

**ASCE-INDOT
STRUCTURAL SUBCOMMITTEE
MEETING NO. 45 MINUTES
October 22, 2009**

The meeting was called to order at 9:10 am by Steve Weintraut. Those in attendance were:

Anne Rearick	INDOT, Structural Services
Tony Uremovich	INDOT, Structural Services
Ron McCaslin	INDOT, Structural Services
Greg Klevitsky	INDOT, Structural Services
Naveed Burki	INDOT, Structural Services
Manoj Sutaria	INDOT, Structural Services
Tony Zander	INDOT, Materials and Tests Division
Jason Yeager	Gohman Asphalt Company
Don Bosse	Prestress Services, Inc.
Mike McCool	Beam Longest & Neff, LLC.
Mike Halterman	USI Consultants, Inc.
Burleigh Law	HNTB Corp.
Erich Hart	RQAW Corp.
Kyle Muellner	Butler, Fairman & Seufert, Inc.
Steve Weintraut	Butler, Fairman & Seufert, Inc.

In addition to the attendees, these minutes will be sent to the following:

George Snyder	INDOT, Structural Services
Brian Harvey	INDOT, Program Development
Ron Heustis	INDOT, Construction Management
Jim Reilman	INDOT, Construction Management
Dick O'Connor	RQAW Corporation
Mike Wenning	American Structurepoint, Inc.
Troy Jessup	R. W. Armstrong
Keith Hoernschmeyer	Federal Highway Administration
Bill Dittrich	INDOT, Program Development
Michael Eichenauer	Butler, Fairman & Seufert, Inc.
Pete White	R.W. Armstrong

A meeting agenda had previously been distributed and the following items were discussed.

1. The July 23, 2009 meeting minutes were approved as written, and have been placed on the INDOT website.
2. Steve Weintraut passed out new proposed pavement ledge details, as well as an example of a cracking problem which has occurred on SR 101. The proposed High Density Plastic Bearing Strip will be glued to the vertical leg of the angle at bottom of ledge. It is noted that a proprietary item such as "Korolath" would not be acceptable. For that reason, a "plexiglass" spec has been added to the package distributed. Nobody had any comments at the time. Steve invites questions or comments on this specification.

3. Tony Uremovich indicated that Tony Zander has been working on a unique special provision for Semi-Lightweight Concrete. He hasn't heard back since meeting No. 44, but in Kentucky there are beams being tested. Currently acceptance on 80 beams is being tracked. More aggregate types than ever before are being used for this material.
4. Tony Zander states that more information on Self-Consolidating Concrete will be gathered from other sources (i.e. state agencies). It is anticipated that this will mostly be applicable to precast concrete. It was also brought up that the districts don't have the money to purchase testing equipment, so the equipment may need to be written into each contract for the time being. Don Bosse commented that Prestress Services has not had good luck with it.
5. Burleigh Law stated that Troy and Pete are working on a spreadsheet for Overhang Criteria. Mike McCool would like to add the information discussed to the "PCI Stability Document" relating to beam stability from release through deck curing. Mr. Bosse notes that bearing pads should be as wide as possible, rather than two separate pads.
6. Anne Rearick has presented Mike McCool's deck reinforcement proposal to the group rewriting the Design Manual concrete section. She is awaiting a response from Randy Strain.
7. Mike McCool presented a concept for "Structures Conference 2010." A subgroup has been formed consisting of Mike McCool, Mike Halterman, and Mike Wenning. Mr. McCool would like to start out with a 1-day course, with potential to expand in the future. Topics may include: LRFD geotechnical design, technical design direction, detailed examples, and practice pointers for those examples. Steve Weintraut recommended CEUs be considered. Anne Rearick would like to see a "looking forward" section. A date needs to be reserved, potentially July 2010. No concerns were stated regarding the date.
8. Anne Rearick sent an email regarding the 400-kip pier design load, and will re-send. For pier design, this load is required unless a 54-in. height barrier, or a w-beam barrier where there is a 10-ft offset, protects the pier. Most states exempt abutments from this extreme event. Anne recommends that structures outside the clear zone be exempt. Naveed Burki would like to see guardrail placed in low-AADT scenarios within the clear zone. Anne indicated that the NCHRP is currently doing studies. Steve Weintraut says that some other states have criteria in place, mostly leaning away from treating low-ADT roads the same as high-ADT roads.
9. Anne Rearick would like comments on Policy and Standard Details pertaining to the following items. FHWA "blessing" is needed in order to deviate from IDM or AASHTO specs.
 - a. Where to enforce or encourage protection:
 - Thus far, ideas have included Exempted abutments, <1000 ADT, Low-Speed Roads, MSE-Wall abutments, Redundant structures.

- b. How to protect:
- No ideas have yet been presented, however Item 8 above recommends pier protection options.
10. Mike McCool would like to get construction loading requirements worked out soon. Steve Weintraut sent out references and the current proposed scheme, as well as showing an example of a 50-psf deck load being extended out to the overhang bracket rail. Jason Yeager notes that Mike McCool's finishing machine load was okay, but that rotations between diaphragms are frequently an issue, especially on light rolled beams. He would like to see a 150-plf load centered 18 in. from the coping. All agreed that this sounded like a good idea. Currently a standard note indicates that the bottom overhang bracket intersects the bottom flange and web. Steve Weintraut will check with Bob McCullough regarding published resources for loading information. Anne Rearick noted that Idaho DOT has some information available. (From Mtg. 44), McCool intends to create a design example, and would like to have the example linked to the Design Manual by next year.
11. Anne Rearick indicated that she will have the IDM rewrite group look into the "Integral End Bent discrepancy."
12. On the topic of Standard Haunch details, Mike Halterman notes that the 2-in. form flute should be removed. Steve Weintraut indicated that the ½-in. dimension should be from the top of beam. Naveed Burki indicated that the 8-in. minimum deck thickness should then be from the top of form. Jason Yeager pointed out that the ½-in. dimension is a bit tight to set form elevations by. One-half inch above the strap as shown is their desired scenario. Anne Rearick stated that the concrete insert spacings, weld calls, and self-tapping screw calls will be eliminated. Tony Uremovich will make the modifications happen.

The next meeting for the INDOT Structural Subcommittee is scheduled for 9:00 a.m. on January 12, 2010, in a room to be determined.

This meeting was adjourned at 11:30 a.m.

Respectfully submitted,
BUTLER, FAIRMAN and SEUFERT, INC.



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