

Memorandum

To: Richard T. Conrad, FAIA
Principal Architect
State Historical Building Safety Board
Division of the State Architect
Department of General Services
1102 Q Street, Suite 5100
Sacramento, CA 95814

Date: July 28, 2006

Telephone: (916) 327-4998

Website: www.osfm@fire.ca.gov

From: Office of the State Fire Marshal

Subject: Regulation approval request response regarding code change proposals to California Historical Building Code, California Code Of Regulations, Title 24, Part 8 And Part 2 (Chapter 34)

The purpose of this letter is to inform the State Historical Building Safety Board (the Board) that under Health and Safety Code (H&SC), Section 18930(a)(9), “*The proposed building standard, if it promotes fire and panic safety as determined by the State Fire Marshal, has the written approval of the State Fire Marshal.*”

A review of the proposed regulations, Title 24, Part 8 and Part 2 (Chapter 34), was recently conducted in accordance with the provisions of Government Code Section 11359(a). As a result, the following changes are requested to the proposed text as shown highlighted in double underline and double strikeout:

~~8-302.5.1 High Rise Buildings. Non-residential and non-hazardous occupancy buildings over 75 feet in height located more than 75 feet above the lowest floor level having building access, may be permitted with only the stories over 75 feet provided with an automatic fire sprinkler system if:~~

- ~~1) The building construction type and the exits conform to regular code and,~~
- ~~2) a complete building fire alarm and annunciation system is installed and,~~
- ~~3) an area separation is provided between the sprinklered and non-sprinklered floors.~~

~~8-402.2 One-hour Construction. Upgrading an existing qualified historical building or property to one-hour fire-resistive construction and one-hour fire resistive corridors shall not be required regardless of construction or occupancy when one of the following is provided:~~

- ~~1. An automatic fire sprinkler system throughout. See Section 8-410.2 for automatic sprinkler systems.~~
- ~~2. An approved life-safety evaluation is provided.~~

~~3. An in-tumescent paint, SFM approved laboratory listed, may be approved as increasing the fire resistive rating of a corridor wall to one hour, when applied as approved to achieve the rating and on the room side of the corridor.~~

4. ~~3.~~ Other alternative measures are approved by the enforcing agency.

8-410.2 When required by the CHBC, an automatic sprinkler systems is defined by the following standards (for non-hazardous occupancies).

1. for floors forth and below, NFPA 13R, ~~1999~~ 2002 edition.

2. for floors above the fourth, NFPA 13, ~~1999~~ 2002, SFM amended edition.

3. for all floors of buildings taller than 75 feet, NFPA 13, ~~1999~~ 2002 edition.

4. When the building is free standing, 2 floors and 1500 s.f. per floor or less, NFPA 13D, ~~1999~~ 2002 Edition.

5. For exterior wall and opening protection. As required by this section.

Exception: When the automatic sprinkler systems are used to reach compliance using this code, in three or more occasions, the system shall be the next higher NFPA standard.

SECTION 8-412 **HIGH RISE BUILDINGS**

Qualified historical buildings and properties having floors for human occupancy ~~over the height of 75 feet from the lowest level of fire department access~~ located more than 75 feet above the lowest floor level having building access shall conform to the provisions of the regular code for existing high rise buildings as amended by the CHBC.

These revisions are requested due to:

Revisions requested to sections 8-302.5.1 and 8-412 are for coordination with California Statutes relating to High-rise structures. Specifically Health and Safety Code 13210(b) "High-rise structure" means every building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet above the lowest floor level having building access, except buildings used as hospitals, as defined in Section 1250."

Revisions requested to section 8-410.2 are for coordination with recent SFM amendments approved by the Building Standards Commission (BSC) March 24, 2006. In the 2004 BSC annual rulemaking cycle, SFM updated NFPA 13 to a more recent edition specifically the 2002 edition.

Should you have any questions regarding this memorandum, please do not hesitate to contact me at (916) 327-4998 or at kevin.reinertson@fire.ca.gov

Kevin Reinertson, Regulations Coordinator

Code Development and Analysis

STATE OF CALIFORNIA
STATE AND CONSUMER SERVICES AGENCY
DIVISION OF THE STATE ARCHITECT
STATE HISTORICAL BUILDING SAFETY BOARD
1102 Q STREET, SUITE 5100
SACRAMENTO, CA 95814

Office Use Item No. _____

PARTICIPATION COMMENTS
Challenge/comments should be sent to the above address.
(SEE RULES FOR PUBLIC COMMENTS ON REVERSE SIDE)

(WRITTEN COMMENT DEADLINE: JULY 21, 2005)

Date: July 18, 2006

From: Thomas Winter
Name (Print or type) (Signature)

-- Division of the State Architect
Agency, jurisdiction, chapter, company, association, individual, etc.

1102 Q Street, Suite 5100, Sacramento, CA 95814
Street City State Zip

I/We (do) (do not) agree with:

The Agency proposed modifications As Submitted on **Chapter 8-2**

and request that this item or reference provision be recommended:

Approved Disapproved Held for Further Study Approved as Amended

By the SHBSB at the adoption meeting.

CHAPTER 8-2 DEFINITIONS

Comment: Section 8-202-A. Omit the definition of Adaptive Reuse.

Response: This term is defined by the National Park Service and need not be repeated in the CHBC.

Comment: Section 8-204-C. Omit the definition of Conservation.

Response: This term may conflict with other usage such as “energy conservation”. The term conservation in a historic preservation context is defined by the National Park Service.

Comment: Section 8-205-D. Distinct Hazard. Add the phrase “or public right of way” at the end of the first sentence.

Response: The public right of way has been often cited by jurisdictions as a distinct hazard thus needs to be included in the definition. Other grammatical corrections. Modify this definition to read:

“DISTINCT HAZARD. Any clear and evident condition that exists as an immediate danger to the safety of the occupants or public right of way. Conditions that do not meet the requirements of current regular codes and ordinances do **not**, of themselves, constitute a distinct hazard. Section 8-104.3 SHBC appeals, remains applicable.”

Comment: Section 8-206 – E. Add a definition for Enforcing Agency.

Response: These terms are used interchangeably throughout the CHBC. Add this definition to read:

“ENFORCING AGENCY. Authority Having Jurisdiction, local agency with jurisdiction, agency. An entity with the responsibility for regulating, enforcing, reviewing or otherwise that exerts control of or administration over the process of granting permits, approvals, decisions, variances, appeals for qualified historical buildings or properties.”

Comment: Section 8-210-I INTEGRITY. Modify this definition for clarity.

Response: The definition of a qualified historical building or property needs to be consistent throughout the CHBC. The “historic period” needs to be quantified to match the definition of “Period of Significance” included in Chapter 8-2. Modify this section to read:

“INTEGRITY. Authenticity of a historic building or property’s historic identity, evidenced by the survival of physical characteristics that existed during the property’s historic or prehistoric period of significance.”

Comment: Section 8-219-R. Modify the definition of Relocation. The definition has a redundant phrase.

Response: Modify this section to read:

“RELOCATION. The act or process of moving any structure or a portion of a structure ~~that may be moved~~ to a new site, or a different location on the same site.”

Comment: CHAPTER 8-4 Section 8-402.2. Modify parts of this section for clarity.

