

**ACEC/Caltrans DES
Structures Liaison Committee
Meeting Minutes
May 12, 2023**

The meeting of the ACES/Caltrans DES Structures Liaison Committee was held in person on Friday, May 12th from 10:00 AM to 12:00 PM.

I. Call to Order

A. Self Introductions

The meeting began with a round of self-introductions for all present in Sacramento as well as those attending remotely in Diamond Bar.

B. Changes to the Agenda

Mark Reno informed the group that the presentation on skid testing may be moved up in the agenda so that it would occur around 10:30 AM. No other changes were requested.

C. Review Annual Report 2022

Mark Reno queried the attendees if there were any comments to the 2022 Annual Report. No changes or comments were requested. Bobby Zermeno to finalize the report and make ADA compliant. Mark to provide the finalized and ADA compliant document to Lance so it may be posted online.

D. Review Previous Meeting Minutes (February 3rd, 2023)

No changes or comments were made to the 2/3/2023 meeting minutes. The meeting minutes were finalized and approved.

II. DES/ACEC Updates

A. General: Shira Rajendra

- Sudhakar Vatti is the new Deputy Division Chief of Bridge Design. The previous Deputy Division Chief of Bridge Design Gudmund Setberg retired last month.
- Caltrans is busy with storm damage repair projects throughout the state as it was the worst winter for storm damage projects in the last 8 years.
- Caltrans has also been busy with the Broadband Middle Mile Network including developing standard details for conduits to be routed through structures.
- Caltrans DES working to backfill vacancies as hiring has been a challenge. The rate of attrition taking place has been difficult to overcome.
- Caltrans DES workload anticipated to see a slight decline next year.
- Ruth Fernandes with Caltrans DES mentioned that Jason Chou is Acting Office Chief for the Office of Special Funded Projects and Structure Local Assistance.

**ACEC/Caltrans DES
Structures Liaison Committee
Meeting Minutes
May 12, 2023**

B. Technical: Structures Technical Policies, Technical Research: Don Nguyen-Tan

Don Nguyen-Tan stated that he had nothing to report this quarter. Caltrans has been spending quite a bit of time developing and authoring AASHTO ballot items. Their goal is to reduce the number of Caltrans specific policies.

C. Contracting Opportunities: Shira Rajendra

Shira reminded the group that the lookahead report is posted on the DPAC website. Included in the report are a total of seven items for Caltrans DES. In the planning phases are six contracts, including two geotechnical contracts, one for northern California and one for southern California. There is also a contract in the planning phase for Structure Construction Inspection in Districts 7 and 12. There is also a contract materials testing services as well as a project specific construction inspection project located in District 12. Lastly, Caltrans will be advertising a contract for Bridge Design Services for the Vincent Thomas Bridge.

D. Local Assistance: Robert Peterson

Robert Peterson reminded the group that Local Assistance has been challenged for many years with being overprescribed. However, the Bridge Formula Program (BFP) through the Infrastructure Investment and Jobs Act (IIJA) has brought with it additional funding but with additional funding comes delivery. He reported that any project in the FTIP can come in for funding and can advance funds into the current fiscal year regardless of where the money had been programmed until funds are exhausted. He also reported that the program currently has 60 projects within this fiscal year that have been programmed totaling approximately \$155 million which, if the owners do not come in for their funding, then other projects that are programmed in an outer year can come in and claim the funding in order to attempt to spend every dollar that has been proportioned to the State. Furthermore, if a local agency does not come in to collect their apportioned funds, the project is penalized by pushing it out to the last year of the FTIP. He also reiterated that the BFP funding is only around for five years and we're presently in year two of five.

Robert was asked if a list of the 60 projects programmed for this year could be shared with the group. He responded stating that he would provide the list to Lance in order for it to be included with the meeting minutes.

Mark Reno asked Robert if local agencies who are working with their DLAE to inform them of delays outside their control such as going to condemnation during R/W would still be subject to having their projects pushed out to the last year of the FTIP? Robert stated that it unfortunately would still result in the project being pushed out. However, local agencies may apply May 1st of the following year for their funding. Robert was asked if a project was pushed out during the fall survey would it still be subject to the same penalty? Robert stated that it would not.

Mark asked Robert if Caltrans is aware of or starting to see good faith efforts being submitted on design contracts? Robert replied stating that he was not aware. Mark stated he would follow up with a formal question to Lance.

