

The ACEC/Caltrans DES Structures Liaison Committee meeting was held in person on Friday, February 7, 2025, from 10:00 AM to 12:00 PM PST at 1801 30th Street, Room 102 (Farmers Market Building, 1st Floor) in Sacramento, CA 95816. A virtual link to attend the meeting was also made available to registrants through Microsoft Teams.

Posted meeting minutes are available on the Caltrans website linked below:

<https://dot.ca.gov/programs/engineering-services/special-funded-projects-and-local-assistance>

## **I. Call to Order**

### **A. Self-Introductions**

The meeting began with self-introductions from the attendees present in Sacramento. Lance Schrey introduced Miguel Carbuccia from HNTB (acting for Michael Van Duyn) as Co-Chair for 2025.

### **B. Changes to the Agenda**

No changes were requested.

### **C. Review Previous Meeting Minutes (November 1, 2024)**

The previous meeting minutes were distributed prior to the meeting for review, and no comments or corrections were noted. The minutes were finalized and will be made ADA compliant for posting on the Caltrans website.

## **II. DES/ACEC Updates**

### **A. General: Rich Foley/Jim Foster**

Rich Foley provided the following updates:

Caltrans has presented the seismic self-assessment report (Assembly Bill 100 Report) to the Seismic Advisory Board (SAB) and the Seismic Safety Commission.

AB 100 Report – *Seismic Safety of California Bridges*

<https://ssc.ca.gov/wp-content/uploads/sites/9/2024/10/item-5-01-AB-100-Caltrans-Report.pdf>

Recently, awards were presented by the Seismic Advisory Board to the City of Los Angeles's 6th St. Viaduct Replacement Project and District 1's Hunter and Panther Creek

Bridge Replacement Project, both focusing on seismic safety. The SAB plans to continue annually recognizing projects within the state of California that prioritize seismic safety.

Jim Foster provided the following updates:

Since the last meeting in November, the Caltrans strategic plan has been published, highlighting five goals: safety, equity, climate action, prosperity, and employee excellence.

Caltrans 2024-2028 Strategic Plan:

<https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/2024-28-caltrans-strategic-plan-final-a11y.pdf>

The team is looking forward to 2025, having made significant progress on several projects, including STP 2.6 and SDC 2.1. They encourage members to share any specific focus areas for future discussions and to reach out for further collaboration.

**B. Technical: Structures Technical Policies, Technical Research: Don Nguyen-Tan/Chris Traina/Christian Unanwa**

Don Nguyen-Tan provided the following Technical Policy updates:

Four new publications were announced:

- STP 10.10 – Vertical Ground Anchors.
- BDM 20.33 – Seismic Design of Bridges with Isolation Bearings: This publication will replace Memo to Designer 20-22.
- SDC 2.1: Although published, it is awaiting online posting by the IT administrator. This will replace SDC 2.0.
- BDM 9.4 – Typical Deck, Typical Overhang, and Soffit Design: This update includes the removal of the truss bars.

Chris Traina provided the following Technical Research Updates:

- In July 2024, new research problem statements and requests were submitted, resulting in nine research projects worth \$5 million being delivered to the Division of Research.

- Currently, the scoring process for research proposals is underway. The number of approved projects will depend on available funding, which may be less than in previous years.
- The new cycle of research is approaching. If anyone has ideas or knows individuals who want to sponsor ideas or submit proposals for consideration, please ensure these are turned in.
- A final draft of the seismic strategic plan will be presented to the board soon, followed by reviews and a workshop on April 11th, 2025. The goal is to publish a strategic plan that provides a clear roadmap for future efforts.
- Research proposals focus on implementation to maximize impact.

