

NCDOT – PCI Joint Meeting Minutes  
August 23<sup>rd</sup>, 2011, 1:30 PM

The meeting started with self introductions. The following were in attendance:  
Reid Castrodale, Jack Cowser, J P Binald, Peter Finsen, Brian Hanks, Chip Harris, Tom Koch, Paul Lambert, Mike Means, Trudy Mullins, J. R. Parimuha, Greg Perfetti, Allen Raynor, Mike Robinson, Tim Sherrill and Richard Potts.

The minutes of the March 17<sup>th</sup>, 2010 meeting were reviewed and approved with comments: Under the item “Rebar dimensioning for 0.6” strand”, the 10 ½” dimension should be clarified as the horizontal dimension between top strands.

### Technical Committee

There was no report from the Technical Committee, as no meeting was held since the full committee last met.

### Ad-Hoc Agenda Items

1. Precast Caps - The following comments were made concerning revisions to the precast cap drawings:
  - a. All widths are now 3'-0" with the exception of caps for 20" piles which are 3'-8".
  - b. The blockouts are roof-top shaped, and tapered. There are chamfers in the four corners and across the top. A comment was made that pile driving tolerances may need to be tightened to accommodate the dimensions of the blockouts.
  - c. Void sizes are all the same.
  - d. The embedment is the same as was used in the Ocrakoke caps
  - e. Shipping weights are nearly the same as for cored slabs
  - f. The goal is to begin using these details by the end of this year.
  - g. If there are any further issues with the drawings, contact Brian Hanks
2. Use of other prefabricated members – Use of prefabricated members such as endwalls, wingwalls and footings was mentioned by the Industry. The Department responded that the Every Day Counts initiative on Prefabricated Bridge Elements and Systems is encouraging State Highway Agencies to look at using prefabricated elements in larger bridges. The use of precast rails was mentioned, and the Department stated that it was not in favor of their use.
3. Diaphragm holes: - The previous request to consider increasing the 1½" diameter holes for the K-frames was discussed further. The Department stated that most of the Non-Conformance Reports related to the holes were not related to tolerance, but to misplacement of the holes by significant distances, and that the 1½" dimension was adequate.
4. Stability of members: The specification states that stability should be considered for members 54" or deeper, but this is not simply an issue of member depth, but of length vs. depth.

5. New Specification: There is a new specification book that will take effect January 2012, and it is currently available on the DOT web site.
6. David Stark changing positions: David Stark is going to a different position in the Design/Build group, and the position will remain vacant for a while. Contact James Gaither or Paul Sprouse in the interim.
7. Overhang Bracket Galvanization: The question was asked if all overhang brackets are required to be galvanized. The reply was that the requirement is for epoxy coating, galvanizing or metallizing all metals where the bridge notes state "design for corrosive environments". Further discussion ensued concerning inserts, and a commitment to discuss this with the AGC was made.
8. Future project increases: There is a plan to spend an additional \$460 Million on structures over the next three years (above the current TIP expenditures. Also, the Bridge Management Unit has earmarked \$1 Billion for structure replacement over the next 5 years. The amount of funding from Divisions is also scheduled to increase from \$2 Billion to \$5 Billion.
9. Precast approach slabs: There was a project that used a precast approach slab, but was not very successful. A list of potential project for further investigation is being developed.
10. Camber research project: The project has been finalized and has two approaches recommended for predicting camber. Issues identified include strength typically being higher than design and modulus being lower than design. Another identified issue is that changes in the shape of the void under the pressure of concrete prior to setting up has an effect on the section's moment of inertia
11. Turnpike projects: The Gaston Garden Parkway project does not have a let date as of now. The Monroe Bypass apparently has the OK to move forward.
12. The next meeting is scheduled for November 17.