Response: The double strike part of subsection 3 is redundant.

3. An intumescent paint, SFM approved laboratory listed, may be approved as

increasing the fire resistive rating of a corridor wall to one-hour, when applied as approved to achieve the rating required, and on the room side of the corridor.”

Comment: Section 8-410.2. Modify this section to for clarity.

Response:

Sub-section 1. “fourth” is misspelled.

Sub-section 4. Property line separations are designed to act in the same manner as physical separations.

Exception. The term “the next higher” is not specific, the proposed wording adds specificity for the user. Modify this section to read:

“8-410.2 When required by the CHBC, an automatic sprinkler systems is defined by the following standards (for non hazardous occupancies).

1. For floors ~~forth~~ fourth and below, NFPA 13R, 1999 edition.
2. For floors above the fourth, NFPA 13, 1999, SFM amended edition.
3. For all floors of buildings taller than 75 feet, NFPA 13, 1999 edition.
4. When the building is free standing, or that has or can be made to have property line separations as required by the regular code, 2 floors and 1500 s.f. per floor or less, NFPA 13D, 1999 Edition.
5. For exterior wall and opening protection. As required by this section.

Exception:

When the automatic sprinkler systems is used to reach compliance using this code, in three or more occasions, the system shall be: ~~the next higher~~ NFPA 13D shall be increased to a NFPA 13R standard, or a NFPA 13R shall be increased to a NFPA 13 ~~NFPA~~ standard.”

Comment: Section 8-412 High Rise Buildings. Modify this section for clarity.

Response: The original text lacked specificity, the proposed wording adds specificity for the user. Modify this section to read:

“8-412 HIGH RISE BUILDINGS

For ~~Q~~ qualified historical buildings and structures having floors for human occupancy over the height of 75 feet from the lowest level of fire department access. Only those floors above 75 feet shall conform to the provisions of the regular code for existing high rise buildings as amended by the CHBC.”

Comment: CHAPTER 8-5 MEANS OF EGRESS. Section 8-502.5. Modify this section for clarity.

Response: Grammatical correction. Modify this section to read:

“8-502.5 Existing Fire Escapes. Existing previously approved fire escapes and fire escape ladders shall be acceptable as ~~on~~ one of the required means of egress provided they extend to the ground and are easily negotiated, adequately signed, and in good working order. Access shall be by an opening having a minimum width of 29 inches (737mm) when open with a sill ~~be~~ no more than 30 inches (762mm) above the adjacent floor, landing, or approved step.”

Comment: CHAPTER 8-6 ACCESSIBILITY. 8-601.4 General Application. Modify this section for clarity.

Response: The proposed wording adds specificity for the user. Modify this section to read:

“The provisions in the CHBC apply to local, state and federal governments (Title II entities); alteration of commercial facilities and places of public accommodation (Title III entities); and barrier removal in commercial facilities and places of public accommodation (Title III entities). Except as noted in this chapter.”

Editorial Comments: Various Chapters

Responses:

Change “historic” to “historical” for consistency
Section -105.1; Chapter 8-2 – Definitions: Alteration, Integrity and Preservation;
Section 8-302.4, Section 8-303.2, Section 8-402.3, Section 8-403,

Change first sentence of definition of Qualified Historical Building or Property. Leave “structure” and omit “property.”

Section 8-401.1. Change first sentence remove added word “solutions.”

Section 8-502.5. Change “on” in first sentence to “one.” Change “sill-be” to “sill.”

Section 8-701.2. Add “is” after “the CHBC”. Add “structures” to “qualified historical buildings or structures.”

Section 8-703.1. Omit “qualified” before “historical structure.”

Section 8-704. Add two new sub-section numbers 8-704.1 and 8-704.2.

Section 8-705.2. Add two new sub-section numbers 8-705.2.1 and 8-705.2.2.

Section 8-805.2.3. Add “1997 UBC” to the part of the sentence to be stricken.

Section 1001.1. Omit “qualified” before “historic features.”

Section 1001.2.2. Omit “qualified” before “historic features.” Add “or” to historical buildings or properties, omit “and”, add “such as historic” before “districts.”

Where the “2006 IBC” is referenced, it will be replaced with the “2007 CBC.”

Response comments received by mail from
the City of San Diego
Division of Building and Safety
Development Services
Ali M. Fattah, P.E. Senior Research Engineer
August 7, 2006

The comments from the City of San Diego were received in the Division of the State Architect office on August 7, 2006. The deadline for the 45 day public comment period ended July 21, 2006, two weeks before. The SHBSB is not required to respond to comments received after the deadline. The SHBSB thanks the San Diego, Division of Building and Safety, Development Services for providing these comments. The SHBSB has responded because the comments raised important issues that were insightful and useful to the creation of these regulations.

Comment: 1. Ref 8-102.1.1. The Express Terms removes the word “structure” throughout and replaces it with “properties.” This makes it unclear the full extent of what the SHBC covers. There are many structures that could be historic that are not buildings. Old bridges, towers, etc. aren’t buildings. The word “properties” is unclear as a district or site could include several properties or a portion of a property. We suggest that the wording be changed to “historic sites, buildings and structures.”

Response: The ISOR was not sufficiently explanatory regarding the change noted. The intent of this change is to make the terminology “Qualified Historical Building or Property” match the definition in Chapter 8-2, Section 8-218-Q Historical Building or Property throughout the CHBC. The SHBSB changed that phrase from Historical Building or Structure in the 1998 CHBC. The thinking then was to make the phrase more descriptive of the definition that encompasses a larger group of physical entities. It is important that the reader be able to substitute any of the nouns in the definition with “property”. For instance, the phrase could be “historic building or site” or “historic district or object”. Basically, the phrase should cover anything that has been or could be listed or inventoried as “historic”.

In the field of historic preservation, the Secretary of the Interior, National Park Service, Cultural Resources Branch is the promulgator of programs and standards for the United States. The terminology of historic preservation is defined in the Secretary of the Interiors Standards and Guidelines. Historic Property is defined as “a district, site, building, structure or object significant in American history, architecture, engineering, archeology or culture at the national, State, or local level.” While the definitions of many words and terms used in historic preservation differ from their standard definitions, the CHBC, as a code for historic preservation, needs to be consistent with the standards of preservation created by the NPS.

Looking at the definition of Qualified Historical Building or Property, Chapter 8-2,

Section 8-218-Q we see a technical error that resulted from a global use of “find and replace”. The word “structure” in the second sentence should not be stricken, but should remain and the added word “property” should not be added.

The SHBSB will consider the consequences of expecting users of the CHBC to know historic preservation terminology, or where to find those definitions.

Comment: 2. Ref Section 8-102.1.2. (a) Throughout the Express Terms the word “alternative” is replaced with the work “solution.” This creates some very unclear wording that is grammatically incorrect. We understand the basis behind this proposal, the Code writers are trying to promote team work between the designers and the enforcing agencies, but as presented we think it will create more confusion. (b) One of the original premises of the SHBC was not to be a prescriptive code, so the unique situations found in older buildings and sites could be adequately addressed on a case by case basis. We think the terms “alternative” and “alternate regulations” should remain unchanged. (c) We would appreciate the SHBSB providing a commentary on how the CHBC is intended to be used.

