September 11, 2009 Meeting –

WSDOT Bridge Office
7345 Linderson Way SW
Tumwater, WA 98501
Conf Room 1034 – Phone 360.528.4023

Members:

WSDOT	**ACEC**	**Guests**
Geoff Swett	Mark Johnson (CH2M HILL)	~~Bijan Khaleghi~~
Eric Schultz	Paul Bott (HDR)	
	David Goodyear (TY Lin)	
Scott Sargent	Jim Schettler (Jacobs)	
Jesse Beaver	~~Rich Johnson (HNTB~~)	
Jeri Bernstein	~~Yuhe Yang (PB)~~	

Action Items:

1. Make copies of Environmental Permit Manual (Geoff)
2. Invite Sonia Lowry to next meeting.
3. Ask a representative from the Washington State Ferries to joint the team.
4. Post Design Review Checklist on the ACEC website.

AGENDA

1. Introduction of new member – Jeri Bernstein – WA State Ferries
2. Review Meeting Minutes and Action Items from last meeting
3. Review Design Review Checklist
4. Develop work plan for future BDM review and proposed modifications to strengthen for Design Build Contracts (Team)
   a. Focus on know issues from previous and current Contracts (see issues identified by Sonia Lowry)
   b. Review Chapter by Chapter
5. Discuss dates for next meetings (Team)
6. Discuss Team Membership (Team)

9:00 am	20 min	• Introduction of Members and Guests • Review Minutes of Previous Meeting • Review Action Items and Today's Agenda
- New member Jeri Bernstein from the WA State Ferries Structures Division was introduced to the team. Welcome aboard Jeri!		

- Minutes and Action Items were reviewed by the team.
- Electronic and hard copies of the Environmental Training Manual were handed out to those who desired a copy. More electronic copies are available for any members that missed the meeting.
- Sonia Lowry was invited to the meeting and had planned to attend but was pulled off on some emergency work. Will invite to a future meeting.

- Jim Schettler's and David Goodyear's 3 year term is ending this fall but both have agreed to stay on an additional year. Thanks to both Jim and David.

9:20 am	30 min	Review of Design Review Checklist

Following the model established by the AGC/WSDOT Structures Team and the ADSC/WSDOT Team, the ACEC/WSDOT Structures team is offering up a similar service to provide structural review and feedback to projects under design. At the previous meeting a Design Review Checklist was developed. The Checklist was reviewed by the Team and several improvements were made. The Team also discussed distribution of the Checklist and where the service may get the most use. The Checklist will be distributed to the Bridge Office, ACEC members and as suggested during the discussion to Local Agencies. The Team felt that Local Agencies may be really interested in this service since they don't have the larger design staffs as WSDOT Bridge and many Consultants have. The updated Checklist will be posted on the Web. Geoff will talk to Bijan about distributing to the Bridge Office and he will also contact the WSDOT Liaison (Grant Griffen or Aaron Batters) with Local Agencies. Mark will pass on the Checklist to the ACEC members.

9:50 am	10 min	Concrete Performance Spec

Jesse Beaver and Scott Sargent gave an update on the status of the Spec. It will not be included in the 2010 Spec Book but is being used on selected projects. Jesse is also involved in the development of testing, particularly for self consolidating concrete. More to come on this topic.

10:00 am.	10 min.	Term "Engineer" In Std Specs

Jim asked about the status of the Process Improvement relating to developing Std. Specs for Design Build projects that clarifies the term Engineer. Geoff discussed the status with Bob Dyer a couple months ago and he is still in favor of the idea but is limited in staff time to perform the work. The Team will keep tabs on this so it doesn't get lost. The team also discussed preparing a revised section for future RFPs that would help clarify the term Engineer as an interim step. If the team wrote the proposed section and sent to Bob Dyer, it may have a good chance of getting implemented.

10:10 am.	90 min	BDM Review

The major focus of the Team this year is to review the BDM and provide recommendations for improvements when used during Design-Build projects. The Team discussed how to approach this task. It needs to be of a reasonable scope so that most of the work can be accomplished within meetings or with minimal effort outside of meeting

times. Everyone on the Team is very busy and it is difficult to assign "homework" that requires a significant time commitment.
The Team reviewed the issues that Sonia Lowry listed several months ago that were specific to her experience with a Design-Build Project. (See Below). Several are currently being addressed by the Bridge Office.
The Team also discussed the idea of preparing a section in the front of each BDM chapter or section that describes the minimum "Performance Requirements" that the prescriptive methods outlined in the chapter are intended to achieve. This would provide guidance to Design-Builders who want to deviate from the BDM and would provide background for methods described in the chapter.
The team reviewed several chapters within the BDM. Several chapters have sections that describe the intent of the chapter or section already and are quite good.