### **C. Contracting Opportunities: Hamid Sadraie/Andrew Tan**

Hamid Sadraie provided the following Contracting Opportunity updates:

A&E Look Ahead Report:

<https://dot.ca.gov/-/media/dot-media/programs/procurement-contracts/documents/ae-lar/lookahead.xlsx>

The Look Ahead Report includes eight contracting opportunities:

- Bridge Design Contracts:
  - Three contracts, each worth \$8 million.
  - Regions: North (Districts 1, 2, 3), District 4, and Central (Districts 5, 6, 9, 10).
  - Outreach meeting for District 4 scheduled for October 14th; others TBD.
- Structure Construction Inspection Contracts:
  - District 6 and District 10: \$15 million, outreach meeting TBD.
  - District 8 (Brightline High-Speed Rail): \$17 million, outreach meeting TBD.
  - District 7 (Vincent Thomas Bridge): \$5 million, outreach meeting TBD.
  - San Francisco-Oakland Bay Bridge West Span: \$20 million for structural construction services, including painting and component repairs.
- Material Testing Contract:

- Tied to a federal grant for low carbon transportation materials: \$2.5 million, details pending from the federal government.

#### **D. Local Assistance: Roberta Jensen/Andy Chou**

Andy Chou provided the Local Assistance and Highway Bridge Program (HBP) update:

Local Assistance Blog: <https://www.localassistanceblog.com>

Highway Bridge Program: <https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-bridge-program>

Since the November 2024 meeting, there have been staffing changes. Robert Peterson, the former office chief, has retired, and Roberta Jensen is serving as the temporary office chief.

- Request for Authorization of Funding for HBP Projects:
  - Financial constraints are reviewed twice a year, in October and March.
  - Projects programmed in October must seek obligations or authorizations promptly.
  - Starting April 1st, federal funds are available for advancement requests. Projects that do not come in timely may lose their funds to other projects.
- SDC 2.1 Implementation:
  - Once publicly posted online, DLA will announce it via a blog post and email blast.
  - Implementation dates for HBP projects will align with state-side implementation, starting February 1st.
- LAPG 6-A Application Form:
  - A new edition of the LAPG 6-A form for HBP projects is now available online and should be used immediately.
  - The LAPG 6-D form for updating cost or schedule changes is still being developed; use the existing form for now.
- Discussion Points:
  - Questions about whether funds are reimbursable if SDC 2.1 is used. This will be addressed in future communications.

- Projects with 2024-2025 funding must come in early to secure their funds, as starting April 1st, funds are up for grabs.

#### **E. Statewide ACEC Committee: Garrett Dekker**

Garrett Dekker shared updates from the Statewide ACEC Committee:

Please note, in December 2024, several Caltrans engineers and consultant engineers were disciplined by the Board for Professional Engineers, Land Surveyors, and Geologists for performing land survey duties and stamping plans as PE, which should have been done by a licensed Land Surveyor. This issue arose from engineers signing or stamping project control sheets that require a surveyor's stamp.

- Design Update:
  - The second progressive design-build project in District 7, the I-5 managed lanes, has an RFQ still under development.
- Construction Update:
  - Caltrans is proposing to revise qualifications for construction inspectors, considering more experience in place of education. Feedback from ACEC is being evaluated.
- DPAC Updates:
  - The ACEC Committee is working with DPAC to define fair and reasonable job classifications for A&E contracts. Progress is being made, but no conclusions yet.
- Cost Proposal Spreadsheet:
  - A new cost proposal template for Caltrans contracts is now in use, aimed at simplifying the process for consulting contracts. Further updates may be made based on ACEC comments.

#### **F. Construction Management and Inspection Updates: John Lammers/Frank Martin/Jon Rohrer**

John Lammers shared the following updates:

Winter training is currently underway. The plan includes an ACEC session in Oakland, utilizing the excellent training facility at the Bay Bridge.

California Test 342, Skid Test Protocol:

- The skid test protocol has been finalized and signed off by all parties.
- There are plans to bring in a specialist to discuss the progress on portable skid testing machines and changes to specifications. Contact Steven Seifert, the responsible CT Coordinator for further coordination.
- A 15-minute presentation on the topic is being considered to clarify the next steps for specification changes.

John Rohrer shared the following updates:

A question arose whether consultant resident engineers should have the same protections as Caltrans resident engineers. We are currently addressing issues related to the designation of resident engineer consultants with ACEC and Caltrans. The challenge lies in the specifications, which differentiate between the full protection afforded to Caltrans resident engineers and the limited protection for consultants acting as resident engineers.