Response: In response to the first question the use of “alternative” dates back to when the code was first created. It was an advisory code which was not mandatory for use. At that time the code provided alternatives to the regular code, or was an alternative code to be used when needed. The CHBC is now the prevailing code for historical properties. As the CHBC is the code for historic properties, the provisions are not alternatives, but the solution to the design issues being resolved. The word “solution” may not be the clearest or most grammatically correct, but the SHBSB intends to make clear that the CHBC is not an alternative code. We would consider other suggestions to the word “solution” based on our opinion stated above.

In some cases the CHBC intends to recognize alternatives, as in Chapter 8-5, Section 8-501.1 Purpose. “The CHBC requires enforcing agencies to accept reasonably equivalent alternatives to the means of egress requirements in the regular code.” In this case, the CHBC wants to make sure alternatives are considered.

In response to the second part of the comment the CHBC is neither a prescriptive nor performance code. It can be described as a code intended to emphasize solutions based on performance with prescriptive provisions proven over time to be equivalent or applicable to a regular code provision.

In response to the third part staff to the SHBSB would like to provide some commentary on how the CHBC should be used. As that becomes possible we will inform users how to access that information.

Comment: 3. Section 8-102.1 Application. We recommend that the reference to the Health and Safety Code Statute Section, codified into the CHBC, remain as in the 1998 CHBC.

Response: The section noted was proposed to be added. The strikeout is a clerical mistake.

Comment: 4. Section 8-102.1.1. We recommend that the last part of this section be revised to read: "...provided non historical additions and alterations shall conform to the requirements of the regular code." It is important to clarify the intent of the code of whether alterations which do not affect the historical fabric of the building need to comply with regular code.

Response: The answer to this comment and the language needed to clarify the section is in the Purpose of the code, 8-101.2. "To provide regulations for preservation, restoration, rehabilitation, relocation, or reconstruction of ... to provide a cost effective approach to preservation ..."

The definitions of preservation, restoration, rehabilitation, relocation and reconstruction are found on the National Park Service, Cultural Resource website. See the response to comment #1.

Every change to a historical building that is necessary to "restore, rehabilitate, repair, relocate or reconstruct" can be considered an "alteration." The goal of preservation is to keep as much of the historic built environment intact as is possible. However, to achieve that goal a use must be found for historical property or there is no reason to preserve it. That use may be as a house museum where no alteration is expected, but in most cases buildings will need to be altered to be viable. It is important to recognize that unlike the regular code, "cost" may be a consideration where the CHBC is applied. The CHBC provides for alterations to be made to the standards of the CHBC. Of course, where a more specific interpretation is required the SHBSB is always available for consultation or appeal on a case by case basis.

Comment: 5. Section 8-102.1.5 Unsafe Buildings. Correct spelling of Unsafe to Un-safe. A review of the standard dictionary shows the spelling "unsafe" as acceptable.

Response: Comment appears to be self answered.

Comment: 6. Section 8-104.3 SHBC Appeals. Revise the section as follows: "may appeal directly to the Board. The Board may accept the appeal only if it determines that issues involved are of statewide significance, and that the applicant has exhausted all available options with the local enforcement agency. The Board..."

Response: Anyone can appeal to the SHBSB at any point. There is no authority for a jurisdiction to mandate a prior appeal process to the SHBSB appeal because the SHBSB appeal process supplants any local process. It may behoove an appellant to the SHBSB to have first used the local appeal process to define the issues to be resolved at the SHBSB level, but in most past cases the appeal is brought directly to the SHBSB.

Comment: 7. Section 8-105.2 Alternate Solutions to the CHBC. We prefer the original title and wording of the title and the first sentence. The SHBC lays out a framework for the solutions and the designer provides the solutions.

Response: Striking the word “alternatives” and the addition of the word “solutions” in the section title was a clerical error. The title should read, “Alternatives to the California Historical Building Code.” The strike of “alternatives” and insertion of “solutions” is as the SHBSB intended. See Response to comment #2.

Comment: 8. Section 8-302.2 Change in Occupancy. We prefer the existing language. The original last sentence in the 1998 CHBC gives both the local jurisdiction and the designer latitude to address the real safety hazards applicable to the building under review. The added wording for the second requirement could be interpreted by and enforcing agency that the requirements of the IEBC must be used, rather than referring to the code as an additional guideline available for consideration when appropriate. This appears to be a prescriptive requirement added into a document that in the past has been non-prescriptive.

Response: The original last sentence of this section is retained but moved to be sub-item 1, where a second sub-item is added. There is no change in intent or substance.

If the user does not carefully read the “or” after the letter “M”, the wording of Sub-item 2 of 8-302.2 could be interpreted as a mandate to use the IEBC, which was not the intent of the change. The SHBSB will consider modification of the language to read:

2. The new use does not present a greater relative degree of hazard where occupancy groups A and H are rated the most hazardous, then group R, and lowest groups B and M. The table “Hazard Categories and Classifications: Life Safety and Exits” in the 2006 IEBC may be used in lieu of the above.

Comment: 9. Section 8-302.4 Exception. The word “Historic’ and Historical” seem to be used interchangeably. We suggest that the entire CHBC be consistent with the definition chosen. The exception should keep the word “approved” in the “approved automatic sprinkler system.”

Response: In response to the first part of the comment, generally the word “historic” and “historical” should fit the context in which they are used. We did a search of a chapter of the express terms and found several places where the phrase “qualified historical building or property” had the word “historic” still in place. Those will be changed to “historical”. In some cases the word “historic” is appropriate and must remain.

In response to the second part of the comment the word “automatic” in the exception is defined in CBC, as noted in Section 8-410. In the context of the CHBC “approved” in

this context is redundant. Installation of an automatic sprinkler system must be approved in the permit process. In the 1998 CHBC there were no references to define an automatic sprinkler system design standard. Proposed Section 8-410 provides such a standard and definition such that “approved” can be omitted by reference to the NFPA standard.

Comment: 10. Section 8-302.5.1 High Rise Buildings. This proposed new section codified the use of an automatic sprinkler system throughout stories located more than 75 feet above the lowest level of fire department building access. We would like to express our deep concern about this proposal. Fire travels upward in a building, therefore, we believe that the stories located below the 75 foot reference point should be protected. Additionally, we believe that stairway enclosures as well as interior spaces immediately adjacent to the stairways be sprinkler protected.

Response: The Initial Statement of Reasons provides a technical analysis of the effect of this provision compared to the CBC. This response will provide some additional information.

The intent of the CBC requirement to install sprinkler systems in buildings 75 feet above the lowest level of fire department access was to provide additional safety for occupants and aid fire fighting where there were floors taller than the typical rescue apparatus of that time period.

The proposed language states “may be permitted” and not “shall be permitted”, therefore this is not a mandated provision from a jurisdictions point of view.

The CHBC provision provides a basis for resolving the difficult issues that come up when applying the regular code to existing buildings, specifically where historic interiors need to remain intact.

The CHBC takes a practical point of view where regular code takes a best case or theoretical point of view of construction requirements. The SHBSB feels the proposal will provide a reasonable level of safety for the occupants and firefighters.

The CHBC requires jurisdictions to accept “reasonable” alternatives to regular code. CBC Section 403.11.4 also provides for alternatives.

