. He explained that Contractors are unsure why they are encouraged to include estimated quantities of fuel and/or fuel based products in bids, but there is no adjustment for exceeding the estimated quantity. As a result, Contractors are more likely to overestimate quantities of fuel and/or fuel products.

Mr. Rochelle responded by stating that the Department requests estimates of quantities listed on the Fuel Usage Factor Chart for the purpose of evaluating the reasonableness to the proposed design. He added that bid data is also used in developing the Engineer's estimate. As such, the intent was to collect the most accurate information and maintain a fair and competitive bidding environment for the Contractors. He also noted that Contractors often choose to opt out of the fuel price adjustment and decline to submit estimated quantities.

After some discussion, Mr. Rochelle stated that the Contractors' concerns were an unintended consequence of some of the verbiage in the special provision for *Submittal of Quantities, Fuel Base Index and Opt-Out Option*. He stated that he would coordinate with the Contracts Unit to revise the special provision and seek Contractors' feedback.

### 4. *National Pollutant Discharge Elimination System (NPDES)*

Mr. Robinson distributed a draft special provision for Permanent Vegetation Establishment. The special provision has been revised to state that the Department will be responsible for preparing the National Pollutant Discharge Elimination System (NPDES) inspection records between the intermediate completion time (ICT) and final project acceptance. Mr. Robinson requested Contractors' send him feedback on the special provision revisions as soon as possible. He anticipated the revised provision will be effective with the October letting. He also advised that Contractors may request the Resident Engineer's office complete the NPDES inspection records on existing projects.

Contractors were in favor of the revisions and agreed to send comments.

### 5. *Approved Product List (APL) for Geotextiles*

Mr. Hidden reported that the Department now requires geotextiles used on projects be listed on the Department's approved product list (APL). He noted that geotextiles listed on the APL are evaluated by the AASHTO National Transportation Product Evaluation Program (NTPEP). He added that this quality control measure will eliminate the difficult task of determining whether geotextiles used on projects conform to the Standard Specifications. Mr. Hidden also demonstrated how to navigate to the online APL and search for approved geotextiles.

### 6. *Precast Caps – Update*

Mr. Hanks provided an update of the Department's participation in the FHWA *Every Day Counts* (EDC) initiative. This initiative focuses on shortening the time needed to complete highway projects using accelerated bridge construction (ABC) through the use of prefabricated bridge elements and systems (PBES). To this end, in the October letting the Department will let three all-precast trial

projects, with no option for cast-in-place. These projects will assist in establishing procedures for future precast projects. He anticipated future precast projects will be let with a cast-in-place option unless there was a specific need for precast only.

7. *Other*

- i. Mr. Rochelle provided a brief update on the Express Design-Build program. He noted that over \$200 million was spent on projects during Years 1 and 2 of the program. The Department received over one hundred statements of qualifications (SoQs) from over forty-five different Contractors. Approximately forty Contractors were shortlisted and contracts were awarded to over thirty unique Contractors. He added that thirteen prime contractors were new to the State's design-build program. He anticipated that during Year 3, six to eight contracts will be let, most of which will be in the western part of the State.

8. *Next Meeting*

The next meeting is scheduled for Wednesday, October 16, 2013 in the Structures Management Conference Room.