- Resident engineers have responsible charge of the project, increasing their exposure to potential lawsuits from the public or contractors.
- Recent discussions with DPAC and other stakeholders have led to resolutions for most issues, and that protections for A&E consultant inspectors have been reciprocated to match those of Caltrans staff during construction.
- The scope of work within Structures Construction and A&E inspection contracts includes these protections, but the increased role of A&E in roadway projects is outside the control of Structure Construction and DES.
- Next Steps:
  - Further discussions may be needed to ensure protections for consultant resident engineers are consistent with those for Caltrans resident engineers.
  - The adopted language for recent contracts may be used to extend protections as necessary.

### **III. Sub-committees**

#### **A. ABC (Accelerated Bridge Construction): Garrett Dekker/Habib Hotaki/Sebastian Varela**

Garrett Dekker gave the ABC update:

Before COVID, there was a conference focused on Accelerated Bridge Construction (ABC) sponsored by FHWA. The FHWA-sponsored symposium was different from the ABC workshops held by Caltrans.

- The last Caltrans ABC workshop was held in Sacramento in March 2024, with plans to hold the next one in 2026, continuing the biennial cycle.
- Nationally, there is less focus on ABC as a separate topic, with it being integrated into general construction practices.
- In California, ABC often involves precast elements, which are widely used.
- Future Plans:
  - The next ABC workshop is planned for March 2026.
  - There is interest in holding the next workshop in Southern California.
  - Planning for the event should begin soon to ensure a successful in-person gathering.

## **B. Alternative Project Delivery Methods: Mark Reno/Jason Chou**

Mark Reno provided the following update:

Jason and Mark discussed the timing for a Lessons Learned workshop on Progressive Design-Build, similar to the previous CM/GC workshop. Initially, they hoped to hold it in the second or third quarter of 2025, but it seems more beneficial to wait until more projects are further along.

- There are noticeable differences in how progressive design-build is implemented in California compared to other regions.
- Belinda Hon has been consulted about the alternative delivery program, and it seems we need more time before organizing a workshop.
- The workshop may be more feasible towards the end of this year or early next year.
- Future Plans:
  - Caltrans has a small number of progressive design-build projects, and efficiencies are expected, but more input from the consultant side is welcome.
  - The goal is to eventually hold the workshop in Southern California, similar to previous workshops held in Northern and Southern California.



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

Bobby Zermeno gave the BIM update:

The second annual BIM4I Summit is scheduled for mid-March in Sacramento. This two-day event will host 10 attendees from various ACEC firms. The subcommittee will receive traditional presentations from consultants, either at this meeting or through separate webinars, depending on the length of the presentations. Additionally, Caltrans will review one or two pilot projects.

Additional Updates:

- Mina mentioned that a few ACEC representatives will present at the BIM Summit. Despite limited spots this year, there is hope for more opportunities for ACEC members in the future.
- Sudhakar added that the BIM Summit Planning Committee recently met, confirming a packed two-day agenda with presentations from consultants and other DOTs. The event is expected to be even better than last year, with high participation and many email registrants. Future summits may consider virtual options and larger venues to accommodate growing interest.

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

Garrett provided the following update:

One technical comment was submitted, but no questions were received. Lance noted that the technical question has been reviewed by several people, and a response will be provided soon.

Garrett reminded everyone to email any questions regarding Caltrans documents, Memos to Designers, or Structure Technical Policies for review and forwarding to Caltrans.

**E. Education Training/Seminar/Webinar: Miguel Carbuccia/Lance Schrey**

Lance provided the following Winter Training 2025 update:

The upcoming Caltrans Winter Training session on Foundations is planned for April 3<sup>rd</sup>, 2025, with a preference for holding it in Oakland due to the excellent facilities at the Caltrans District 4 Training Facility on Burma Rd, or the D4 auditorium. The trainers believe the multiple screens and setup in Oakland provide a better presentation experience.



The training will follow a hybrid model, with satellite locations and virtual participation to accommodate those who cannot attend in person. Feedback indicated that in-person sessions are beneficial for group learning, and virtual options are essential for those who cannot travel. Previous issues with remote audio have been addressed, ensuring a better experience for virtual attendees.