The proposed modification in the CHBC limits the availability of this provision to buildings that meet 4 provisions, the occupancy is directed towards offices, the construction type and exits are adequate, the occupants can be notified of emergencies and the building can be separated between the higher and lower floors.

The “area” separation between the lower and upper floors is intended to help contain fire spread upward between floors and remember there will be sprinklers on floors above.

Newer rescue ladders available in many jurisdictions are able to reach above 100 feet. Fire rescuers can evacuate several additional sprinkled floors with this equipment.

The track record of enforcing the CBC's retrofit time mandate (April 24, 1979) is inconsistent, usually being enforced when another construction permit is requested. If the high rise provision was determined to be extremely important, the 1979 date for building retrofit would have been met. The CHBC does not recognize "triggers", and triggering a major sprinkler retrofit because of a minor-improvement permit runs against the intent of the CHBC.

As mentioned by the commenter, sprinkler protection for spaces adjacent to stairs would also be a possible enhancement, and in many situations could be easily achieved with minimum disturbance to the historic character.

Comment: 11. Section 8-302.5.1. We recommend that a definition for high rise buildings be developed and that it be consistent with that proposed by the State Fire Marshal in the 2007 CBC, and as defined by statute. A definition will ensure uniform code application.

Response: The Express Terms defines the term "High Rise Buildings" in CHBC Section 8-412. The Board will consider changing the definition to conform to CBC, or referencing CBC Section 403.11.1.

Comment: 12. Section 8-302.5.1, Item 3. We suggest the term "fire barrier" be used in lieu of "area separation" to separate "sprinklered" from "non-sprinklered" floors or define what an area separation means. Also, no fire rating is provided for the requirement. This will be a difficult provision to administer.

Response: This is a reasonable comment. Looking at CBC, an area separation based on construction type would indicate a 4 hour separation with 3 hour openings. The problem with using CBC Section 504.6 is how to interpret construction for protected openings for elevators. In a practical application the elevator shaft would not be able to be completely protected. A CHBC defined "barrier" could address that issue. The SHBSB will consider defining "separation" or "barrier."

Comment: 13. Section 402.3. We suggest that the word "appropriate" not replace "approved" when describing smoke seals on protected exterior openings. Also the title of the section should be revised to "protected openings" since the chapter is titled Fire-resistant Construction.

Response: "Approved" is redundant as any construction must be permitted or approved by the jurisdiction. In this sentence if left, approved would be stated twice. The use of the word "Appropriate" is intended to give the user the understanding that several kinds of material can be used in this application.

Comment: 14. Section 410 , Automatic Fire Extinguishing Systems. The original title should remain along with the original text “automatic fire extinguishing system.” There may be other types of fire extinguishing systems that are applicable. This would provide guidance for the designer to other possibilities for fire protection such as the use of gas and chemical agents in alternative systems rather than water. The proposed change would limit possible solutions.

Response: The SHBSB will consider changing the title of the section back to the original, but it is our understanding that the sprinkler industry prefers to leave the word “extinguishing” from the phrase. Suppression is preferable to extinguishing, but the proposed phrase is intended to be more generic. As for other types of systems that may be applicable as noted in the comment, the exception to 8-410.1 as well as Section 8-411 cover alternate technologies that might be used as equivalents. Please note that the strikeout of the word “alternative” and insertion of “solution” is a clerical mistake. The exception to section 8-410.1 should read: Exception: When an alternative life-safety system or other technologies are approved by the enforcing agency.

Comment: 15. 8-410.2

- a. Item 1 should be reworded to read “for stories located below the fifth story in residential buildings, sprinkler protection may be designed based on NFPA 13-R, 1999 Edition.”
- b. Item 2 add the word “story” after “fourth” to read “...above the fourth story, sprinkler protection may be designed based on NFPA 13, 1999 Edition.”
- c. Item 3 should be reworded to be consistent with the State Fire Marshal with either a definition added for hi-rise buildings or reworded to read: “For all buildings having floors used for human occupancy located more than 75 feet (22860mm) above the lowest floor level having building access, sprinkler protection may be designed based on NFPA 13, 1999 Edition.”
- d. Item 4 should be revised to read “...per floor or less, and classified as a group R Division 3 occupancy, sprinkler protection may be designed based on NFPA 13-R, 1999 Edition
- e. We recommend that the more current 2002 Edition of the NFPA sprinkler standard be referenced.

Response: The SHBSB has proposed to define “automatic sprinkler system” or “sprinkler system.” The CHBC proposal has not mistaken the intended application of the NFPA standards 13, 13-R and 13-D. It is understood that NFPA has created standards, based on their analysis and testing. The proposed language of this section recognizes that the proposed use of the NFPA system design does not match the NFPA standard. The SHBSB has considered that the creation of the NFPA standards can meet the CHBC standard for providing “life safety” for the occupancies and conditions other than the NFPA intended. As noted earlier, the CHBC looks at code from a different point of view than regular code. Life safety and protection of occupants is the standard used and this section is proposed to meet that standard.

The 2007 CHBC should reference the latest NFPA editions.

Comment: 16. Section 8-410.2, Item 1, Automatic Fire Extinguishing Systems.

This provision would allow NFPA 13-R sprinkler systems to be used in all historic buildings less than 5 stories tall. There are many cases where this may be acceptable, but we have concerns for hazardous occupancies, institutional occupancies, or occupancies that have large congregations of people such as schools, theaters, auditoriums, bars and nightclubs, etc. We think E occupancies over one story, I occupancies, H occupancies and A occupancies with 300 or more occupants should be protected with more sprinkler coverage required by a NFPA 13 system design.

Response: The SHBSB agrees with this comment. The language states: “for non-hazardous occupancies.” The intent of this language was to limit the applicability of this section to occupancies that present a non-hazardous situation to the occupants. The language may be better worded using specific occupancies as suggested, or the use of the phrase defined in CHBC Chapter 2, Distinct Hazard. The first sentence of Section 8-410.2 could read: When required by the CHBC, automatic sprinkler systems are defined by the following standards (where the occupancy and use do not create a distinct hazard). The SHBSB will consider this modification.

Comment: 17. Section 8-411. OTHER TECHNOLOGIES. The section should be reworded to read: “Fire alarm systems, smoke and heat detection systems, occupant notification and annunciation systems, smoke control systems and fire modeling, timed egress analysis and modeling, as well as other engineering methods and technologies may be accepted by the authority having jurisdiction when it can be shown or proved to provide equivalence to the minimum requirements of the regular code.” While we agree that the statute cannot be changed, Health and Safety Code language can be clarified when transcribed into the CHBC document if it improves the readability and does not conflict with the intent of the originating legislation as codified in Health and Safety Code.

Response: The SHBSB will consider the proposed suggested language. We agree with the second part of the comment as it describes the intent for creation of regulations.

Comment: 18. Section 8-412. High Rise Buildings. It is not clear why this section is necessary as it is only used to define hi-rise buildings. It may be more appropriate to move that language to Chapter 8-2 as a definition. The section offers no requirements or provisions.

Response: The SHBSB will consider this comment.

Comment: 19. Section 8-502.2. Existing Doors and Corridor Widths. “...width and height for a person to pass through...” This language should be changed to read:

“...width and height for the occupants to pass through...” In many cases, the full occupant load needs to be looked at, not just if a person can pass through the opening.

