

Telephone: (916) 263-2222 – Toll Free: 1-866-780-5370 Facsimile: (916) 263-2246



www.bpelsg.ca.gov

### **OFFICIAL NOTICE**

### BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

## JOINT MEETING OF THE CIVIL ENGINEER and STRUCTURAL ENGINEERTECHNICAL ADVISORY COMMITTEES

2535 Capitol Oaks Drive Third Floor Conference Room Sacramento, CA 95833

A joint meeting of the Civil Engineer and Structural Engineer Technical Advisory Committees of the Board for Professional Engineers, Land Surveyors, and Geologists is scheduled to be held on **Thursday August 27**, **2015**, **beginning at 1:00 P.M.** The meeting will be held at the address provided above in Sacramento, California.

The meeting is open, and the public is invited to attend. The meeting facilities are barrier-free in accordance with the Americans with Disabilities Act. A person who needs disability-related accommodations or modifications in order to participate in the meeting shall make a request by contacting Celina Calderone at (916) 263-2230 or email <a href="mailto:celina.calderone@dca.ca.gov">celina.calderone@dca.ca.gov</a> or sending a written request to Ms. Calderone at the Board for Professional Engineers, Land Surveyors, and Geologists, 2535 Capitol Oaks Drive, Suite 300, Sacramento, California, 95833. Providing your request at least five (5) business days before the meeting will help to ensure availability of the requested accommodations.

Board Members are not members of the Technical Advisory Committees; however, Technical Advisory Committee meetings may be attended by Board Members

For further information regarding this meeting, please contact Celina Calderone at (916) 263-2230. Electronic copies of this Official Notice and Agenda are available at <a href="http://www.bpelsq.ca.gov">http://www.bpelsq.ca.gov</a>.

NOTE: All times indicated and the orders of business are approximate and subject to change.

# JOINT MEETING OF THE CIVIL ENGINEER and STRUCTURAL ENGINEER TECHNICAL ADVISORY COMMITTEES OF THE BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

### 2535 Capitol Oaks Drive Third Floor Conference Room Sacramento, CA 95833

Thursday August 27, 2015, at 1:00 P.M.

### **CIVIL ENGINEER TECHNICAL ADVISORY COMMITTEE**

Members:	Neal Colwell, PE; James Foley, PE, GE, SE; Adam White, PE
	Robert Stockton, PE; Kathy Jones Irish
Liaisons:	
Staff Liaisons:	Susan Christ, PE

### STRUCTURAL ENGINEER TECHNICAL ADVISORY COMMITTEE

	Alireza Asgari, P.E., S.E.; Gregg Brandow, P.E., S.E.; Doug Hohbach, P.E., S.E.; Ryan Huxley, P.E., S.E.; Williston Warren, IV, P.E., S.E.
Board	Karen Roberts, P.E. S.E
Liaisons:	
Staff Liaisons:	Susan Christ, P.E.

- 1. Roll Call
- 2. Public Comment
- 3. Discussion of Proposed Changes to Section 6735.2 of the Professional Engineers Act, Business and Professions Code as submitted by Structural Engineers Association of California. (Possible Action)
- 4. Other Business Not Requiring Committee Action
- 5. Adjourn

# Item 3: Discussion of Proposed Changes to Section 6735.2 of the Professional Engineers Act, Business and Professions Code as submitted by Structural Engineers Association of California. (Possible Action)

