

ICC LA BASIN CHAPTER STRUCTURAL CODE COMMITTEE

MEETING MINUTES

Tuesday, June 12, 2007

1:00 p.m. to 4:00 p.m.

L.A. County Building, Plan Check Conference Room
900 S. Fremont Avenue, Alhambra

ATTENDEES:

Chairpersons Present:

Truong Huynh, Philip Yin

Committee Members Present:

Steve Lam, Ed Alexanian, Forest Nishiyoka,
Ben Yousefi, Jameson Lee, Eddie Yamamoto,
Ben Ling, Nick Delli Quadri

ICC Board Members Present:

Hassan Alameddine, Steve Ikkanda

STAKEHOLDERS IN AUDIENCE:

SEAOSC Committee Members Present:

James Lai (Seismology)

Structural Engineers Present:

None

Other:

Jae Lee

DOCUMENT HANDOUTS:

- Template - LARUCP Amendment
- Instruction – LARUCP Amendment
- 2002 LARUCP Committee Recommendation
- Accidental Torsion in Light Frame
- Buckling Restraint Brace Table
- Importance Factor in Stability Check
- Minimum Base Shear Equation
- Moment Frames on Podiums
- Over-Strength Factor
- Building Separation proposed By James Lai
- William Chern's questions in Chapter 16 of IBC 2006

MEETING AGENDA

1. Introduce new member(s) not in attendance in previous meeting(s).
2. Approval of minutes of previous meeting.
3. Assign a lead person(s) to material chapters not yet selected.
 - a. Chap 16 – Philip Yin, Jameson Lee
 - b. Chap 22 – Truong Huynh
 - c. Chap 23 – Steve Lam, Ben Yousefi and Tom Van Dorpe
 - d. Chap 17, 18, 19, 20, 21 and 34 remain unassigned

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4. Discuss existing business from previous meeting.
 - a. 2 LARUCP items still pending a recommendation from committee (16-4 & 16-5).
 - b. Building separation.
 - c. Alternate wind design provision for low-rise building.
5. Discuss any remaining topics related to Chap 16.
6. Ben Yousefi to discuss ASCE proposals to committee.
 - a. Accidental Torsion in Light Frame
 - b. Buckling Restraint Brace Table
 - c. Importance Factor in Stability Check
 - d. Minimum Base Shear Equation
 - e. Moment Frames on Podiums
 - f. Over-Strength Factor
7. Instruction on submitting a proposed amendment to the committee for evaluation. Discuss the LARUCP Template to be used.
8. Open discussion of any new business from committee members.
9. Establish tasks to complete for the next scheduled meeting.
10. Determine next meeting time and location.
11. Adjourn.

DISCUSSION/COMMENTS:

1. Introduction of new members at the meeting.
 - Nick Delli Quadri and Steve Ikkanda of LA City, Eddie Yamamoto of Simi-Valley, Ben Ling and Hassan Alamedine of LA County, and Jae Lee were introduced as first time participants at the meeting.
2. Approval of previous minutes.
 - Truong asked the members present to approve previous meeting minutes. Steve Ikkanda made a motion to approve, Ben second the motion. Motion was approved with no changes.
3. Assign a lead person(s) to each material chapters.
 - Lead persons for Chap 16 are Philip Yin and Jameson Lee.
 - Lead persons for Chap 19 are Ben Yousefi and James Lai.
 - Lead person for Chap 22 is Truong Huynh.
 - Lead person for Chap 34 is Steve Ikkanda.
 - Chap 17, 18, 20 and 21 do not have lead person(s) designated.
 - See attached email distribution list for contact information of the lead person(s).

Action Item 1: Any and all inputs or comments related to Chap 19 and Chap 34 should be forwarded to any of the designated lead persons who will then organize and present the materials to the committee members for discussion and/or review. Lead person should provide a quick bullet point summary of topics to be discussed and email them to either Philip or Truong for incorporation in the next meeting agenda.

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4. Discuss existing business from previous meeting.
- LARUCP 16-4: It was generally agreed that the story drift limit based on $0.02/T^{1/3}$ should be removed. The need to have a minimum base shear used to determine the calculated drift for tall buildings is still a concern. (See Ben's comments on Agenda 6 minimum base shear). Nick indicated that having this minimum base shear could result in stiffer high-rise buildings.

Action Item 2: Nick Delli Quadri will discuss the proposed minimum base shear with the LA Tall Building Council and present back to the committee with any comments or concerns identified with such a proposal.

- LARUCP 16-5: Jameson presented his findings on the cross-tie spacing and subdiaphragm limitation. After consulting with Doc Nghiem, former Chairperson on the LA Task Committee to that proposed the 25 ft continuous tie spacing and 300 plf limitation used to determine the depth of subdiaphragm, the committee is proposing a recommendation to increase the continuous tie spacing to either 32 ft or 40 ft in lieu of the current 25 ft spacing. Furthermore, the committee, recognizing that diaphragm values have increase in capacity in the past several years, proposes increase the design values to 75% of allowable code diaphragm shear values in determining the depth of the subdiaphragm. It was appropriate to take into consideration the studies done previously by the Task Committee, so the proposed limitation of 75% was deemed acceptable.

Action Item 3: Jameson will present the recommendation to the committee on the continuous tie spacing and subdiaphragm limitation.

Action Item 4: Ben will contact SEAONC to get more information on continuous tie spacing proposed by SEAONC.