- Based on past events, attendance is expected to be around 70 people in person, with virtual participation available for others.

#### **IV. Discussion Items**

##### **A. STP 2.6 Update: Don Nguyen-Tan**

The plan is to respond to comments by February 25th and then reconvene with the team, including Cathy's team, to review the comments.

- Once the BDM is approved for publication, it will be packaged together with the California Amendment.
- A meeting will be scheduled for mid to late March, likely virtual to accommodate geographic diversity.
- Cathy will send Lance optional dates for the meeting.

##### **B. Caltrans SDC 2.1 Update: Christian Unanwa**

Clarifications, editorial changes, and new SDC code provisions were presented, including updates to bridge design standards and procedures. Updates to seismic design criteria included new definitions, updated hazard maps, and changes to design life and reinforcement standards. Emphasis on implementing seismic response application systems such as base isolation, with updates to risk-based seismic design.

A focus group will be formed to review and consolidate comments received on SDC 2.1, with a scheduled meeting for questions and responses.

##### **C. Section 2.8 of the OSFP Information and Procedures Guide – Lightweight Concrete Update: Jason Chou**

Section 2.8 focuses on lightweight concrete. Comments have been received from structure construction, Caltrans internal committees, management teams, and consultants.

Discussion Points:

- Lightweight concrete is generally less durable than normal weight concrete. While some structures have performed well, others have faced challenges.
- Past issues with construction and administration regarding lightweight concrete have highlighted the need for clearer guidance and requirements.
- Lightweight concrete is less suitable for heavy truck traffic but may be appropriate for ordinary and pedestrian bridges.
- Caltrans prioritizes seismic design solutions like base isolation over lightweight concrete structures.
- The use of lightweight concrete must be justified through project-specific design criteria and approved through the Type Selection process.
- Designers are required to perform evaluations on baseline designs and consider concrete alternatives, including precast options.

Next Steps:

- Further research on lightweight concrete is ongoing, and findings will be distributed.
- Specific design evaluations and criteria are included in the new OSFP Section 2.8.

**D. Annual Report: Garrett Dekker**

Garrett mentioned that a draft of the annual report will be ready for Caltrans review ahead of the next quarterly meeting. The draft will be available for review by late April or early May. The goal is to share the final version during that meeting.

**E. BIM Presentation: “Digital Design Delivery for Structures on BART-SVII Tunnel/Rail Project”– Jon Berkoe (Arup)**

The BIM presentation was postponed until the next meeting due to time constraints.

**V. Miscellaneous Questions: Open Forum**

None.

## VI. 2025 Meeting Schedule:

**Q1:** February 7, 2025 (1st Friday)

**Q2:** May 2, 2025 (1st Friday)

**Q3:** August 1, 2025 (1st Friday)

**Q4:** November 7, 2025 (1st Friday)

## VII. Distribution:

### A. Caltrans

Rich Foley	DES	Hamid Sadraie	PPM&OE
Jim Foster	SES	Andrew Tan	PD&SCM
John Lammers	SC	Roberta Jensen	HQ/LA
Nina Choy	GS	Don Nguyen-Tan	BD
Tim Greutert	METS	Jason Chou	SES
Sudhakar Vatti	BD	Chris Traina	EE
Vassil Simeonov	SM&I	Mike Lee	SM&I

### B. ACEC Regular Committee Members:

Member No.	District	Contact
1	1, 2, 3, 9, 10	Mark Reno, <i>Consort</i>
2	11	Jack Abcarius, <i>NV5</i>
3	4	Garrett Dekker, <i>Moffatt &amp; Nichol</i>
4	7, 8, 12	Miguel Carbuccia (acting for Mike Van Duyn), <i>HNTB</i>
5	5, 6	Bobby Zermeno, <i>Cornerstone Structural Engineering Group</i>
6 (CM&I)	1-6, 9-10	Frank Martin, <i>Psomas</i>
7 (CM&I)	7-8, 11-12	Jon Rohrer, <i>HDR</i>

## Attachments:

- Caltrans Org Charts – January 2025
- Draft STP 2.6 – Hydraulic Design for Structures (8/22/2024)
- SDC 2.1