**ACEC/Caltrans DES
Structures Liaison Committee
Meeting Minutes
May 12, 2023**

E. Statewide ACEC Committee: Garrett Dekker

Garrett Dekker reported the following:

- Caltrans District 11 is looking at using the SANDAG method of creating an on-call bench of pre-approved DBE firms that primes are able to use.
- Statewide Caltrans is also looking at this to make it easier to add DBE firms to your team.
- Construction met with DPAC to implement a full-service scope of work template for CM contracts.
- Buy America regulations have been updated and there will be training sessions for local agencies to get up to speed on new requirements.
- 2023 construction standards set to be released on July 24th, 2023.
- New escalation policy for Caltrans contracts which is tied to labor indices and it updates every January.

Mark reminded the group that the construction standards will be updated annually in July and hard copies will no longer be produced. Each construction standard update will come along with its own implementation timeline.

F. Construction Management and Inspection Updates: Rich Foley/Jon Rohrer

Rich Foley stated that they completed their Winter Training sessions (13 total Caltrans training sessions in person and one with the ACEC group). This year's training was on concrete and next year's training is on post tensioning and alternative delivery methods. Mark reported that a total of 115 attendees participated during the ACEC training session across 5 satellite locations.

III. Sub-committees

A. ABC (Accelerated Bridge Construction): Garrett Dekker/Habib Hotaki

Garrett reported that he did not have any updates on the ACEC side.

Habib stated that Caltrans is finalizing three research projects with Iowa State University. The studies are as follows:

- UHPC Deck Overlays for Concrete Box Girder Bridges
- ABC Abutments
- Substructure ABC – Connection Between Column, Pile Cap, and Piles

Rich Foley asked the group how ACEC is selling ABC to local agencies? Garrett responded that on the consultant side one of his takeaways from an ABC workshop in 2022 is that one of the options considered during Type Selection should be an ABC option. Mark stated that at one

**ACEC/Caltrans DES
Structures Liaison Committee
Meeting Minutes
May 12, 2023**

point Caltrans had an ABC checklist to determine if ABC should be considered. He recommended the first step should be to step through the checklist. He also confirmed with Robert Peterson that Local Assistance would be on board with a construction cost increase so long as there was justification for selecting ABC based on following Caltrans's checklist.

Mark asked if Caltrans had made any further progress in terms of connections between precast columns and caps and has Caltrans started to use any of these connections given the seismic concerns that exist in California? Habib stated that the ongoing Substructure ABC was studying this right now. Ruth Fernandes stated that AASHTO T3 is actually working on a research study on seismic couplers at this time.

B. CMGC/Design-Build (Lessons Learned): Mark Reno)/Jason Chou

Mark reported that he and Caltrans are presently still in the planning stages on the upcoming CMGC/Design Build workshop. They have identified a location and are currently looking at a couple of dates in August and September. The workshop will be held on a Friday and will consist of a half dozen presentations and a panel discussion. As soon as a date is identified they will be sending out notice to the group. The identified site can accommodate up to 150 attendees.

Jason Chou asked what the group would like to see with the upcoming presentation. Mark suggested that they follow a similar approach to the Design Build workshop which was held a few years ago. It consisted of lessons learned, success stories, how selecting CMGC was arrived at and different perspectives as well as things that didn't go so well.

C. BIM (Building Information Model): Doug Dunrud/Bobby Zermeno

Bobby Zermeno stated that the BIM Subcommittee is working with Caltrans to prepare a virtual joint webinar to occur in the Summer of 2023. Caltrans will be covering their BIM related progress over the past year and half and Doug will be presenting a couple of recent case studies. Bobby also indicated that Caltrans has expressed interest in obtaining information from the Consultant community in terms of what is being done related to BIM and its state of maturity. Caltrans shared some suggested questions with the BIM Subcommittee. Doug, Bobby, and Elias Kurani (Caltrans) to meet to review the suggested questions before sending them out to the ACEC community for feedback. Elias had also prepared slides which were unable to be shared during the meeting but have been attached to the meeting minutes, which summarize the feedback Caltrans received from the construction community related to BIM. Ultimately, what Caltrans ascertained from the data collected is the state of maturity is fairly low.