- (a) (1) All structural engineering plans, calculations, specifications, and reports (hereinafter referred to as "structural engineering documents") for the construction of significant structures described in paragraph (2) shall be prepared by, or under the responsible charge of a licensed civil engineer who is also licensed as a structural engineer in accordance with Section 6736.
  - (2) "Significant structure" shall be defined as:
- (A) hazardous facilities, defined as: a building or structure housing, supporting, or containing sufficient quantities of toxic or explosive substances to be considered a high hazard such that there is a danger to the safety of the public if released;
  - (B) special occupancy structures, defined as:
- (i) buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300;
- (ii) all public school buildings and other structures, as provided under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code;
- (iii) all private school buildings and other structures, containing any grades kindergarten through 12<sup>th</sup> grade, with an occupant load greater than 250;
- (iv) buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500;
- (v) skilled nursing facilities and intermediate care facilities, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
  - (vi) jails, correctional centers, detention centers, and prisons; and
  - (vii) all buildings or structures with an occupant load greater than 5,000;
- (C) hospitals, and other medical facilities having surgery and emergency treatment areas, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
  - (D) essential facilities, defined as:
  - (i) fire, rescue, and law enforcement stations;
  - (ii) emergency vehicle shelters and garages;
  - (iii) designated earthquake, hurricane or other emergency shelters;
- (iv) structures containing, housing, or supporting water or fire suppression material or equipment that are attached to, adjacent to, or contained within and required for the protection of essential or hazardous facilities or special occupancy structures;
- (v) emergency preparedness, communications, and operations centers and other facilities required for emergency response;
- (vi) structures containing, housing, or supporting power-generating equipment required as emergency backup facilities for essential facilities and for facilities described in subsection (a)(2)(C);
- (vii) aviation control towers, air traffic control centers, and emergency aircraft hangars; and
  - (viii) buildings and other structures having critical national defense functions;
- (ix) essential facilities of one-story Type V or Type II B construction that are 2,000 square feet or less in floor area are exempt from this section;
  - (E) structures exceeding one hundred feet in height above average ground level; and
- (F) buildings that are customarily occupied by human beings and are four stories or 45 feet or more above average ground level;

- (b) All structural engineering documents for the construction of significant structures as defined in subdivision (a) shall include the name and license number of the structural engineer in responsible charge of the preparation of the documents. Interim documents shall include a notation as to the intended purpose of the document, such as "preliminary," "not for construction," "for plan check only," or "for review only." All final structural engineering documents shall bear the signature and seal or stamp of the licensee and the date of signing and sealing or stamping. If the final structural engineering plans described above have multiple sheets, then the signature, seal or stamp, and date of signing and sealing or stamping shall appear on each sheet of the plans. If the structural engineering specifications, calculations, and reports described above have multiple pages, then the signature, seal or stamp, and date of signing and sealing or stamping shall appear at a minimum on the title sheet, cover sheet, or signature sheet.
- (c) Notwithstanding subdivision (a), all structural engineering documents for the construction of significant structures as defined in subdivision (a), except for those structures described in subsections (a)(2)(B)(ii), (a)(2)(B)(v), and (a)(2)(C), may be prepared by, or under the responsible charge of civil engineers who were licensed prior to January 1, 20XX.
- (d) Notwithstanding subdivision (a), a licensed structural engineer who signs structural engineering documents as described in subdivision(a) shall not be responsible for damage caused by subsequent changes to or uses of those documents, if the subsequent changes or uses, including changes or uses made by state or local governmental agencies, are not authorized or approved by the licensed structural engineer who originally signed the documents, provided that the engineering service rendered by the structural engineer who signed the documents was not also a proximate cause of the damage.
- (e) Nothing in subsection (a)(2)(B)(ii) shall be construed to prohibit a licensed architect holding a valid certificate under Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code from performing work as authorized under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code.

