

**ACEC/Caltrans Division of Engineering Services
Structures Liaison Committee**

MEETING MINUTES

DATE: April 25, 2014
TIME: 10:00 AM – 12:00 PM
MAIN LOCATION: California Department of Transportation
Division of Engineering Services
1801 30th Street, Room 102 (Farmers Market 1 Building, 1st Floor)
Sacramento, CA 95816
VIDEO CONFERENCE LOCATION: District 12 Office, Room 333
3337 Michelson Drive, Irvine

Note action items are in *bold italics*.

I. Call to Order

- A. Self-introductions – See sign-in sheets.
- B. Changes to Agenda – None.
- C. Review Previous Meeting Minutes (2/07/2014)
Approved. *E. Fredrickson will post along with the Annual Report.*

II. Old Business

- A. Technical Workshops:
 - 1. 2010 Specifications Training – Update
J. Abcarius reported that Caltrans structures specifications engineers met with a small group of ACEC specifications engineers to demonstrate preparation of 2010 specifications for a sample project (Estrella River Bridge) and answer questions. A follow-up workshop may come out of this. M. Reno thanked Caltrans for their assistance with this. *M. Reno to explore opportunities for a follow-up specifications training workshop.*
 - 2. Structures Design Seminars – Update
N. Wang reported that M. Keever organized a roundtable discussion on Design-Build for Caltrans structures at the DES Quarterly All-Managers Meeting March 13, 2014. The panel discussed how to follow a consistent design approach for structures including the RFQ, Agreements and post-award issues. N. Wang suggested that ACEC host a follow-up webinar on this topic in cooperation with M. Keever. While there will be concerns about discussing actual projects, R. Stott felt there would be plenty of opportunity to discuss how to work better together and advance design to the Ready for Construction stage. *M. Reno to follow up with M. Keever and set up a subcommittee to organize a workshop on Design-Build process improvements.* N. Wang provided notes on the panel discussion to M. Reno.
 - 3. Construction Annual Winter Training Seminar
Mark R. thanked Rob Stott for making Caltrans trainers available. There were a total of 130 participants. The training was successful and the webinar format worked well. Some slide images were too small with three slides combined into one. N. Wang suggested reformatting

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to a single slide per page. **Eric F. will provide a pdf of the expanded presentation to M. Reno.** PDH certificates will not be provided but M. Reno suggested using the agenda and self-certifying. **M. Reno will send an email with brief instructions.** Mark R. asked where BCM's are available. R. Stott determined that the public version of the manuals was not being updated at the same time as the in-house version. **R. Stott will look into this.** M. Reno recommends continuing with Winter Training. R. Stott concurred. **R Stott will report back to the group once the 2015 Winter Training Topic once it is selected.**

III. Recurring Business

A. DES Updates (Shira Rajendra)

Rick Land, Caltrans Chief Deputy Director has retired. Norma Ortega is acting in his place. DES is gearing up for the construction workload for the upcoming season to ensure adequate construction staff are available. This includes A&E staff in construction. 60% of DES workload is in structures construction phase. The budget process for FY 14/15 is ongoing. A slight decline in statewide capital outlay support workload is anticipated.

B. DES Updates: Memo to Designers, Technical Research, IQA (Roberto LaCalle for Barton Newton)

The Structures Corporate Management council is working on Structures Policy Directives required for NBSI. R. LaCalle handed out copies of the California Bridge and Structures Strategic Direction which is still draft but it has been vetted internally and externally. This applies to all bridges, not just State-owned.

The Concrete Committee is being reorganized to include reinforced concrete, prestressed concrete, segmental, etc. The goal is a more effective committee structure under one Chair. The Chair has not yet been selected.

There is a drive to approve Structure Policy Directives including risk and quality.

A memorandum implementing the AASHTO 6th Edition with Caltrans amendments has been signed and posted on the Internet (see Attachment 1). The number of Blue Sheets (California Amendments) has decreased approximately 15% since the 5th Edition. M. Reno asked about application to Local Agencies for the Local Assistance Program. Re-design may be required in the event of a prolonged environmental phase. R. LaCalle said that there is an exception process but he does not know if there is a tipping point for going back on design.

M. Reno asked about the status of policy on the use of the 2010 Standard Specifications on Local Assistance projects. S. Rajendra has asked Local Assistance what their position is on this. He expects Ray Zhang to issue guidance/policy on this to Local Agencies. **S. Rajendra will ask if Local Assistance can be represented on this committee.**

M. Saraf asked if Caltrans could issue the rationale they used for the Blue Sheets. **R. LaCalle said that he will bring this up with Barton Newton and Sue Hida.** Caltrans is moving toward fewer Blue Sheets. There are position papers on every California Amendment to AASHTO. These are used for change proposals at the AASHTO Subcommittee on Bridges and Structures. Sue Hida commented: "Mixture of apples and oranges here. Technical Background Forms (TBFs) are used to document the rationale for CA taking exception to AASHTO BDS as stated in the Amendment aka blue sheet. POSITION PAPERS are rationale for voting in favor or not in favor of a national change to

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AASHTO BDS. The content may be used to write a TBF, especially if we voted NO and the change still passed.”