Response: The existing language is being transferred over from 1998 CHBC. However, the SHBSB will consider the comment.

Comment: 20. Chapter 8-6. Alternative Accessibility Provisions. The original title should remain, as this makes it clear there are alternatives to the regular code.

Response: The title was changed for the same reason noted in response to comment number 2. The proposed language provides specific provisions, not alternates.

Comment: 21. Section 8-601.3. Item 1. This section does not allow the use of alternative provisions where a building is undergoing reconstruction or replication. A replication of an older building will often result in certain elements that may not comply with the standards of the regular code. It may be appropriate perhaps to add an exception to this scoping limitation to allow the provisions of this chapter to be used when requirements for equivalent facilitation per Section 8-604 are met.

Response: The Federal Department of Justice (DOJ) has recommended this change in CHBC Chapter 8-6. To use the minimum standards the statement in Federal Guidelines, (ASAAG), “compliance with the requirements for accessible routes (exterior and interior), ramps, entrances, or toilets would threaten or destroy the historic significance of the building or facility”, must be met. In the opinion of DOJ it would be difficult to prove that compliance with the regular standard guidelines would destroy the historic significance of a reconstruction where it will be used as a Title III facility. The SHBSB, in applying for certification for Chapter 8-6, is following the recommendations of DOJ.

Comment: 22. Section 8-603. This section heading should read “Alternative Standards.”

Response: Please look at the response to comment #7.

Comment: 23. Section 8-603, Doors, Section 8-603.4, Power Assisted Doors. The exception to these sections does not allow the use of power assisted doors in commercial uses or public accommodation. This limitation appears extremely harsh. It would adversely affect the abilities of small businesses to move into older historic buildings. We suggest a process whereby documentation of an unreasonable hardship similar to CBC Chapter 11B be used to document an unreasonable hardship. For a Victorian single family dwelling to be converted into an office or tea house, Equivalent Facilitation would be extremely useful. Could these exceptions make reference to the “Documentation of Unreasonable Hardship” found in Section 8-604, as well as the disabled access requirements of the regular code?

Response: The exception eliminating the use of power assisted doors should have been omitted in the final draft of the Express Terms. Power assisted doors can be used. Our analysis of the issue as presented to Fed DOJ is included below.

Section 8-603.3 allows the use of power assisted doors as an alternative to level landings, strike side clearance and door opening forces. ADAAG 4.1.7(3) states that the path of travel shall meet Section 4.3. Within 4.3 doors are regulated in Section 4.13. There are three sections within ADAAG that talk about power-assisted doors. Of those, only 4.13.6 is of interest.

Provision 4.13 governs everything within the subject of "maneuvering clearances at doors". That section basically says that when doors are "power-assisted" it removes requirements described in Fig. 25. There isn't a prohibition to using power assisted doors for the similar provisions in CHBC Section 8-603.3. It seems straight forward that the authority to use power-assisted doors as an alternate to requirements for maneuvering clearances, or strike side clearances is provided in 4.13.6

The level landings provision in the second sentence of 4.13.6 regulates the floor condition within the area of required clearances, but in the case of power-assisted doors, that maneuvering area isn't regulated. It can be interpreted to mean level landings aren't a requirement at power-assisted doors.

Looking at the practical usage of power-assisted doors, the area where the activator is located needs to be level to allow activation of the door, but since there is no special maneuvering required, it really doesn't need to be considered "maneuvering space," just space to remain still while the button is pushed. The area within the ADAAG maneuvering clearances can be considered a part of a regular path of travel and that can be a ramp.

In response to the second part of the comment regarding the use of Unreasonable Hardship or Equivalent Facilitation, those provisions are not allowed, or as is noted at the end of 8-604, "...a waiver of an ADA accessibility requirement will not be entitled to DOJ certification as rebuttable evidence of compliance..." The use of Equivalent Facilitation, as noted in the CHBC proposed language, for private entities, public accommodation, etc. will not get the protection provided by certification. An explanation of certification is included in the Initial Statement of Reasons, but very simply stated, if a project is reviewed, permitted and constructed following the provisions of the CHBC Chapter 8-6, a jurisdiction or an owner can rely on the code to be used as defense.

Comment: 24. Section 8-703.1, Structural Survey, Scope. The addition to the last sentence requires an investigation only "...where these members are relied on for seismic resistance." On many of the older buildings architectural and veneer elements constitute a falling hazard. In many past earthquakes, veneers and architectural appendages have fallen off of buildings onto neighboring properties and public ways, causing injuries and death. This section requires that anchorages for veneers and

appendages be evaluated.

Response: This section states the scope of evaluating or surveying “a structure or portion of a structure”. The sentence being referred to states that “Details, reinforcement and anchorage of structural systems and veneers...” shall be determined and documented. The intent of stating “veneers” in the provision is to mandate analysis of connections “where these members are relied up for seismic resistance”. Any connection or member that can fail during a seismic event shall be evaluated, determined what the anchorage is and document the condition and capacity of the anchorage. A following section, 8-706.2.1 mandates that anchorages for veneers and decorative ornamentation shall be included when structural strengthening is required.

Comment: 25. Section 8-505.2.3 Reference is being made to UBC Standard 21-6 which may no longer be available after California adopts the 2006 IBC as part of the 2007 CBC. We suggest transcribing the standard into the CHBC and the California Existing Building Code.

Response: The Express Terms remove (strike) UBC Standard 21-6 and have inserted “the 2006 IEBC”. It is unknown if California will adopt the 2006 IEBC; whether it does or not will not affect use of it as a standard in the CHBC.

Comment: 26. Section 8-806.3 Deletion of Item 5 may imply that out-of-plane wall anchorage is not required for heavy adobe walls connected to more flexible roof or floor structure. While the existing language is poorly written we suggest that the following be replacement language: “5. Anchorage between roof and floor diaphragms to the bond beams or equivalent structural element shall be provided and the anchors or similar suitable design be compatible with the adobe material.”

Response: There has been a lot of discussion over the modification of Item 4 and the elimination of Item 5. Basically, the additions to Item 4 made Item 5 redundant. Specifically, the addition of the last part of Item 4, “to tie the building together and connect the wall to floor or roof”, is substituted for Item 5. The discussion on this section was over the use of “reinforced concrete” as the suggested solution for a bond beam. Over the past 10 years alternate technologies and increased knowledge of the behavior of adobe have made specific use of reinforced concrete overly prescriptive. The SHBSB decided to modify the wording to be generic, “bond beam or equivalent structural element” and to include the intent rather than the specific “tie the building together”.

The suggested language could be used, however given the amount of discussion already put into this item it is unlikely the proposed language will be changed.

Comment: 27. Section 8-807.1 Revise the last sentence to read: “Allowable diaphragm shear capacities published in the 21006 IEBC may be used.”

Response: The SHBSB will consider this suggestion.

Comment: 28. Section 8-810. The last sentence to the section should be revised to read as follows: “hollow clay tile bearing walls shall be evaluated and strengthened as appropriate to resist both in plane and out of plane lateral loads and their ability to maintain support of gravity loads. Suitable protective measures shall be provided to prevent blockage of exit stairways, stairway enclosures, exit ways and public ways from falling wall debris as a result of an earthquake.”