Mark stated at one time Caltrans had indicated a timeframe for implementing BIM and was curious if the timeframe had changed or if it was still several years out. Elias stated that BIM is being implemented right now in various ways on 15 different ongoing pilot projects where they're piloting different software, where they're doing 3D modeling, where they're sharing 3D models with contractors using CMGC, and preparing as-builts. Work is also ongoing to create a roadmap for Caltrans DES BIM implementation.

**ACEC/Caltrans DES
Structures Liaison Committee
Meeting Minutes
May 12, 2023**

D. Technical Subcommittee: Garrett Dekker (Jack Abcarius)/Jason Chou

Garrett provided responses to two technical questions submitted since the first quarterly meeting:

- The first question submitted was regarding Abutment shear. There was a new Bridge Design Practice released in October of 2022 containing an example that indicates if the shear demand in the stem is over half the concrete capacity, then reinforcing steel is required which would result in a number of bridge abutments requiring shear ties. This was an error in the Bridge Design Practice and it will be corrected.
- The next question was in regards to barriers needing to comply with MASH standards for modular steel bridges. Garrett explained that Caltrans STP 17.1 covering modular steel panel truss bridge bridges answers this question directly.
- The final question asked whether there was a link to download the latest Caltrans Standard Special Provision word files online. He stated that they are not available for download at this time since they aren't ADA compliant, however he recommended subscribing to Caltrans Office of Construction Contract Standards Email List Server which will send email notifications to all subscribers anytime there is an announcement which will include the posting of ADA compliant Standard Special Provisions at a future date.

E. Education Training/Seminar/Webinar: Michael Van Duyn/ Lance Schrey

- CMGC/Design Build Workshop to occur during August or September of 2023
- Joint ACEC/Caltrans BIM Update to occur in Summer of 2023
- ABC Workshop in 4th quarter of 2023 will be in person in Sacramento.
- Education Committee is looking into whether Consultants will be able to join in on upcoming virtual seminars. Mark indicated that pre-COVID ACEC also contributed by giving presentations. Lance agreed and indicated that Caltrans may be looking for ACEC to present as soon as December on either a Design Build or CMGC presentation.
- 2023 is the 100th Anniversary of Caltrans's Bridge Department and they are in the infancy stage of planning a celebration. Caltrans is looking for individuals/companies interested in helping as well as ideas. Lance invited all those interested in helping out to reach out to him directly. Caltrans will likely also be looking for sponsorship opportunities.

**ACEC/Caltrans DES
Structures Liaison Committee
Meeting Minutes
May 12, 2023**

IV. Discussion Items

1. METS Update on Skid Testing: Steve Seifert

Steve Seifert with Caltrans METS provided an update on the Skid Testing Correlation Study efforts.

- Caltrans is obtaining final signatures on the Correlation Study which looked at commercially available alternative test methods for Skid Testing
- Next step moving forward to make changes to the specifications is to issue a decision document which is likely a year out
- Caltrans METS is shadow testing the commercially available alternative test methods at this time to collect data for those that will be on the decision document
- Caltrans has eight California Portable Skid Testing Machines. Two of these are based out of METS.
- The two commercially available machines are both constant friction measuring equipment and both are portable (can be carried in a Prius) and easily assembled in the field
- A total of 8 different specifications require friction testing via California Test 342

Jon Rohrer asked what other states are doing for friction testing? Steve responded that California is the only state in the country that currently performs acceptance level testing. Most states perform system wide testing using SCRIM trucks, or tow-behind trailers (ASTM e2774), but nothing project specific.

2. Caltrans BIM Update: Elias Kurani

In addition to what was previously covered, Elias shared that Caltrans DES is putting together an action plan for BIM and its part of their strategic goals implementation. The action plan includes such things as establishing a BIM committee, creating a roadmap, acquisition of tools, training of staff, collaboration internally and externally, develop standards, and figure out how to advertise, award, and administer contracts. This will be part of a long-term effort.

3. Update on Scour Countermeasures at Abutments: Don Nguyen-Tan

Don stated that Caltrans has a large ballot item that has been in the works for two years as part of collaboration with AASHTO Technical Subcommittees T-15 (Substructure & Retaining Walls) and T-5 (Loads and Load Distribution). Don believes that the ballot item will likely end up passing this year and Caltrans will be adopting most of it. The 10th Edition of the AASHTO LRFD BDS is due out about one year from now and it will likely take 12 to 18 months for Caltrans to develop their blue sheets. He stated that Caltrans will be trying to fast-track the abutment updates for scour through issuing Caltrans's STP 2.6 on Bridge Scour.

