The meeting of the ACES/Caltrans DES Structures Liaison Committee was held by Virtual Microsoft Teams Meeting on November 18, 2022, from 10:00 AM to 11:45 PM.

I. Call to Order

A. Changes to the Agenda

Greg Kaderabek was scheduled to talk in Section IV,however due to another appointment, his talk was moved up to the beginning of the meeting. No other changes were requested.

B. Review Annual Report 2021

No changes or comments were requested.

C. Review Previous Meeting Minutes

No changes or comments were made to the 8/19/2022 meeting minutes. The meeting minutes were finalized and approved.

II. DES/ACEC Updates

A. General: Tom Ostrom / Shira Rajendra

Tom Ostrom was not present, and Shira Rajendra gave the following updates:

- Caltrans is currently at a point of the largest amount of advertised projects since the mega toll bridge projects were done years ago.
- In terms IIJA funding, which has Caltrans and Local Agencies competing for these same funds. Caltrans is also seeking additional SHOP funding.
- DES workload and maximum workload for construction support is rapidly increasing. There are nearly 260 vacancies that DES is attempting to backfill throughout the State.
- There are no significant changes in DES Executive Staff.
- Over the last 3 months Caltrans has not seen spikes in pricing. Currently Caltrans has large advertisement program, which could lead to adjustments in future.
- Jon Roher noted the contractors have plenty of work.

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

Don Nguyen-Tan gave Technical Policy Update:

There are updates to the STP's, Addenda/Errata to CA Amendments, and new BDM's (list provided in attachment). It was noted that the new STP's clearly define which previous Memos

are superseded. Only when everything from that previous memo has been covered under a new policy will an "Inactive" watermark be applied. The old memo will still be available for reference in the meantime. For the non-watermarked memos, there may still be portions of the memo that are applicable.

Bridge technical policies and guidance have been recently published. For projects under development, Structure Technical Policies and California Amendments must be adopted on all projects with a Type Selection approval on or after the date of publication.

Caltrans is continuing to make updates to the California Amendments. Previously they only did Erratum, but now they are doing both Erratum and Addendum, which can be downloaded. The Addendum covers newer topics or larger changes to the code that are going through approval by the State Bridge Engineer. These are being done mid-cycle, so designers should be monitoring.

Links to latest updates available in attachments.

C. Contracting Opportunities: Shira Rajendra / Steve Gunther

Steve Gunther, Acting Office Chief for Project Delivery and Structure Contract Management gave quick update recapping the look ahead report:

- There are three DES contracts posted, 2 replacement contracts and 1 new contract:
 - A&E Construction, Engineering and Inspection District 12 (New)
 - A&E Construction, Engineering and Inspection District 11 (Replacement)
 - Professional & Technical Engineering Services DES Corporate Product Development (Replacement)

D. Local Assistance: Robert Peterson

Andy Chou, HBP Manager, gave an update on the HBP Program:

- The project list for projects receiving Federal funding for this year is out. Caltrans is having some difficulty posting these lists to the website, so if list is not available agencies should reach out to the appropriate DLAE.
- Caltrans did program to IIJA Program levels this year raising the amount of funding available. The majority of the increased funds came from the Bridge Formula Program which was identified in IIJA. Caltrans does not expect this program to last beyond the IIJA, so they are stressing to Districts and Local Agencies to deliver on these funds.
- HBP Local Assistance has hired 3 permanent TE Civils. They came from District Local Assistance serving as HBP coordinators: Mark Mueller (District 1), Jesus Serrano (District 10) and Karen Nguyen (District 8).
- Previously HBP Program has not been accepting new bridges into the program, however this year 80 new projects were accepted into the HBP program (40 On Federal Highway

System and 40 Off Federal Highway System). Agencies were encouraged to submit HBP eligible projects.

