

# BRIDGE TECHNICAL COMMITTEE MEETING – MINUTES

## July 25, 2013

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### Previous Meeting Carryover Topics:

1. **Anchorage for Temporary Barrier (Tom Braun)**  
No new discussion.

### Standing Topics:

1. **North South Update (Laura Shadewald)**
2. **Hoan Bridge Update (Laura Shadewald)**
3. **USH 41 Update (Bill Dreher)**
4. **Zoo Interchange (Laura Shadewald)**
5. **IH-39 Illinois-Dane County (Jim Lucht)**
6. **Verona Road Madison (Laura Shadewald)**
7. **Every Day Counts – EDC-2 Initiatives (Bill Dreher, Bill Oliva)**
  - Chris Kirchner asked whether the mix designs of prestressed precast concrete girders would be looked into. Bill Dreher stated that BOS will be involving the fabrication community when these decisions are made.
8. **Wisconsin Highway Research Program (WHRP) Bridge Items (Bill Oliva)**
  - Bill Oliva mentioned that there is a structures TOC involved looking into new research needs that we have in order to improve the way transportation structures perform.
  - Bill Oliva also mentioned the different, current research projects being worked on and referenced the fact that he asked for input on future research interests.
  - Kevin McMullen discussed the current WHRP research project regarding Bridge Approach Slabs that is a joint effort between the structures TOC and rigid pavements TOC.

### New Meeting Topics:

1. **Concrete Surface Repair - (Jim Parry & John Bolka)**

Under Section 509, Concrete Overlay and Structure Repair, Section 509.2 Materials, the contractor is allowed to use an engineer-approved commercial grout to surfaces being repaired, if the engineer specifically approves in writing. In the field, it appears the Engineer is; Approving the use of a commercial grout, if the Non-Shrink Commercial Grout is on the pre-approved list (attached), without checking to see if the product is made for the intended use, the assumption being that it is an approved grout; or Allowing the use of whatever material the Contractor is proposing regardless of its inclusion on the PAL. Project staffs should be checking product spec sheets from the manufacturers to be sure that appropriate products are being used for each application. Presence on a general WisDOT approved list does not guarantee that a product will be appropriate for a specific application. This is especially true in the repair world where there are far too many unique applications to be possible to tie all of them to a couple of general approved lists.

  - Vendor was out on site for SE region project and stated that product was being used incorrectly – vertical patch was being treated with a horizontal patch material.
  - Product was on the Approved Products List, but wasn't in the correct application.
  - Contractors in field are using approved products without looking into the intended use of the products.
  - Jim Parry noted that we do not intend to put together approved products lists for all types of materials and applications – each specific project team needs to look into products on a case by case basis.
  - Manufacturer's spec sheets should be reviewed prior to application.
  - It is not the responsibility of WisDOT to get vendors' products onto the Approved Products Lists per Kevin McMullen (WCPA)
  - The project engineer can approve any product for their specific project – do not need to use an Approved Products List product per Mike Hall (WisDOT)
  - WisDOT to look into developing a process to provide "engineer's approval" for each specific project that has a product that does not fit within a current Approved Products List.
  - Jim Parry reiterated the fact that the project team (contractors/design engineer/field engineer/etc.) should look into the product data sheets for application requirements.

- Highlighting the fact that the engineer makes the final decision of product application (not the fact that the product is on a list) is needed.
2. **Interior Adhesive Anchored Barriers- (Aaron Bonk)**  
Discussion regarding a proposed requirement for contractors to use an ACI/CRSI certified installer for adhesive anchors. This relates to implementing of the use of adhesive anchors at interior parapet locations (at the contractor's option).
- Aaron Bonk provided background on reason why new requirements for post-installed anchors are being instituted. [See attached handouts.](#)
  - No comments provided by contractors. – Additional discussion at fall BTC Meeting anticipated.
3. **Box Culvert Construction- (Bill Dreher)**
- Bill Dreher discussed the current construction of box culverts per WisDOT standards.
  - A question came up regarding whether the contractor could pour the sidewalls and top slab of box culverts monolithically. Per the standard spec, it states that the contractor needs to pour the top slab after 1 hour but before 3 hours after the finished sidewall pour.
  - Standard spec states that it should be poured monolithically unless the plans show otherwise. However, our standard shows the joint.
  - Mike Hall handed out an update to the standard spec referring to the timelines associated with construction.
  - The question of whether the 1 hour minimum requirement is needed was discussed. Mike Hall stated that this note has been in the standard spec for a long time, but it is also in the ACI and AASHTO spec sections referring to this construction type.
  - The overall sentiment from the contractors was that the hour limit should not be needed.
  - Bill Dreher stated that BOS will look into the topic further, but that it is not a large issue due to the fact that most times culverts are poured with joints.
4. **Maximum Number of Breaks in Deck Cross Slope- (Bill Dreher & Chris Doll)**
- Superelevated structure was requested to have a break at the shoulders which would cause there to be 4 changes in the deck cross slope – project that Chris Doll is working on.
  - Steve Lunde mentioned that the Bidwells have limitations on where the breaks can be located.
  - David Stanke mentioned that there are many projects with tapers/etc. that cause problems for contractors and longitudinal joints have been required.
  - Kevin McMullen asked that the Bidwell representatives come to a future meeting to put a presentation on regarding this issue.
  - No official stance on the number of breaks allowable are required.
  - Highway designers need to be made aware of this issue – limit the number of breaks on a deck as much as possible.
5. **Plans and Specs Available for Large Projects More than 4-5 Weeks in Advance of a Letting – (Scott Krall)**
- Matt Grove discussed the desire to get plans and specs out early in order to help bids. He mentioned that the SE region has done a good job, but other regions are lagging.
  - Bill Oliva stated that Scott Lawry is looking into alternative options to how the letting process works. Scott and PDS will be looking into the associated issues with different options.
  - Laura Shadewald asked whether draft plans being advertised earlier are enough or if final plans being advertised early are needed. Matt Grove responded that as much information as possible is best.
  - Jim Lucht stated that he brought up the advertising issue to the I39 project team and they are looking into ways of how to accommodate this request.
  - Tim Holien mentioned that if plans are advertised earlier, it may help to limit the amount of addendums that come through at the last minute.
  - Bill Dreher stated that it is not likely possible to get final plans out an extra 5 weeks earlier than current dates, but it would be possible to put out draft versions early that contain more information than our preliminary plans (type, size, and location only).

