

MINUTES

SCDOT – PCI Joint Committee Meeting

SCDOT Office of Materials and Research, Columbia SC

November 3, 2011 -1:30 PM

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

The following members (or representatives) were present:

SCDOT

| | |
|--------------|----------------------------------|
| David Rister | Bridge Construction |
| Bener Amado | Program Manager, RPG-2, Co-Chair |
| Barry Bowers | Pre-Construction Support |
| Toya Scipio | Office of Materials and Research |

PCI

| | |
|-----------------|-------------------------------------------|
| Peter Finsen | Executive Director, Georgia/Carolinas PCI |
| Reid Castrodale | Carolina Stalite Company, Co-Chair |
| Jeff White | Prestress of the Carolinas |
| Eric Deierlein | Tekna Corporation |
| Richard Potts | Standard Concrete Products (SCP) |

Clemson University

| | |
|----------------|---------------------|
| Bryant Nielson | Assistant Professor |
|----------------|---------------------|

FHWA

Presentation

The meeting started with a power point presentation by Dr. Bryant Nielson, a professor at Clemson, about the research project "SCDOT Research Project No. 682: Precast Alternative for Flat Slab."

The presentation summarized testing to date as well as future directions for the study. The research is focusing on providing a precast prestressed concrete solution for spans in the range of 22 to 40 ft. Concern was expressed about the section being proposed since it was a modification of the NEXT beam and would probably require a different form. However, the resulting narrower section is preferred for "top down" construction, for longer spans, and for keeping joints away from the wheel paths.

Minutes of Last Meeting

The minutes of the May 5, 2011 meeting were reviewed. They were approved as distributed.

Old Business

92-13 *Strand Slippage in Prestressed Piles*

There was no discussion of this item.

00-1 *PCI Bridge Design Manual*

Peter Finsen reported that the Manual will be published as an e-book, although a hard copy can also be obtained. An electronic copy will be licensed to a specific computer. FHWA has purchased 800 hard copies of the Manual, many of which will be distributed to the DOTs. It is anticipated that those copies will be distributed in October or November. The distribution for SCDOT was discussed.

01-6 *SCDOT Bridge Design Manual*

Details for steel intermediate diaphragms had been distributed to the committee for comment. Only 1 set of comments had been received. The proposed details were based on the NCDOT details. The Department may use a 2" diam. hole as suggested by JR Parimuha in his comments. The NCDOT diaphragm is welded, but the proposed SCDOT details allow the diaphragm to be either welded or bolted. SCDOT reported that the contractors are very interested in using the steel diaphragms. Barry Bowers expects that a memorandum on the diaphragms will be out by January 2012.

02-2 *Prefabrication of Bridge Elements for Rapid Construction*

Bener Amado reported on a project with 2 - 30 ft spans and 2 - 40 ft spans. He said he would distribute the plans for industry comment. A question was raised about whether the post-tensioning was adequate.

It was noted that the precast cap could be fabricated as either 1 piece or 2 pieces, at the contractor's option. The pile pocket in the caps has to be circular, so it must be large to accommodate square piles. Barry Bowers wondered if the piles could be octagonal to allow for smaller pockets, and therefore, smaller caps.

SCDOT is planning a project with precast approach slabs, which would be reinforced, not prestressed, concrete. They plan to use U-bars in the splices similar to those being studied by Clemson for the double tee bridge section. The Department plans to use these slabs on interstate construction where user costs can justify the speed and cost.

02-3 *Self-Compacting Concrete (SCC)*

There was no discussion of this item.

06-1 *Reinforcement Details for Continuous for Live Load Designs*

Barry Bowers had checked with contractors and found that they liked the current hairpin details even though they have to thread a bar through the loops.

06-2 *Regional Standardization - PCEF*

Peter Finsen asked if anyone knew whether Jim McCabe and Aly Hussein have had opportunity to review MNL-116 and see if there are other items that they would like to have included in the PCI plant inspections. Since neither was present, others were not aware if they had reviewed the manual yet.

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

There was no additional discussion of this item, which was the topic of the presentation at the beginning of the meeting.

New Business

Eric Deierlein reported that a piling producer in Charleston is now making piles for SCDOT. He expressed concern that SCDOT has hired a new consultant to inspect the second plant, while the inspector for his plant is not busy and could have easily covered the inspection at the new plant. Bener Amado said that he would bring it up at an upcoming meeting.

Informational Items

None.

Next Meeting

The next meeting was scheduled for Thursday, May 3, 2012 at 1:30 PM.

It was noted that the next G/C PCEF Meeting was scheduled for February 9, 2012, in Atlanta, GA.

The meeting was adjourned at about 4:00 PM.