

## MINUTES

### SCDOT – PCI Joint Committee Meeting

SCDOT Headquarters, 5<sup>th</sup> floor, Columbia SC

November 10, 2015 – 1:30 PM

Dr. Castrodale welcomed attendees and called the meeting to order at 1:30 PM. A sign-in sheet was circulated.

The following members (or representatives) were present:

#### **SCDOT**

Bener Amado	Program Manager RPG 2, Co-Chair
David Rister	Bridge Construction
Bill Chao	Bridge Maintenance
Terry Koon	Structural Design Support
Jim McCabe	Office of Materials and Research
Aly Hussein	Office of Materials and Research

#### **PCI**

Reid Castrodale	Castrodale Engineering Consultants, Co-Chair
Peter Finsen	Executive Director, GA/CAROLINAS PCI
Jeff White	Prestress of the Carolinas
Richard Potts	Standard Concrete Products
J.R. Parimuha	Florence Concrete Products

#### **Academia**

#### **FHWA**

#### **Minutes of Last Meeting**

The minutes of the May 7, 2015 meeting were approved as submitted.

#### **Old Business**

##### **01-6    *SCDOT Bridge Design Manual***

Terry Koon reported that a new memo for seismic was sent out last week. Lucero Mesa is working on a supplemental specification for three sided culverts. No update about the bridge manual at this time. Peter Finsen asked that G/C PCI members be included in review of any proposed revisions.

**09-1    *Accelerated Bridge Construction (ABC)Project – A Precast Alternate for Flat Slab Spans***

The National ABC Conference in Miami will be held in December 2015. Lucero Mesa is going to attend. As for the modified NEXT Beam project, there were some issues with the grout pay item. The project went through the letting but was rejected and expected to be let again by February 2016 with construction expected in April or May.

David talked about some emergency bridges in South Carolina due to the flood, a few other emergency projects with Design/Build and the work on I-95, where around 2700-3000 CY of flowable fill was poured around the piles.

**12-1    *Tentative Letting List***

Jeff White passed out copies of SCDOT Tentative Lettings for Bridges for the period of December 2015 through November 2016. The layout was good, but the data has not been populated in the table yet. Producers would like to see more information regarding superstructures. David will contact the new Director of Preconstruction, Ladd Gibson to encourage program managers to fill in the data in the tables.

David discussed recent changes at SCDOT Headquarters.

This item is essentially complete, but will be kept on the agenda until the next meeting.

**12-2    *Electronic Shop Drawings***

Jeff White reported that he sent his submittal for a recent project to the contractor electronically and got it back pretty quick; it was a consultant design project. SCDOT is beginning to use ProjectWise by Bentley, but implementation is sort of slow. Folks from outside SCDOT need to pay \$75 for access. SCDOT is moving forward and will define some rules for its use. At this time, contractors send shop drawings to consultants, then consultants send to SCDOT and from there it goes out to everyone else, so unofficially using emails. Jim McCabe and Mike Koon of OMR will still need to get hard copies of the shop drawings. The prestressers can also print drawings if needed. The Department is moving ahead with electronic drawing submittals including electronic signatures. This will also apply to shop drawings. Prestressers will submit to contractors who will put into the system.

Leave this item on the agenda for future meetings to allow reports on progress.

**12-3    *Fabrication from Contract Drawings***

Jeff White reported that he recently submitted contract plans for fabrication rather than redrawing them. This was for a York County project. The plans were part of the submittal that included other required items such as elongations, detensioning sequence, end cuts, diaphragm holes, overhang brackets and a framing plan. The submittal was approved.

The Department was satisfied with this approach. If fabrication details do not affect the design or performance of the beam, the seal on the design drawings will still stand. David Rister feels that this approach is a good idea, but would leave it up to the fabricators to decide whether they want to use the contract drawings or redraw them. Terry Koon will work with the RPGs to make sure that this approach will be understood. All agree that this approach eliminates potential for introducing error during the redrawing.

This item will be removed from the agenda.

There was a discussion of whether this approach should be discussed with the PE licensing board. It was concluded that if the sheet is not modified or manipulated, it stands as intended and can be copied without needing a new seal. It was agreed that a note should be added to the transmittal certifying that the drawings have been copied from the contract plans without modification. The transmittal with the note should be included as part of the electronic submittal so it could not be separated from the rest of the submittal and would be available for the reviewer.

## **Informational Items**

### ***Prestressed Concrete Bridge Design Seminar***

Peter indicated that G/C PCI used to provide a design seminar each year. This stopped during the slowdown in the economy. A few years ago, NCDOT asked G/C PCI to develop a seminar directed toward educating new design engineers on the basics of prestressed concrete design for bridges. Peter distributed the agenda for the NCDOT Prestressed Concrete Bridge Design seminar in 2014. NCDOT liked it and the seminar attracted about 160 people. Additionally, one engineering firm arranged for their own seminar in Charlotte, so they did not have to send 20+ of their engineers to Raleigh. The seminar addresses basic design issues, especially for the new graduate engineers. Discussions have begun with NCDOT on another seminar. The panel discussion on fabrication issues was very well accepted. GDOT is also interested in such a seminar.

Terry reported that Barry Bowers had a run up with the idea of having a similar seminar in Columbia, S.C. but it did not go anywhere. Terry Koon stated that the Department is working with Clemson University on developing a course for prestressed concrete. The class is expected to start in early 2016 and will be design oriented. Dr. Tommy Cousins is involving Dr. Timothy Mays of the Citadel and possibly David Taylor, who is now with Stantec. The Department would be interested in seeing a seminar by G/C PCI later in 2016 or early 2017 that would focus more on fabrication, which would not be covered in the Clemson course. G/C PCI would also be pleased to assist in a plant trip as part of the course. Peter Finsen will contact Dr. Cousins to get information on the course. The initial class by Clemson is expected to be for SCDOT employees, but may be open to consultants, especially for later offerings. Terry offered to share course information with industry before it goes out.

David Rister indicated that repair is an issue that would be important to cover in the seminar. It would be helpful for engineers to understand how repairs can be made and how they might affect prestressed concrete members. Lateral stability and shipping and handling would also be a good topic. Peter Finsen gave David a copy of the PCI Repair Manual since he did not have a copy and was not aware of it.

### ***Other Items***

Peter Finsen distributed a new version of a matrix of products produced by each of the G/C PCI members. New members include Coastal Precast Systems in Wilmington, NC, and Forterra (formerly Hanson) in Pelham, AL. The final version of the matrix will be printed soon and will be posted on the G/C PCI website.

Peter mentioned the PCI Convention on March 3-6, 2016 in Nashville, TN in conjunction with the NPCA Precast Show, so the show will be much larger. PCI will offer up to 4 slots for SCDOT again this year. Peter should send the invitation to David and Terry.

David Rister was on a domestic scanning tour earlier last summer. One topic he learned about was the use of carbon fiber for prestressing strands. He asked if it was market ready yet. He indicated that FDOT was looking at it. The major issue they heard was about issues with anchoring the tendons. He asked if the fabricators have any experience. He thinks that it may take off if they get the anchorage worked out.

### **Next Meeting**

The next meeting (originally scheduled for Thursday, May 12, 2016) has been changed to Thursday May 5, 2016 at 1:30 p.m. at the OMR Conference Room.

The next PCEF Committee Meeting is scheduled for Thursday, February 18, 2016 in Columbia, SC, at the SCDOT Headquarters, Construction Conference Room, 3<sup>rd</sup> floor. David will arrange for reserving the room.

The meeting was adjourned at 3:25 P.M.