The updated draft STP is separating the scour considerations between abutments and piers. For piers and abutments supported on shallow foundations the top of the footings will need to

**ACEC/Caltrans DES
Structures Liaison Committee
Meeting Minutes
May 12, 2023**

be placed below the anticipated scour depths as though RSP or other scour countermeasures are not in place. For intermediate piers on deep foundations, Caltrans does not plan on specifying the top of footing elevations, but they will be requiring that scour countermeasures be ignored. For bridge abutments supported on deep foundations, Caltrans is looking to adopt the proposed AASHTO policy that allows properly designed scour countermeasures per HEC-23 to protect the abutment and remain in place during a scour event. However, Caltrans is considering adding that the piles or shafts will not be allowed to terminate above the anticipated scour elevation assuming the countermeasures are not in place.

Mark asked if the AASHTO ballot measure does not pass will Caltrans still adopt it? Don stated that Caltrans would likely still adopt it.

Don was also asked whether retaining walls needed for the stability of the bridge would also be addressed in the STP. He confirmed that they would and added that (as currently written in the draft STP,) the abutments supported on spread footings would still need to be designed for scour assuming the countermeasures were not in place. He further indicated that STP 2.6 would not address retaining walls supporting approach embankments. The current ballot item indicates that the owner should address retaining walls supporting approach embankments on a case-by-case basis using a risk-based approach. Lastly, he indicated that owners are fully expected to inspect, maintain, and rehabilitate the scour countermeasures implemented as part of the project.

4. Miscellaneous Questions: Open Forum

Greg Young with Consor asked the group if it's true that the required length of approach guardrail will be doubling from 75 feet to 150 feet. Caltrans stated that they would look into it and get back to the group.

Rosa Griggs with Dokken Engineering stated she noticed the California Rail ST-70SM (Caltrans MASH approved side mounted rail) XS sheets were pulled from the website. Greg Kaderabek told her they were pulled since Caltrans is attempting to patent the railing design. She asked if they are still able to use the XS sheets if they have them from previous projects on current HBP projects. Caltrans responded stating that they would look into this, but they should still be able to use the rail.

Michael Van Duyn stated that it's his interpretation based on a recently released Caltrans CAD guide that we're no longer including the standard plan list on index to plans sheet which is where we would typically include the applicable Standard Plans year. If this is the case how will the applicable Standard Plans year be documented on things such as the as-builts? Lance will be looking into this one and providing a response.

**ACEC/Caltrans DES
Structures Liaison Committee
Meeting Minutes
May 12, 2023**

V. 2023 Meeting Schedule

February 3, 2023 (1st Friday)
May 12, 2023 (2nd Friday)

August 11, 2023 (2nd Friday)
November 3, 2023 (1st Friday)

VI. Distribution:

A. Caltrans:

Tom Ostrom	Caltrans DES	Vassil Simeonov	Caltrans SMI
Ruth Fernandes	Caltrans SES	Shira Rajendra	Caltrans PPM & OE
Rich Foley	Caltrans SC	Jason Chou	Caltrans OSFP/SLA
Nina M Choy	Caltrans GS	Sid Pedaballi	Caltrans OPD & SCM
Tim Greutert	Caltrans METS	Robert Peterson	Caltrans HQ/LA
Sudhakar Vatti	Caltrans SD	John Lammers	Caltrans SC

B. ACEC Regular Committee Members:

Member 1: Districts 1,2,3,9,10:	Mark Reno	Conсор
Member 2: District 11:	Jack Abcarius	NV5
Member 3: District 4:	Garrett Dekker	Moffatt & Nichol
Member 4: Districts 7,8,12:	Michael Van Duyn	HNTB
Member 5: Districts 5,6:	Bobby Zermeno	Cornerstone Structural Engineering
Member 6 (CM&I): Districts 1-6 and 9-10	Hank Doll, Mark Thomas	
Member 7 (CM&I): Districts 7-8 and 11-12	Jon Rohrer, HDR	

Attachments*:

- Caltrans BIM Contractor Survey Dashboard Slides
- Local Assistance Projects Still to Obligate with FFY '22/'23 Programmed Funds

*Attachments not included in posted meeting minutes, because they are not ADA compatible