Response: The SHBSB will consider this suggestion.

Comment: 29. Section 8-811.2. Revise the section as follows: “Brick veneer with mechanical anchors

Response: Editorial comment accepted.

Comment: 30. Chapter 8-10. The requirements and permissiveness of this chapter are greatly misunderstood when enforced at the local level. Often applicants choose to invoke the section for certain items such as the design and type of exterior wall coverings but do not use historically compatible roof coverings. It would appear that the applicant needs to demonstrate the historical significance of the element in question when put into context with the district. Additionally it appears the individual buildings need not be a designated historical building and existing non-historical additions and alterations notwithstanding, may include historical elements or additions that may conflict with local urban wildland interface fire hazard requirements. The CHBC should make it clear that local adopted standards codified pursuant to findings filed with the Building Standards Commission, that new non-historical additions to non-designated building in historical districts may have to comply with the regular code as adopted and amended.

Response: This is a multi-part comment and the various parts are subdivided for clarity. This comment brings many of the issues that complicate applying code to historic buildings and properties.

The requirements and permissiveness of this chapter are greatly misunderstood when enforced at the local level.

Chapter 10 of the CHBC has been a problem for the SHBSB and the user. The first problem is with understanding what can be qualified for the CHBC. Things that are not buildings or structures can be designated as historic, can be qualified. A landscape, a garden, a grove of trees can be designated as historic. The battlefield at Gettysburg and Golden Gate Park (all 1700 acres of it), are listed on the National Register. The spaces between the buildings at Balboa Park are included in the nomination and are therefore eligible to use the CHBC.

It would appear that the applicant needs to demonstrate the historical

significance of the element in question when put into context with the district.

What constitutes qualification of a historical property is an important concept that needs to be understood. Every building that uses the provisions of the SHBC must be qualified as historical by a government authority (local, state or federal), where “appropriate” is interpreted: “a part of the government structure.” Whether that means the building is “historical” based on any other standard is not a concern of the SHBSB. What constitutes historical in one community may not be historical in another. There is no separate qualification of the elements that make up a historical building or property. The building or property is qualified in its entirety unless the authority designating the building or property makes specific mention of what is and what isn’t a part of the designation. Where a historical district is designated the authority usually specifies what elements are historic and what aren’t under a system developed by the National Park Service (see the response to comment #1).

Often applicants choose to invoke the section for certain items such as the design and type of exterior wall coverings but do not use historically compatible roof coverings.

The CHBC in many ways is misunderstood when it comes to “preservation” versus “building code.” Aesthetics color and design and materials are only under the scope of the CHBC if they are within the application of code. The CHBC has no authority over non-code related design issues. Design, style, color, and materials that affect the historic significance must be resolved at a local level. CHBC Section 8-102.1 Application, defines “code” for the use of the CHBC. (Also note the addition of the phrase “any agency with jurisdiction” in Section 8-102.1 and the explanation in the ISOR for that section.)

If there is a disagreement with the owner, the jurisdiction may use the help of a preservation board or their local authority that governs preservation issues to work with owners on design appropriateness.

Additionally it appears the individual buildings need not be a designated historical building and existing non-historical additions and alterations notwithstanding, may include historical elements or additions that may conflict with local urban wildland interface fire hazard requirements.

Where elements or additions are added to a qualified property they may or may not be qualified, the SHBSB would be the ultimate judge of that. Generally however something added that has a historical basis, existed at some point in time, etc. would be considered restoration or reconstruction. Something added new, to support or strengthen, provide for new uses, allow greater use or continued use would be considered rehabilitation. An addition would be something that expanded the floor area, height, size or that has no historical basis would be considered new.

“...Conflict(s) with local urban wildland interface fire hazard requirements.” The CHBC should make it clear that local adopted standards codified pursuant to findings filed with the Building Standards Commission, that new non-historical

additions to non-designated building in historical districts may have to comply with the regular code as adopted and amended.

The recent proliferation of ordinances designating Urban Wildland Interface and High Fire Zones has complicated administration of the CHBC and for historic wood roofing types in particular. The jurisdiction should be aware of requirements in Health and Safety Code §18959(f). This statute mandates making an express finding and filing that with the SHBSB. The reference in §19859(f) to Health and Safety Code 18944.7 alerts the user to the independence of the SHBC/SHBSB from the Building Standards Commission. The ISOR for CHBC Section 8-408 describes the authority of the SHBSB to review local amendments. New language in CHBC Section 8-408 clarifies the term “express finding” in H&SC as “express finding” combines two terms used in the creation of regulation. The word “express” is defined as “express terms” or the adopted language, and “finding” is defined as the statement of reasons for the adoption. The Board requires this documentation when the amendment is submitted so it is available when reviewing application of local amendments to the CHBC.

Response to comments received by mail from
Heritage Architecture and Planning
San Diego, California
David Marshall, AIA
July 21, 2006

General comments:

1. The proposed change replacing the term “structure” with “properties” will exclude some historic elements. There are many historic structures that will no longer be covered under buildings or properties. I would suggest that the phrase should be "buildings, structures, and properties." The word structure is used throughout the IEBC and should be kept in the CHBC.

Response: See the response to comment #1 from San Diego Building and Safety.

2. The proposed change replacing the term “alternative” with “solution” seems to be awkward in many locations. The revised sentences do not read well in many instances and may become unclear. Alternative is defined as “The choice between two mutually exclusive possibilities.” Solution is defined as “The method or process of solving a problem.” Either wording will work, but if changed to “solutions,” the sentences need to be revised for clarity.

Response: The word “alternative” was replaced with “solution” by using a find and replace function. We have attempted to find and resolve any confusing places where the words were exchanged.

3. The proposed change replacing the term “automatic fire extinguishing system” “automatic sprinkler system” limits the possibilities for systems that may be used. Change does not allow for any option other than sprinklers. This should be kept automatic fire extinguishing system.

Response: See the response to comment #14 from San Diego Building and Safety.

Specific Code Comments:

Section 8-102.1.4 Continued Use. The added text that the building’s existing use be verified to have “conformed to the code or to the standards of construction in effect at the time of construction.” This is extremely burdensome for an architect to research and prove when requested by a building official. UBC date back to the 1930s. Before that there were only vague standards and trade books that will likely not show specifics. This can lead to numerous complications.

Response: We realize that there is no specific reference that can be cited for pre-code standards. The SHBSB discussed adding this language since it has used this concept

as precedent for many years. This concept follows the precedent embodied in regular code that a building maintained in “as constructed” condition is not subject to upgrading to the provisions of modern codes. There are also numerous books published before the advent of city codes or UBC that describe building construction and design standards for nearly any era.

Section 8-104.2.1. This section mandates that “All state agencies ... shall consult and obtain SHBSB review prior to taking action or making decisions ... that affect qualified historical buildings...” This mandates action from the SHBSB as opposed to allowing the Certified Local Governments to review and advise on the historical building or property within their jurisdiction. This change will likely result in an increased workload for the SHBSB, and longer review periods.

Response: The CHBC applies to the owners of qualified historical buildings or properties. We cannot think of a situation where a state owner is subject to a certified local government, but if there is such a case, Health and Safety Code §18961 applies as repeated in Section 8-104.2.1.