### Structural Engineers Association of California Comments – Worksheet

### "Significant Structures" shall be defined as:

- Any references below which are made to the 2013 California Building Code (CBC) have also been compared with the language in the 2015 International Building Code (IBC) which will be adopted into the 2016 CBC.
- (A) hazardous facilities, defined as: a building or structure housing, supporting, or containing sufficient quantities of toxic or explosive substances to be considered a high hazard such that there is a danger to the safety of the public if released;
  - The definitions of buildings within "High-Hazard Group H" occupancy (including the types and maximum quantities hazardous materials allowed) is contained in the 2013 CBC Section 307. These may fall into Risk Category III or IV depending on the nature and quantity of the substance under consideration and the level of threat to the public.
- (B) special occupancy structures, defined as:
  - The following buildings and structures listed under the heading of "special occupancy structures" are contained in the 2013 CBC as Risk Category III, unless noted otherwise.
- (i) building and other structures whose primary occupancy is public assembly with an occupant load greater than 300;
- (ii) all public school buildings and other structures, as provided under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code;
  - Currently contained within the Field Act.
- (iii) all private school buildings and other structures, containing any grades kindergarten through 12th grade, with an occupant load greater than 250;
- (iv) buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500;
- (v) skilled nursing facilities and intermediate care facilities, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
  - Currently contained within the Alquist Seismic Safety Hospital Act (vi) jails, correctional centers, detention centers, and prisons; and
  - This category falls under the definition of "Institutional Group I-3" occupancy in the 2013 CBC which is intended to include "Persons that are generally incapable of self-preservation due to security measures not under the occupants' control."
  - (vii) all buildings or structures with an occupant load greater than 5,000;
- (C) hospitals, and other medical facilities having surgery and emergency treatment areas, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
  - Currently contained within the Alquist Seismic Safety Hospital Act
- (D) essential facilities, defined as:
  - The definitions of essential facilities listed below generally reflect and conform with the definitions of Risk Category IV listed in Table 1604A.5 of the 2013 CBC.
  - (i) fire, rescue, and law enforcement stations;
  - (ii) emergency vehicle shelters and garages;
  - (iii) designated earthquake, hurricane or other emergency shelters;
    - This was added, as it was listed in Risk Category IV per the 2013 CBC Table 1604.A.5

- (iv) structures containing, housing, or supporting water or fire suppression material or equipment that are attached to, adjacent to, or contained within and required for the protection of essential or hazardous facilities or special occupancy structures;
  - This requirement is for <u>both</u> Risk Category III and IV buildings and structures per the 2013 CBC
- (v) emergency preparedness, communications, and operations centers and other facilities required for emergency response;
- (vi) structures containing, housing, or supporting power-generating equipment required as emergency backup facilities for essential facilities and for facilities described in subsection (a)(2)(C);
  - This requirement is <u>only</u> for Risk Category IV buildings and structures (including hospitals) per the 2013 CBC
- (vii) aviation control towers, air traffic control centers, and emergency aircraft hangars; and
  - Language per Table 1604A.5 in the 2013 CBC. SEAOC is investigating the licensing requirements for federal and/or military projects, if any.

(viii) buildings and other structures having critical national defense functions;

- Language per Table 1604A.5 in the 2013 CBC. See comment above.
- (ix) essential facilities of one-story Type V or Type II B construction that are 2,000 square feet or less in floor area are exempt from this section;
  - This is the exemption that is contained in the Essential Services act of 1986 (Health and Safety Code Chapter 2, Section 16010
- (E) structures exceeding one hundred feet in height above average ground level;
  - SEAOC is checking whether any other state licensing boards have experienced any issues regarding the 100-ft height limitation.
- (F) buildings that are customarily occupied by human beings and are four stories or 45 feet or more above average ground level.

### **Joint TAC Member Comments**

### **Comments A**

General Comment - I understand and most would agree that it is indeed a lofty goal to protect public safety. I question however if the modification of the Business and Professions Code is the correct avenue to achieve enhanced public safety. It may be a significant challenge to provide code interpretation in determining which projects require title license preparation and which don't.

If one looks to the Health & Safety Code (Alquist Hospital Facilities Seismic Safety Act of 1983), it states the clear intention of the Legislature to enact provisions which establish an office to propose building standards, conduct independent review and provide oversight design and construction of a clearly define realm of construction, namely hospital buildings, for which events leading up to the enactment resulted in the need for such provisions. The Health & Safety Code establishes an application procedure, fees, and a process for approval of hospital building construction and repair. It may be an unintended consequence that the board would become a quasi-approval agency for the types of project to be designed by the proposed modification.