E. Statewide ACEC Committee: Garrett Dekker

- Some consultants expressed concerns regarding the indirect cost rates (ICR) being submitted by small business to prime consultants. There is an initiative underway to have the small businesses submit their financials directly to Caltrans.
- There is a new design information bulletin that provides new guidance on complete streets supplementing the HDM.
- DPAC implementing the new streamline processing for contracts attempting to hit their 75-day deadline for negotiations, which includes streamlining of the complex cost spreadsheet. Caltrans is interested in feedback on how this is going from the Consultants.

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

Rich Foley noted that there a lot of work now with even more work coming and our industry is struggling to provide enough resources to perform the work. Caltrans has implemented their field engineer training program for all the Structures Construction employees as well as the rotators coming through Construction.

Jon Rohrer pointed out that a constraint that Consultants are battling is the California law requiring prevailing wage be paid. This law result in paying a minimum wage of around \$80/hr (\$160-\$180 loaded rate). Caltrans and many Local Agencies do not want to pay this minimum rate for employees straight out of college. Jon suggested having a smaller working group follow-up with Caltrans and consultants to strategize on these challenges. Rich also mentioned that Caltrans has come up with a new classification, Junior Engineering Technician (JET), which allows Caltrans to pull people straight out of High School. Jon pointed out that many of the Caltrans District/Roadway contracts require a minimum of 2-years of post-high school education and many technicians do not meet this requirement.

Mark Reno asked Rich Foley if Caltrans was looking to implement Construction Management (CM) degree graduates into their program. Rich said that there is a "Hurdl" program, which the CM degree candidates can take an exam to allow them to pass into the Transportation Engineer realm. However vertical construction is also going very well right now and contractors in those arenas are paying higher wages and attracting more of these graduates.

Jon pointed out that there is a fundamental change to Caltrans on-call contracts any time you have overtime you must include the premium portion of overtime in the other direct costs. It's creating some slowdown in the contracting process and the previous ICR's are not approved.

III. Sub-committees

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

Garrett reported that there was nothing major to report at this meeting. They are planning to hold another workshop 3rd quarter of 2023. Dorie Mellon is retiring so Habib Hotaki will be taking this role over. Garret will reach out to Caltrans contact Habib on future efforts. Caltrans is in the process of updating the ABC manual, please submit any comments to Manode Kodsuntie, looking to go to publication early in 2023. Caltrans has also completed working with METs on the ultra-high-performance concrete (UHPC) approved materials list and the link is now live.

B. CMGC/Design-Build (Lessons Learned): Mark Reno/Sudhakar Vatti

Mark Reno noted that they are looking for a facility in Sacramento for February or March 2023 to hold the in-person workshop. Gudmund and Sudhakar suggested that setting the conference either at the beginning or end of the week would be preferred. The workshop will include presentations and then panel discussion similar to what was done with the design-build workshop that was done in OCTA a few years ago.

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

Bobby Zermeno and Doug Dunrud mentioned that the New York State Department of Transportation has a guidance document for digital delivery which Doug shared with Caltrans Caltrans is striving to include a digital model for delivery by 2025.

D. Technical Subcommittee: Jack Abcarius/Sudhakar Vatti

There were not any technical issues to discuss at this meeting.

E. Education Training/Seminar/Webinar: Michael VanDuyen/Lance Schrey

• CMGC Lessons Learned Seminar

As mentioned before looking to hold this workshop/seminar first quarter of 2023.

• Joint Caltrans/ACEC ABC Webinar December 2023

As mentioned above will be looking to hold this workshop/seminar in 3rd Quarter 2023. Gudmund mentioned that Caltrans would like to have a meeting with the consultants to identify items that should be covered in this workshop. Caltrans has a strong interest in ABC and the safety aspects with a goal of 20-30% project delivery by ABC.

Caltrans Structures Construction Winter Training
Will be targeting April 2023 for Consultant presentation.