After much discussion the Team chose to work on Sections 7.1 and 7.2 in the BDM. The homework for the Team is to review these sections with the following in mind:

1. How are the Sections written when considering Design-Build contracts? Are there areas that need to be strengthened or clarified to take out any ambiguity within the section? For example terms such as "should" or "best-practice" etc. Is there a need for adding a section on minimum performance requirements that are intended to be achieved by following the guidance or prescriptive methods discussed in the specific section?
2. How are the Sections written considering the new AASHTO Guide Specification for Seismic Bridge Design? Are modifications necessary to be consistent with the Guide Spec? If so, identify and propose and changes.
3. How is the Section written considering the WSDOT Design Memo related to the interpretation and implementation of the new seismic guide spec. Again, are changes required, identify and propose changes.

The team agreed to work on these sections and submit comments to all members prior to the next meeting. Comments should be distributed to the team by **October 2nd**.

During the October 16th, meeting the Team will discuss the comments and determine the next steps.

11:45 pm.		Wrap-up

Next meetings: Since WSDOT now have two members traveling from the Seattle area, the team discussed going back to alternating meeting locations. Geoff will discuss with Bijan. The next 5 meeting dates were scheduled and are listed below.

October 16th, 2009 @ Tumwater (Bridge Office)

November 13, 2009 (location to be determined)

December 4th, 2009 (location to be determined)

January 8th, 2010 (location to be determined)

February 19th, 2010 (location to be determined) Action Items: 1. Update Website with revised Design Review Checklist and Member List (Geoff) 2. Distribute Checklist (Geoff and Mark) 3. Discuss meeting sites with Bijan (Geoff) 4. Review Sections 7.1 and 7.2 of the BDM. Provide comments to Team by October 2nd. 5. Invite Special Guests or Speakers as they become available. (All)		
12:00 pm.		Adjourn

Issues from Sonia Lowry:

1. There is a hinge detail in Chapter 7 indicating that it is acceptable for use, shown on a spread footing. The DB interpreted this as being acceptable for this project. Bijan disagreed, stating that was for a specific case. It was unclear in the BDM. We ended up allowing a 'reduced moment section' after going back and forth multiple times. This concept is not addressed in the BDM.

2. The DB is proposing to have drainage pipe and fire hydrant dry-line on the exterior of the structure. In the BDM, Chapter 10, it is indicated that it is our 'preference' to have these inside the structure/inside of the the exterior girder. Because it is our 'preference' not a requirement, they are asking for additional $$$ to move these inside the box girder/barrier. This could be worded differently -- maybe it should be a requirement unless extraordinary circumstances dictate otherwise?

3. There are several design memos that haven't been incorporated into the BDM, but are still active and indicate our current policy. One example is a memo from 2006 describing epoxy-coated steel requirements in roadway decks. It differentiates between girders and boxes for top and/or bottom mat coated. If you want, I can try to track down the actual memo. I think there are several out there that would fall into this category. They just haven't come up on this project. I have talked to Brian Aldrich about updating Chapter 5 to include this example.

4. Our standard specification has been amended to include an upgrade in PT duct material (to plastic) and the type of grout to use in them. This is not anywhere in a design memo or the BDM. I have talked to Brian Aldrich about this one as well. The spec was amended after the award of this contract, but it came up in a discussion with the designers.

I think that most of our problems have been where the BDM language suggests that certain practices are 'preferences' or 'best practices' but not necessarily policy or requirements. I talked to Dick Stoddard a little bit about this, but I wonder if we could put some sort of disclaimer in future DB, or even in the BDM that when the BDM is used for Design-Build, anything that is a 'best practice' or similar should be treated as a contractual obligation. It seems easier to go back and relax those requirements if the project allows then to try and enforce them after the contract is awarded. There have also been some instances of how to interpret the BDM. Most of these issues have been in Chapter 5 related to PT boxes and I have been working with Brian to have them clarified in the next edit of the chapter.

I will try to keep track of issues as they come up and let you know about them.

5. Cast-in-place PT box. Not enough info in the BDM; currently defaulting to Caltrans practice in most cases

6. Micropiles – need to add guidance in the BDM

7. Use of Geofoam – this could be a Geotech issue more appropriate for the GDM

8. Detailing Practices – more description on WSDOT standards and practices

9. Longitudinal Restrainers – required in Guide Spec.

10. Review of Falsework during a DB contract – does it need to go through WSDOT Construction Support

11. Barlist – make this a requirement in the BDM