Further, from the proposed language is not clear who would enforce and assure compliance with the provisions. These issues in total lead me to believe that the appropriate avenue is though other means and I would appreciate further discussion of consideration for changing existing codes and regulations (e.g., H&S code).

- (2) "Significant structure" shall be defined as:
- (A) hazardous facilities, defined as: a building or structure housing, supporting, or containing sufficient quantities of toxic or explosive substances to be considered a high hazard such that there is a danger to the safety of the public if released;

Comment - The words "sufficient" and "high hazard" lack sufficient definition to determine whether the structures are considered a hazardous facility. It is not clear what agency would be responsible for determining when a particular facility falls within the definition.

- (B) special occupancy structures, defined as:
- (i) buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300;

Comment - Sufficient justification has not been provided to determine that the public would be any more protected than they currently are by requiring that these facilities be designed by a structural engineer.

(ii) all public school buildings and other structures, as provided under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code;

Comment - Specified facilities are defined and cited elsewhere in code and inclusion is redundant, recommend deleting.

(iii) all private school buildings and other structures, containing any grades kindergarten through 12th grade, with an occupant load greater than 250;

Comment - Why not have Title 1 of the Education Code revised to include these structures?

(iv) buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500;

Comment - Title 1 of the Education Code should be revised to include these structures instead of amending the B&P code.

(v) skilled nursing facilities and intermediate care facilities, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;

Comment - Specified facilities are defined and cited elsewhere and inclusion is redundant, recommend deleting.

(vi) jails, correctional centers, detention centers, and prisons; and

Comment - Sufficient justification has not been provided to determine that the public would be any more protected than they currently are by requiring that these facilities be designed by a structural engineer.

(vii) all buildings or structures with an occupant load greater than 5,000;

Comment - Sufficient justification has not been provided to determine that the public would be any more protected than they currently are by requiring that these facilities be designed by a structural engineer.

- (C) hospitals, and other medical facilities having surgery and emergency treatment areas, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
- (D) essential facilities, defined as:
- (i) fire, rescue, and law enforcement stations;
- (ii) emergency vehicle shelters and garages;
- (iii) designated earthquake, hurricane or other emergency shelters;
- (iv) structures containing, housing, or supporting water or fire suppression material or equipment that are attached to, adjacent to, or contained within and required for the protection of essential or hazardous facilities or special occupancy structures;
- (v) emergency preparedness, communications, and operations centers and other facilities required for emergency response;

Comment - Sufficient justification has not been provided to determine that the public would be any more protected than they currently are by requiring that these facilities be designed by a structural engineer.

- (vi) structures containing, housing, or supporting power-generating equipment required as emergency backup facilities for essential facilities and for facilities described in subsection (a)(2)(C);
- (vii) aviation control towers, air traffic control centers, and emergency aircraft hangars; and
- (viii) buildings and other structures having critical national defense functions:

Comment: The terms in this category are so broad as to be interpreted as any structure. It is not clearly defined which structures qualify under this category and could prove problematic. Recommend deleting.

- (ix) essential facilities of one-story Type V or Type II B construction that are 2,000 square feet or less in floor area are exempt from this section;
- (E) structures exceeding one hundred feet in height above average ground level;
- (F) buildings that are customarily occupied by human beings and are four stories or 45 feet or more above average ground level;

Comment - Sufficient justification has not been provided to determine that the public would be any more protected than they currently are by requiring that these facilities be designed by a structural engineer.