## 6. Pipe Under drain Behind Abutments– (Dave Kiekbusch)

For pipe under-drain behind abutments, is it best to discharge at both wing tips, or drain from one wing tip, along back of abutment, and discharge at the other wing tip.

- Dave Kiekbusch mentioned that this topic was meant for the BOS tech meeting.
- Jim Lucht mentioned that on wide structures, the placement of underdrain needs to be up to a couple feet higher on one end for drainage, which takes away from the serviceability of the underdrain (want it to gather water at the lowest elevation possible behind abutments).

## 7. Specification Changes – (Mike Hall)

- Mike Hall discussed the airport clearance website that shows restrictions for cranes.
- Laura Shadewald showed the webpage via smartboard (send out link to webpage with official meeting minutes).
- Mike Hall stated that he would try to get the link to the webpage put into the FDM, but the desire of Darrin Stanke to have the designers include this information on the plans is likely not going to happen.
- Krissy VanHout stated that the coordination between the Bureau of Aeronautics and the designers is minimal (i.e., they let you know whether there will be a restriction on crane access or not).
- Marv Ruhland stated that MSA designers coordinate this on every one of their projects and that he felt that designers were tied into this task by fine print in one location or another.
- Bill Oliva will follow up with Jerry Zogg to dig into this issue further.

## 8. Girder Coordination Project – (Peter Lynch & Dawn Johnston)

As part of our role in OSOW Freight operations we are in receipt of a concern and perhaps a resource need regarding girder deliveries. Venders are concerned about the increasing difficulty of getting their material into the job sites (reportedly backing up considerable distances in some cases)

- Peter Lynch (WisDOT Bureau of Highway Maintenance, Freight Section) brought this topic to the meeting.
- The OSOW Freight Operations Group has been tasked with creating a process that will assist all parties involved in the bridge girder coordination to establish a clear plan, ensure seamless delivery, reduce time delays, etc.
- State Patrol has mentioned that there are multiple concerns from their viewpoint.
- The target of this process is to improve things for the Zoo interchange project so that there are as few delays/disruptions/etc. as possible.
- The goal of the group is to have a rough draft put together and presented to the Bridge Tech Committee in the near future, hopefully prior to the next construction season.
- David Stanke mentioned that the contractors have no ability to adjust the delivery of girders to project sites (i.e., delivery is scheduled 1 month in advance, but if other jobs are delayed it creates a ripple effect to that job and will cause an issue with this program).
- Tim Holien stated that the state statutes require single trip permits to be used in a specific window of time and this causes issues when that window can't be met because of any number of reasons.
- Chris Kirchner stated that a lot of the problems with delivery come from engineers scheduling timelines that are too tight and do not come from a definitive source.
- See attachment for more information.

## 9. Bid Items for Asbestos

- Aaron Bonk stated that the current updates to the Bridge Manual included information stating that bid items for asbestos need to be included in the structure plans in order to clear up previous confusion.

## 10. Temporary Shoring

- Krissy VanHout discussed the issue of including different bid quantities depending on different situations (i.e., different types of shoring can be used in multiple situations). By only using one quantity, there is potentially more of a risk for the contractor and also the department.
- Bill Dreher asked the question of the contractors as to what types of temporary shoring are used (sheet piling).
- Certain structures dictate different types of temporary shoring to be used.
- Blended bid quantities and costs are coming in because of the fact that there is only one generic bid item type currently being called out in all locations.

- Curt Pheifer (Radtke Contractors) mentioned that if the actual type of temporary shoring required is noted on the plans, the bid costs will likely be better.
- Steve Lunde stated that he has seen specific types of temporary shoring called out in the plans in the past and it should be continued.
- David Stanke discussed the issue of different types of temporary shoring on the same job which have different bid costs. If and when the quantity changes, the contractor would request to be paid at the rate for the actual shoring used and not the overall blended cost.
- David Stanke asked that differentiating temporary shoring locations on the plans so that multiple bid items are presented will be the best way of approaching this in the future.
- The quantity of temporary shoring per bridge is small enough where separating out different types of shoring isn't an issue unless there is one overall project ID that contains multiple structures with different sizes of temporary shoring.
- BOS will have internal discussions following up on this issue and will bring it back to the next Bridge Tech Committee meeting.

**Attachments:**



Handout  
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