Chapter 8-2 Definitions.

Adaptive Reuse - The definition for Adaptive Reuse has been removed. This should be retained in the SHBC as it directly relates to many historical projects.

Response: The SHBSB has removed a number of definitions that are better defined by the Secretary of the Interior’s Standards.

Distinct Hazard – The word “hazard” was left out of the text at the end of the sentence.

Response: Editorial comment accepted.

Preservation – As written, the first sentence does not read clearly. Also, the term structure should be added in this definition. The end of the first sentence should read “... to sustain the existing form, integrity, and materials of a qualified historical structure, building, or property.”

Response: The “an” should not have been added. The part of the sentence referred to should read: “a qualified historical building or property” to be consistent with the rest of the code.

4. Definitions. Period of Significance. The addition of the word “qualified” for historic buildings follows the definition very clear. The addition of “qualified” related to historical significance does not follow the definition given and will add confusion to the process. The definition of historical significance should be sufficient as stated without adding the word qualified.

Response: The SHBSB will consider this recommendation.

Structure – This definition is included and should remain as part of the SHBC.

Response: Noted.

Section 8-301.1. The phrase revised as “to provide solutions regulations” is awkward and confusing.

Response: There are other places where “alternatives” and “solutions” were replaced incorrectly. They will be corrected.

Section 8-302.2. Change in occupancy revisions seem to rely solely on the IEBC and do not allow for any alternatives which is how the CHBC was first intended. This shows a tendency to be more prescriptive than non-prescriptive and less flexible, which we fell is a mistake.

Response: The SHBSB has made a precedence of looking at “relative hazard” when considering changes of occupancy. Precedence is developed during reviews and appeals by the SHBSB. The SHBSB has proposed to quantify “relative hazard” and codify precedence with the addition of this provision. Comment was received regarding the IEBC table referenced; it should be 912.5 Heights and Areas Hazard Categories.

Section 8-302.5.1

The reasoning for providing sprinklers in stories over 75 feet is not clear. While the fire department can reach these areas, fire naturally travels up and it makes more sense to sprinkle the whole building if it is required or to show an approved alternate method.

Response: See response to comment from the City of San Diego. For more information about this issue you can read the articles on the following web sites.

<http://www.fpemag.com/articles/article.asp?i=228>

<http://www.facilitiesnet.com/BOM/article.asp?id=2426>

Section 8-303.1

The first sentence reads awkwardly. “The purpose of this section is to provide solution regulations ...” Alternatives is still a better word to use here.

Response: Editorial comment accepted.

Section 8-303.3

The text needs to be changed from “historic” to “historical.”

Response: Editorial comment accepted.

Sections 8-303.6

Correct the words “open able” to “openable.”

Response: Editorial comment accepted.

Sections 8-401.1

The second sentence starts with “the,” revise to “The.”

Response: Editorial comment accepted.

Section 8-410

Previously discussed change from “fire extinguishing system” to “sprinkler system.”

Response: See the response to comment #14 from San Diego Building and Safety.

Section 8-410, exception

This is a case where “alternative” is the best wording and “solution” is not appropriate. This should read “When an alternative life safety system or other technology is approved by the enforcing agency.”

Response: Editorial comment accepted.

Section 8-412 High Rise Buildings

This is a new section that may have serious negative consequences for historical buildings. This should be changed to allow the enforcing agency some latitude for historical buildings. It should read “... as amended by the CHBC or as approved by the enforcing agency.”

Response: The SHBSB will consider this comment.

Section 8-502.2

This new section was derived from the old section 8-502.1, #3. The major change is that the stairway width was removed from the text. This will have a major negative impact on a historical building if the existing stairway width is required to be changed.

Response: There is no intent to change the provision of stairway widths. The SHBSB will consider this comment.

Section 8-502.5

Text changes are needed for this new item. First sentence should read “one” not “on.” Second sentence should be changed to read “... when open with a sill that is no more than ...”

Response: Editorial comment accepted.

Section 8-503

This statement should be noted as 8-503.1.

Response: The format issue is with 8-504.1, where single provision sections should have no additional numbering.

Section 8-504.1

This states that if there is a change in occupancy, the existing railing height cannot remain unless it meets current code. This should be revised as it will have major affect on interiors for any historical building with an occupancy change, even to a lower hazard level.

Response: The intent of this provision is to codify precedent used over many years. Railings and guard railings may be continued unless there is some overriding hazard created. The sentence reads, "...unless a distinct hazard has been identified or created by a change in use or occupancy." The sentence can be read, a distinct hazard "has been identified," or, "is created by" a change in use or occupancy." We don't see a problem with the wording changing the intent.

Section 8-602.1 and 602.2

The term "qualified historical significance" is not defined and may cause confusion to the enforcing agency. This should read "historical significance."

Response: The board will consider this comment.

Section 8-603.3 and 603.4

The exceptions both state that alternatives "do not apply to alteration of commercial facilities and places of public accommodation." This will directly affect historical buildings that are commercially used and may deter their retention of storefronts or their reuse at all for commercial spaces. These exceptions should be reviewed and revised.

Response: We are aware that the new provisions are a major change from the 1998 CHBC. As stated at length in the ISOR the provisions of this chapter must align with ADAAG or the benefits of certification to the users of the CHBC will not be realized. Simply stated, for Title III entities, the minimum standards of ADAAG are the only alternatives available for commercial properties providing public accommodation.

Section 8-603.6

This is a major change for historical buildings. This reduces the height for a 1:10 ramp by over half what was approved previously. This should be left as was originally approved in the CHBC.

Response: See the response for the comment above.

Section 8-701.2

The first sentence should read "The intent of the CHBC is to ..."

Response: Editorial comment accepted.

Section 8-704

These two items should be 8-704.1 and 704.2.

Response: Editorial comment accepted.

Section 8-705.2

The two items following this section should be 8-705.2.1 and 705.2.2.

Response:

Section 8-706.1

The second sentence does not read clearly. “2006 IBC requirements but the seismic base shear need not exceed 0.45W.” This should be revised.

Response: The editorial problem is the part of the sentence, “1995 Edition of the California Building Code (CBC).” should be stricken.

Section 8-706.6

The first sentence should read “Non-structural features of a qualified historical building...”

Response: Editorial comment accepted.

Section 8-808.2

The word “structure” was removed and no word added in its place. This is an appropriate place to leave the word “structure.”

Response: Editorial comment accepted.

Comments received by mail from
Page and Turnbull
Melisa Nelson Gaudreau
San Francisco, California
July 21, 2006

Footer. State Historical Building Code. Change to California Historical Building Code – for consistency.

8-102.1.4. If such use or occupancy conformed to the code or to the standards of construction in effect at the time of construction How does one establish standards of construction in effect at time of construction? If building permit records do not exist, what is recognized standard?

Response:

8-104.2.1. "...obtain SHBSB review prior to taking action..." It would be helpful to describe more specifically what kind of action this refers to & what format the typical review process would follow.

Response:

8-2 Definitions. Definitions Administration Remove the word Administration from the title.

Response:

8-2 Definitions - Distinct Hazard. "...constitute a distinct." Change wording to "constitute a distinct hazard."

Response: Editorial change accepted.