### **Comments B**

- (a) (1) All structural engineering plans, calculations, specifications, and reports (hereinafter referred to as "structural engineering documents") for the construction of significant structures described in paragraph (2) shall be prepared by, or under the responsible charge of a licensed civil engineer who is also licensed as a structural engineer in accordance with Section 6736.
  - (2) "Significant structure" shall be defined as:
- (A) all public school buildings and other structures, as provided under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code;
- (B) skilled nursing facilities and intermediate care facilities, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
- (C) hospitals, and other medical facilities having surgery and emergency treatment areas, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
- (b) All structural engineering documents for the construction of significant structures as defined in subdivision (a) shall include the name and license number of the structural engineer in responsible charge of the preparation of the documents. Interim documents shall include a notation as to the intended purpose of the document, such as "preliminary," "not for construction," "for plan check only," or "for review only." All final structural engineering documents shall bear the signature and seal or stamp of the licensee and the date of signing and sealing or stamping. If the final structural engineering plans described above have multiple sheets, then the signature, seal or stamp, and date of signing and sealing or stamping shall appear on each sheet of the plans. If the structural engineering specifications, calculations, and reports described above have multiple pages, then the signature, seal or stamp, and date of signing and sealing or stamping shall appear at a minimum on the title sheet, cover sheet, or signature sheet.
- (c) Notwithstanding subdivision (a), a licensed structural engineer who signs structural engineering documents as described in subdivision(a) shall not be responsible for damage caused by subsequent changes to or uses of those documents, if the subsequent changes or uses, including changes or uses made by state or local governmental agencies, are not authorized or approved by the licensed structural engineer who originally signed the documents, provided that the engineering service rendered by the structural engineer who signed the documents was not also a proximate cause of the damage.
- (d) Nothing in subsection (a)(2)(B)(ii) shall be construed to prohibit a licensed architect holding a valid certificate under Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code from performing work as authorized under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code.

### **Comments C**

#### **Business and Professions Code section 6735.2 is added to read:**

- (a) (1) All structural engineering plans, calculations, specifications, and reports (hereinafter referred to as "structural engineering documents") for the construction of significant structures described in paragraph (2) shall be prepared by, or under the responsible charge of a licensed civil engineer who is also licensed as a structural engineer in accordance with Section 6736.
  - (2) "Significant structure" shall be defined as:
    - (B) special occupancy structures, defined as:
- (i) buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300;
- (ii) all public school buildings and other structures, as provided under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code;
- (iii) all private school buildings and other structures, containing any grades kindergarten through 12<sup>th</sup> grade, with an occupant load greater than 250;
- (iv) buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500;
  - (vi) jails, correctional centers, detention centers, and prisons; and
  - (vii) all buildings or structures with an occupant load greater than 5,000;
- (C) hospitals, and other medical facilities having surgery and emergency treatment areas, (v) skilled nursing facilities and intermediate care facilities, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;

as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;

- (D) essential facilities, defined as:
- (i) fire, rescue, and law enforcement stations;
- (ii) emergency vehicle shelters and garages;
- (iii) designated earthquake, hurricane or other emergency shelters;
- (iv) structures containing, housing, or supporting water or fire suppression material or equipment that are attached to, adjacent to, or contained within and required for the protection of essential or special occupancy structures;
- (v) emergency preparedness, communications, and operations centers and other facilities required for emergency response;
- (vi) structures containing, housing, or supporting power-generating equipment required as emergency backup facilities for essential facilities and for facilities described in subsection (a)(2)(C);
- (ix) essential facilities of one-story Type V or Type II B construction that are 2,000 square feet or less in floor area are exempt from this section;
- (F) buildings that are customarily occupied by human beings and are four stories or 45 feet or more above average ground level;
- (b) All structural engineering documents for the construction of significant structures as defined in subdivision (a) shall include the name and license number of the structural engineer in responsible charge of the preparation of the documents. Interim documents shall include a notation as to the intended purpose of the document, such as "preliminary," "not for construction," "for plan check only," or "for review only." All final structural engineering documents shall bear the signature and seal or stamp of the licensee and the date of signing and sealing or stamping. If the final structural engineering plans described above have multiple sheets, then the signature, seal or stamp, and date of signing and sealing or stamping shall appear on each sheet of the plans. If the structural engineering specifications, calculations, and reports

described above have multiple pages, then the signature, seal or stamp, and date of signing and sealing or stamping shall appear at a minimum on the title sheet, cover sheet, or signature sheet.