There is a Draft Structures Policy Directive on technical software to address outside purchase, support, etc.

There are ongoing pilots projects on early-age deck cracking, post-tensioning grouting, use of corrosion-resistant reinforcement, and on Accelerated Bridge Construction using the FHWA toolkit.

The new Type 732SW barrier for ADA compliance with an eight-foot sidewalk passed the crash testing. This will be an XS sheet until the new Standard Plans come out.

There are new handrail details for the ST10 barrier rail (preferred by the Coastal Commission).

R. LaCalle said that DES might be able to provide an overview presentation on technical developments for ACEC. This would provide an opportunity for Caltrans technical experts to answer questions directly. **M. Reno will coordinate with E. Fredrickson on this.**

The Techstar modular joint seals have had a high incidence of failure recently.

The Office of Earthquake Engineering is working on the next version of the Seismic Design Criteria (SDC). R. LaCalle reported that Caltrans is doing about \$4 million of seismic research per year. This includes connections for Accelerated Bridge Construction.

Memos To Designers continues to be worked on and is getting a major overhaul.

Caltrans has adopted the AASHTO 6th Edition Standard Specifications for Sign Structures with no Blue Sheets.

M. Reno asked if there was any update on CTAbut availability. **E. Fredrickson will follow-up.**

M. Reno asked if Sue Hida ever sent a link for draft Memos To Designers to E. Fredrickson. She was interested in getting comments. **E. Fredrickson will follow up on this.**

M. Reno asked about the Load Rating policy. **R. LaCalle will mention this to Delores Valls/Kevin Keady for follow up.** E. Fredrickson said that the Office of Structure Maintenance and Investigations would need to prepare a directive on this. So the fact that this is being mentioned in on-going Type Selection Meetings is premature.

M. Saraf asked if Caltrans has any guidelines addressing aesthetic modifications to standard barriers. R. LaCalle said that Caltrans has guidelines on architectural treatments but not on structural modifications or anything that would affect performance. Structural modifications would require additional crash testing and require Federal approval.

M. Saraf asked if there is a committee working on differences / pros and cons of SDC versus AASHTO for seismic. **R. LaCalle will ask Tom Ostrom to address this at the workshop on technical developments.**

C. Project Development Oversight/Updates/Contracting Opportunities (Shira Rajendra)

There are no active procurements at this time.

D. 2010 Specification Issues (E. Fredrickson / M. Reno)

ACEC submitted questions to E. Fredrickson and he has written responses that he will share.

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E. Fredrickson said there is a directive on shop drawing stamp wording reflecting 2010 Standard Specification language. **M. Reno will check to see if that has been issued outside.** The new language applies to projects with 2010 Specifications only.

AASHTO 6th Edition now requires weakened planes and expansion joints in abutments exceeding 96 feet in length. R. Stott said it is a topic that surfaces with Area Construction Managers and is a good thing to consider. **Mark R suggested that ACEC propose modifications to the language.**

R. Stott reported that a new specification is coming on friction testing for methacrylate and polyester deck overlays. Caltrans is moving toward decanting the design of the testing machine into a set of working drawings so Contractors can build the machines in the future and take over the testing. Caltrans would then do Independent Quality Assurance. Caltrans will also look at IRI to replace profilographing with Contractor doing the testing in the future.

J. Abcarius reported that there are technical issues with installation of the specifications macro changing the behavior of MS Word. He said a good IT person may be able to make the macro work only when doing specifications.

R. LaCalle reported that Caltrans is now using Master Spec for buildings.

E. Statewide ACEC Committee Update (Jack Abcarius)

The prevailing wage and Provisional Indirect Cost Rate (ICR) topics are still ongoing. For ICR there is draft language submitted by Caltrans. ACEC thinks it is an improvement but still lacking. There could be a change coming for inspection and surveying not being subject to prevailing wage.

There was an update from David Sai of Local Assistance. The Division of Local Assistance is no longer enforcing the 2010 Standard Specifications. This can result in issues when Structures Local Assistance reviews a project with 2006 specifications. The local agency boilerplate is still based on the 2006 specifications and this causes the local agencies to prefer 2006. S. Rajendra has discussed this with Ray Zhang pointing out that the Office Bulletin allows either 2010 or 2006. Ray Zhang said that they would do something about this within the next 30 days. They are thinking of changing the language to simply say something like "current Caltrans Standard Specifications." **S. Rajendra said that we would invite the participants on the Local Agency/Caltrans statewide bridge committee to attend this meeting in the future.**

J. Abcarius reported that Tim Craggs said one local agency had complained that Caltrans is not being responsive to local needs for complete streets. R. Stott thought this might refer to state routes that are city streets. **Caltrans will send a link to the memo.**

IV. New Business

A. Other

M. Reno thanked the firms that hosted sites for Winter Training. R. Stott said the topic next year would be Foundations with a focus on driven and large diameter pile testing.