IV. Discussion Items

1. Update on new STP 2.6 Hydraulic Design for Structures over Waterways: Cathy Avila/Tony Newick

Cathy Avila gave a recap of a meeting that took place between ACEC Technical Subcommittee on 11/10/2022. The meeting was to address possible changes to LRFD Scour Criteria. *Minutes for that meeting including presentation slides will be attached at later date.*

Joel Magana noted that Caltrans agrees with the Consultants belief that Abutments need to be considered different than Piers, but there is some disagreement around the recommended changes to AASHTO code along with the Caltrans Amendments. Caltrans and ACEC will meet after Don Nguyen-Tan returns from the National Group Meeting (AASHTO T-15 Foundation Committee). Gudmund requested that Joel and Don make a presentation in front of the Structures Policy Board if there will be a deviation from AASHTO LRFD. Don mentioned that in-state Caltrans is no longer going to waive the check flood; opening up opportunities to see how that extreme event limit state can be used to mitigate some of these issues

2. Implementation of 2022 Standard Plans and Specifications: Andy Chou

Andy Chou dropped a few links into the chat which detailed and outlines the implementation memo, signed October 17, 2022, which outlines the timeline and requirements. A list of these links along with brief detail is attached.

3. Type 85 Barrier Bicycle Railing and Pedestrian Railing Opening Requirements: Greg Kaderabek / Joel Magna (*Presentation was given at the beginning of the Meeting*)

- Per California State Law all highways are open to bikes unless explicitly signed to prohibit it. Typically this is on access control freeways, expressways and at a number of tunnels which prohibit bicycle traffic. Greg said similar citations mandate that bicycle height railing must be used on all facilities and he would provide ACEC specific citations.
- Type 85 & ST-75 are both 36" in height so they do not meet the bicycle height. Caltrans crash tested these rails with the bicycle rails in place to confirm that their placement was okay. If they had not been tested with rails in place, they would have had to be off-set a minimum of 18" from the top of the traffic face. The Type 85 details are now shown in the Standard Plans. Over the next year to 18 months the other rails will be updated and moved from bridge standard details to the Standard Plans.
- So, all facilities including rural highways and local roads need the bicycle rail now. Greg mentioned that there was a question if the AASHTO Low Volume Road Guide may have an exception to this rail requirement. If someone has the particular code citation, please submit to Caltrans for review.

- There is one XS sheet regarding adding Bicycle Railing to Bridge Rail, but it has not been updated and doesn't have any of the details for the rails that were not crash tested. The XS sheet shows casting the anchors in the railing, but the drill and bond would be similar. Custom railings can be used but require design evaluation. This can be done with evaluation for pedestrian and bicycle loads, the same loads 50 lbs per lineal foot simultaneously with a 200 lb point load.
- Greg also touched on the clear opening requirements. Per AASHTO Section 13, in the lower 27" of a bridge rail if you have any clear openings, they cannot allow a 6" sphere pass through. Above 27" cannot allow 8" sphere. In the new Type 86H Rail, which has concrete balusters to mimic the old historic concrete balusters, meets those gaps requirements.
- If designing a stand-alone pedestrian rail or bicycle rail not subject to vehicular traffic which has panels bolted to the posts, opening requirements must still be met.
- Some other Agencies around the State have attempted to push for tighter restrictions (4" sphere requirements).

Next year the first meeting will be February 3, 2023 and Mark Reno will be the co-chair from the ACEC group and Hank Doll will be the Secretary.

V. 2023 Meeting Schedule

February 3, 2023 (1st Friday) May 12, 2023 In- Person (2nd Friday) August 11, 2023 In-Person (2nd Friday) November 3, 2023 In-Person (1st Friday)

VI. Distribution:

A. Caltrans:

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

B. ACEC Regular Committee Members:

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

Attachments:

- STP, AASHTO LRFD California Amendments and BDM Updates, Links
- Standard Plans and Specifications Links
- Subcommittee ACEC Technical Hydraulic Meeting Minutes to be attached with final minutes