- (c) Notwithstanding subdivision (a), all structural engineering documents for the construction of significant structures as defined in subdivision (a), except for those structures described in subsections (a)(2)(B)(ii), (a)(2)(B)(v), and (a)(2)(C), may be prepared by, or under the responsible charge of civil engineers who were licensed prior to January 1, 20XX.
- (d) Notwithstanding subdivision (a), a licensed structural engineer who signs structural engineering documents as described in subdivision(a) shall not be responsible for damage caused by subsequent changes to or uses of those documents, if the subsequent changes or uses, including changes or uses made by state or local governmental agencies, are not authorized or approved by the licensed structural engineer who originally signed the documents, provided that the engineering service rendered by the structural engineer who signed the documents was not also a proximate cause of the damage.
- (e) Nothing in subsection (a)(2)(B)(ii) shall be construed to prohibit a licensed architect holding a valid certificate under Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code from performing work as authorized under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code.

### **Comments D**

- (a) (1) All structural engineering plans, calculations, specifications, and reports (hereinafter referred to as "structural engineering documents") for the construction of significant structures described in paragraph (2) shall be prepared by, or under the responsible charge of a licensed civil engineer who is also licensed as a structural engineer in accordance with Section 6736.
- (2) "Significant structure" shall be defined as:
- (A) hazardous facilities, defined as: a building or structure housing, supporting, or containing sufficient quantities of toxic or explosive substances to be considered a high hazard such that there is a danger to the safety of the public if released;
- (B) special occupancy structures, defined as:
- (i) buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300;
- (ii) all public school buildings and other structures, as provided under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code;
- (iii) all private school buildings and other structures, containing any grades kindergarten through 12th grade, with an occupant load greater than 250;
- (iv) buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500;
- (v) skilled nursing facilities and intermediate care facilities, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
- (vi) jails, correctional centers, detention centers, and prisons; and
- (vii) all buildings or structures with an occupant load greater than 5,000;
- (C) hospitals, and other medical facilities having surgery and emergency treatment areas, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
- (D) essential facilities, defined as:
- (i) fire, rescue, and law enforcement stations;
- (ii) emergency vehicle shelters and garages;
- (iii) designated earthquake, hurricane or other emergency shelters;
- (iv) structures containing, housing, or supporting water or fire suppression material or equipment that are attached to, adjacent to, or contained within and required for the protection of essential or hazardous facilities or special occupancy structures;
- (v) emergency preparedness, communications, and operations centers and other facilities required for emergency response;
- (vi) structures containing, housing, or supporting power-generating equipment required as emergency backup facilities for essential facilities and for facilities described in subsection (a)(2)(C);
- (vii) aviation control towers, air traffic control centers, and emergency aircraft hangars; and
- (viii) buildings and other structures having critical national defense functions;
- (ix) essential facilities of one-story Type V or Type II B construction that are 2,000 square feet or less in floor area are exempt from this section;
- (E) structures exceeding one hundred feet in height above average ground level; and including community colleges
- (F) buildings that are customarily occupied by human beings and are four stories or 45 feet or more above average ground level;
- (b) All structural engineering documents for the construction of significant structures as defined in subdivision (a) shall include the name and license number of the structural engineer in responsible charge of the preparation of the documents. Interim documents shall include a

notation as to the intended purpose of the document, such as "preliminary," "not for construction," "for plan check only," or "for review only." All final structural engineering documents shall bear the signature and seal or stamp of the licensee and the date of signing and sealing or stamping. If the final structural engineering plans described above have multiple sheets, then the signature, seal or stamp, and date of signing and sealing or stamping shall appear on each sheet of the plans. If the structural engineering specifications, calculations, and reports described above have multiple pages, then the signature, seal or stamp, and date of signing and sealing or stamping shall appear at a minimum on the title sheet, cover sheet, or signature sheet.