Attachments:

Attachment 1 – Memorandum, Adoption of the AASHTO LRFD Bridge Design Specifications,
Sixth Edition with the California Amendments

Attachment 2 – Sign-in Sheets

Distribution:

Robert Pieplow, Caltrans, DES
Rob Stott, Caltrans, SC
Mike Keever, Caltrans, SD
Tom Ostrom, Caltrans, EQE
Sue Hida, Caltrans, SPI
Barton Newton, Caltrans, SPI
Dolores Valls, Caltrans, SMI
Said Ismail, Caltrans, OSFP
Phil Stolarski, Caltrans, GS/METS
Shira Rajendra, Caltrans, PPRM
Eric Fredrickson, Caltrans, OSFP

Mark Reno, Quincy Engineering
Mark Ashley, TY Lin International
Jay Holombo, TY Lin International
Nien Wang, HNTB
Jim Frost, Simon Wong Engineering
Wei Koo, WKE
Jack Abcarius, NV5
Chandu Shenoy, NV5
John Woelfel, HNTB
Steve Tayanipour,
Todd Goolkasian, Cornerstone Struct. Eng.
Shawn M. Cullers, Cornerstone Struct. Eng.
Greg Zeiss, HDR
Majid Sarraf, TTG
Ayman Salama, TranSystems
Kevin Coates, WKE
Syed Kazmi, URS
Mike Bianucci, Mark Thomas & Company
Sunny Jhutti, AECOM
Kevin Thompson, URS
Patricia Preston, Apex Civil Engineering
Walt LaFranchi, URS Corporation

Attachment 1 - Memorandum, Adoption of the AASHTO LRFD Bridge Design Specifications, Sixth Edition with the California Amendments

Memorandum

*Flex your power!
Be energy efficient!*

To: DES DEPUTIES
Division of Engineering Services
DOLORES VALLS
Division of Maintenance
RAY ZHANG
Division of Local Assistance

Date: March 10, 2014

File:

From: BARTON NEWTON
Deputy Division Chief
Structure Policy & Innovation
Division of Engineering Services



Subject: **ADOPTION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION WITH THE CALIFORNIA AMENDMENTS.**

Effective March 10th, 2014, the *AASHTO LRFD Bridge Design Specifications, 2012 (Sixth Edition)* with *California Amendments (AASHTO-CA BDS-6)*, constitutes the primary design specifications for Caltrans bridges and ancillary structures.

For projects under development, adoption of *AASHTO-CA BDS-6* is:

- Not applicable when the Plans, Specifications, and Estimate (PS&E) has been submitted for advertising, or, the project is under construction.
- Optional if it would not impose a significant delay in the project schedule or a significant increase in the project engineering or construction costs. The project history notes and plans must indicate the design criteria used.
- Mandatory for all projects with scheduled "Ready-to-List" dates (as defined in the FY14-15 Delivery Plan) after December 31, 2015.

Local Agency →

Caltrans' Standard Plans and Standard Specifications remain valid for use. If a project under development requires significant deviation from these standards, the design must meet the requirements of *AASHTO-CA BDS-6*.

The State Bridge Engineer shall approve any exception to adopting provisions in the *AASHTO-CA BDS-6* as stated above. This request must be made as early as possible.

AASHTO-CA BDS-6 shall be the basis of all Caltrans guidance material under development.

For questions or concerns on application of the *AASHTO LRFD Bridge Design Specifications and California Amendments* on a specific project, consultants and local agencies should contact the Structure Liaison Engineer. Caltrans staff may contact the appropriate Technical Committee Chair or Technical Specialist.

DES DEPUTIES, et al.

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- c: Bob Pieplow, Chief, Division of Engineering Services
- Tim Craggs, Chief, Division of Design
- Sue Hida, Chief, DES SP&I Office of State Bridge Engineer Support
- Roberto Lacalle, Chief, DES SP&I Office of Structure Quality Management
- Tom Ostrom, Chief, DES SP&I Office of Earthquake Engineering
- Shannon Post, Chief, DES SP&I Office of Design & Technical Services
- Amarjeet Benipal, Assistant Division Chief, Division of Pavements

Attachment 2 – Sign-In Sheets

ACEC/Caltrans Division of Engineering Services Structures Liaison Committee

SIGN IN SHEET

Date: April 25, 2014

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