- Building Separation: A draft of the building seismic separation distance proposed by James Lai was discussed. James Lai will revise the proposed draft language so that it is similar to the current CBC Section 1633.2.11 for final discussion at the next meeting. The committee will recommend a yes on this new proposal.

Action Item 5: James will revise and present for next meeting.

- Alternate Wind Design: Alternate wind design provision for low-rise building was discussed and decided to be withdrawn from consideration by the committee. James indicated the complexity of justifying that the existing code criteria for wind design, in all cases, would be higher than the IBC wind design provision. If such justification cannot be made, the committee cannot make recommendations that will inadvertently be less than or an alternative to the IBC. Truong proposes that the committee pursue a local and uniform interpretation of the wind design provisions through an information bulletin.

5. Discuss any remaining topics related to Chap 16.
- William Chern's list of questions was discussed by the committee. It was determined that the questions raised is already addressed in the code or could

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not be addressed by the committee. It is recommended that these questions be discussed as part of any future meetings on code clarifications or interpretations.

6. ASCE Proposals

- Ben presented six major ASCE proposals to the committee for review and discussion. Based on the committee's discussion, the following recommendations are summarized:
- TS-2-CH12-15 Accidental Torsion in Light Frame Structures: Structures of light frame construction might have flexible or rigid diaphragms. The exception should remain for structures of light frame construction with rigid diaphragms. The committee recommends **NO** on this proposal.
- TS-6-CH12-01 Buckling Restraint Braced Frames: Truong request that this item be put on hold until the Steel Committee has a chance to weigh in on the subject. This can be discussed again when the committee begins review of Chapter 22. The committee recommends **HOLD** on this proposal.

Action Item 6: Truong will follow up with the Steel Committee and present his findings back to the committee at a later date.

- TC-2-CH12-08 Important Factor in Stability Check: The proponent of this proposal submitted this amendment to OSHPD. The proposed CBC has adopted this provision. Considering that important buildings and structure must be operation in the event of an emergency and that OSHPD has also adopted this proposal, the committee recommends **YES** on the proposal.

Action Item 7: Ben will prepare an LARUCP amendment to incorporate this item and present back to the committee at a later date for approval.

- TS-2-CH12-YY Minimum Base Shear Equation: Ben indicated that based on preliminary results from ATC 63 for tall buildings, the elimination of the $0.044S_{DS} I W$ minimum base shear equation raised a lot of concerns about the potential danger of structural damage and failure that may result. The committee recognized this limitation would adversely impact high-rise designs. Nick Delli Quadri will consult with LA Tall building Council for more information. Further discussion will be continued during the next meeting. The committee recommends **HOLD** on this proposal.
- TS-2-CH12-09 Moment Frame on Podium Slab: This issue should be addressed by an information bulletin. The committee cannot make recommendations to allow an exception to the code that would lessen the requirement of the IBC despite the valid concerns raised on it's implication to the designers. The committee recommends **NO** on this proposal.
- TS-2-CH12-14 Over-Strength Factor: Section 12.4.3.2 refers to the over-strength factor in Section 12.4.3. Permitting the change in reference would result in designers having the ability to use the exception and thus allow them to not apply

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the requirement. Whether or not the committee feels this is appropriate, it would not be considered a lessening of the IBC requirements. The committee recommends **NO** on this proposal.

7. LARUCP Proposal.
 - Truong explained how to use the LARUCP template when submitting a proposed amendment.
 - Anyone with a proposal should forward the amendments to either Truong or Philip.
8. New Business.
 - Ed raised a concern regarding the R-values to be used in vertical and horizontal combinations. ASCE 7 Section 12.2.3.1 and 12.2.3.2 permits the mixing of R-values for the lateral force resisting system used. The committee generally agreed that perhaps adding a 2-story limitation to Exception 3 of Section 12.2.3.1 would be appropriate.

Action Item 8: Ed to propose an amendment and present to committee for review.
9. Determine next meeting time and location.
 - Steve Lam indicated that the next meeting location would continue to be held at the Plan Check Conference Room on 3rd floor in the Building and Safety Division side. Meeting date is June 26 (Tuesday) from 1:00 PM to 4:00 PM.
10. Adjourn
 - The meeting adjourned at 4:30 PM.

ACTION ITEMS (FOLLOW UP) AND RESPONSIBLES:

1. Review of Chapter 23 Wood. Forward any comments and proposals, if any, to Steven Lam, Ben Yousefi, or Tom VanDorpe.
2. Nick Delli Quadri will discuss the proposed minimum base shear with the LA Tall Building Council and present back to the committee with any comments or concerns identified with such a proposal.
3. Jameson will present the recommendation to the committee on the continuous tie spacing and subdiaphragm limitation.
4. Ben will contact SEAONC to get more information on continuous tie spacing proposed by SEAONC.
5. James will revise building separation equation and present for next meeting.
6. Truong will follow up with the Steel Committee and present his findings back to the committee at a later date.
7. Ben will prepare an LARUCP amendment to incorporate TC-2-CH12-08 Important Factor in Stability Check and present back to the committee at a later date for approval.
8. Ed to propose an amendment and present to committee for review that adds a 2-story limitation to Exception 3 of Section 12.2.3.1.

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NEXT MEETING:

- June 26 (Tuesday), 1:00 PM to 4:00 PM at the Plan Check Conference Room on 3rd floor in the Building and Safety Division side.