- (c) Notwithstanding subdivision (a), all structural engineering documents for the construction of significant structures as defined in subdivision (a), except for those structures described in subsections (a)(2)(B)(ii), (a)(2)(B)(v), and (a)(2)(C), may be prepared by, or under the responsible charge of civil engineers who were licensed prior to January 1, 20XX.
- (d) Notwithstanding subdivision (a), a licensed structural engineer who signs structural engineering documents as described in subdivision(a) shall not be responsible for damage caused by subsequent changes to or uses of those documents, if the subsequent changes or uses, including changes or uses made by state or local governmental agencies, are not authorized or approved by the licensed structural engineer who originally signed the documents, provided that the engineering service rendered by the structural engineer who signed the documents was not also a proximate cause of the damage.
- (e) Nothing in subsection (a)(2)(B)(ii) shall be construed to prohibit a licensed architect holding a valid certificate under Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code from performing work as authorized under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code. Comments
- 1. I think it may help to add "community colleges" added to this item to be clear that DSA's jurisdiction includes these.

Recommended reference (this is how DSA references it): "the Field Act, Education Code Section 1728017316 and Sections 8113081147."

- 2. I'm not sure if this would influence this proposal, but the education code section 17329 states that a private school can be designed by an architect, civil engineer, or structural engineer, so these sections would have to be modified to agree with this revised section. Interestingly, the code requires that the review of public school structures be done under the supervision of a structural engineer.
- 3. I'm a little on the fence about including the nonhabitable structures over 100 ft. I'm not sure that a structural license would yield a better design on these structures. I think it is a specialized field. Many transmission structures are designed using TIA/EIA 222. which is almost a prescriptive procedure.
- 4. Can I suggest that we include these only if they are within 100 ft of another habitable structure?

### **Comments E**

- (a) (1) All structural engineering plans, calculations, specifications, and reports (hereinafter referred to as "structural engineering documents") for the construction of significant structures described in paragraph (2) shall be prepared by, or under the responsible charge of a licensed civil engineer who is also licensed as a structural engineer in accordance with Section 6736.
  - (2) "Significant structure" shall be defined as:
- (A) hazardous facilities, defined as: a building or structure housing, supporting, or containing sufficient quantities of toxic or explosive substances to be considered a high hazard such that there is a danger to the safety of the public if released;
  - (B) special occupancy structures, defined as:
- (i) buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300;
- (ii) all public school buildings and other structures, as provided under Chapter 3 (commencing with Section 17251) of Part 10.5 of Division 1 of Title 1 of the Education Code;
- (iii) all private school buildings and other structures, containing any grades kindergarten through 12<sup>th</sup> grade, with an occupant load greater than 250;
- (iv) buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500;
- (v) skilled nursing facilities and intermediate care facilities, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
  - (vi) jails, correctional centers, detention centers, and prisons; and
  - (vii) all buildings or structures with an occupant load greater than 5,000;
- (C) hospitals, and other medical facilities having surgery and emergency treatment areas, as provided under Part 7 (commencing with Section 129675) of Division 107 of the Health and Safety Code;
  - (D) essential facilities, defined as:
  - (i) fire, rescue, and law enforcement stations;
  - (ii) emergency vehicle shelters and garages;
  - (iii) designated earthquake, hurricane or other emergency shelters;
- (iv) structures containing, housing, or supporting water or fire suppression material or equipment that are attached to, adjacent to, or contained within and required for the protection of essential or hazardous facilities or special occupancy structures;
- (v) emergency preparedness, communications, and operations centers and other facilities required for emergency response;
- (vi) structures containing, housing, or supporting power-generating equipment required as emergency backup facilities for essential facilities and for facilities described in subsection (a)(2)(C);
- (vii) aviation control towers, air traffic control centers, and emergency aircraft hangars; and
  - (viii) buildings and other structures having critical national defense functions;
- (ix) essential facilities of one-story Type V or Type II B construction that are 2,000 square feet or less in floor area are exempt from this section;
  - (E) structures exceeding one hundred feet in height above average ground level; and