8-2 Definitions - Cultural Resource. Building, site, property, object, or district...Use the wording "building, site, structure, object or district"... to be consistent with the Secretary of the Interior's Standards. Property and resource are words that are interchangeable, not property and structure. Building, site, structure, object, or district are words that refer to a different level of detail – and should not be listed with property in this context.

Response: The Board's intent in striking "structure" and adding "property" to the definition of cultural resource in the CHBC is to make the cultural resource definition match the Qualified Historical Building or Property definition.

8-2. Definitions - Fire hazard. "Any condition or act which increases, or an increase in the hazard..." Change wording to "Any condition ~~or act~~ which increases, or ~~an increase~~

contributes to an increase in the hazard..."

Response: The Board will consider the proposed language.

8-2. Definitions. Include a definition of "notification system."

Response: The only instance of "notification system" in the proposed CHBC is in Section 603.2.3. That language is taken directly from AADAG. Please note: the CHBC limits the distance from AADAG, which is unspecified, to 200 feet.

8-2. Definitions Qualified Historical Building or Property. "Any building, site, property, object, place, location, district..." See comment regarding the definition of "Cultural Resource".

Response: The intent is to make the terminology "Qualified Historical Building or Property" match the definition in Health and Safety Code §18955. The definition in the statute was created in 1975, and was intended to make the SHBC inclusive of all possible resource types. It is worth noting that the first edition of the Secretary of the Interior's Standards was published in 1976. While the SHBC has been added to many times to clarify and strengthen the intent, the commenter should know that making a significant "overhaul" of the statute would be a time consuming political process. The confusion created by the definition is only significant to someone familiar with the "Standards" and of course many users have little professional experience with preservation standards. The SHBSB changed the wording from "structure" to "property" in the 1998 CHBC. It is important that the reader be able to substitute any of the nouns in the definition with "property." For instance, the phrase could be "historic building or site" or "historic district or object."

8-2 Definitions. Qualified Historical Building or Property. "This shall include qualified historical buildings or properties on..." Do not overuse the word qualified when the aim is to define qualified historical buildings. Change wording to "This shall include ~~qualified~~ historical buildings or properties on..."

Response: The Board will consider this comment.

8-2 Definitions. Qualified Historical Building or Property. "...city or county registers, inventories, or surveys of qualified historical or architecturally significant...Change wording to city or county registers, inventories, or qualified surveys of historical or architecturally significant..."

Response: The Board does not wish to change the definition to make surveys "qualified." The SHBSB recognizes any list that is "deemed of importance ... by an appropriate local, state or national governmental jurisdiction" as being qualified. See the response to a similar comment from Laurie Management LLC.

8-2 Definitions. Qualified Historical Building or Property. Entire Definition. The word “qualified” needs a definition in this context.

Response: See above.

8-2 Definitions. Qualified Historical Building or Property. Entire Definition. This definition differs from the definition for qualified historical building or facility given in ADA 4.1.7(b). This is confusing when CHBC references ADA, and definitions regarding (to what the code applies) are not consistent.

Response: There can be confusion when trying to make two separate codes work with each other. It would have been simple to just cite AADAG but it would eliminate all options available under the 1998 CHBC. The new Chapter 8-6 keeps much of the 1998 provisions. The intent of Chapter 8-6 is to make clear that where Title III entities are concerned AADAG 4.1.7(3) governs completely, including any definitions that are inherent to those guidelines.

8-302.2 2. 2006 IEBC. Cite particular section in 2006 IEBC, as done for other citations. (Typical)

Response: The reference to Life Safety and Exits in the 2006 IEBC should be to Table 912.5, Heights and Areas Hazard Categories. The Board will make this change.

8-302.5.1. With only the stories over 75 feet provided with an automatic fire sprinkler system. Based upon general intuition, not on any background in fire protection engineering, this provision seems odd. Thinking about path of travel and flow of people exiting the building at the ground level, it would seem that sprinklers would be required at lower levels.

Response: See response to comment from the City of San Diego. For more information about this issue you can read the articles on the following web sites.

<http://www.fpemaq.com/articles/article.asp?i=228>

<http://www.facilitiesnet.com/BOM/article.asp?id=2426>

8-410.2 1. Forth Change to fourth

Response: The editorial change is accepted.

8-602 .2.2. Documentation. It seems this reference should be consistent with 8-604.3. It is not clear, as stated, who is responsible for the producing the documentation. Is any format acceptable?

Response: The documentation required in 8-602.2.2 is for the use of any of the AADAG alternate provisions. The documentation required in 8-604.3 is for an

“exception” which is a significant deviation from the AADAG provisions. The Section title “Equivalent Facilitation” is a term used in the CHBC and the provisions provided in that section are unique to the CHBC. Please note that these provisions are only acceptable for Barrier Removal projects and Title II entities.

8-603.6 1 A lift or a ramp of greater than standard slope but no greater than 1:10 for horizontal distances not to exceeds 5 feet. Change “exceeds” to “exceed.” This provision differs from ADA 4.1.7.(3), where there is no mention of 1:10 ramp – which governs?

Response: The editorial change is accepted. The 1:10 ramp is only available for Barrier Removal and Title II entities.

8-603.6 2 Access by ramps of 1:6 slope for a horizontal distance not to exceed 13 inches. This provision differs from ADA 4.1.7.(3), where 1:6 ramp is not to exceed 2 feet – which governs?

Response: The Access Board is considering, and will likely change their requirement to 13 inches. The CHBC is anticipating that change and has therefore proposed that requirement.

8-604.3 Note. Does the Note apply to the text immediately below (Equivalent facilitation for an element of a building...)? This format is used differently in CHBC (see 8- 714 where it seems to be a stand alone sentence) and is not entirely clear.

Response: It is unclear where Section 8-714 occurs, however the response is clear. The note applies to equivalent facilitation for Title III entities.

8-604.3. “Equivalent facilitation for an element of a building or property when applied as a waiver of an ADA accessibility requirement...” This is a loaded sentence and seems to have tremendous implications. Where can users of this code access further detail, description & explanation? Shouldn’t guidance be referenced?

Response: We know of no reference for this statement. The language was recommended by Fed DOJ and proposed by SHBSB for this amendment. It relates to use of any kind of “equivalent facilitation” or “exception” to the requirements contained in AADAG §4.1.7(3). Please read the last sentence in the Initial Statement of Reasons for Section 8-604 for the best explanation we can offer.

Appendix A. The United States Secretary of Interior Standards for the Treatment of Historic Properties... Shouldn’t all be cited: The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings... The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.

Response: Appendix A was intended to be a part of Chapter 10. It was moved to Appendix A when that part was created. The citation should be as you have recommended. The Board will consider this recommendation.

Comments received by mail from
Lurie Management, LLC
San Francisco, California
Arnie Hollander, Vice President and Project Director
June 19, 2006

Comment: 1 Chapter 8-2 (should this read Section 8-2?) defines “qualified historical building or property” as a building or property on a “qualified” list. It would be helpful if there were some clarification as to what constituted a “qualified” register, inventory or survey (hereafter called a list). We have seen such lists used by cities that were prepared by a college architecture class and not prepared by a professional historian, architect or the like. Such lists are questionable as to the consistency, accuracy and thoroughness. Is there intended to be a way to required that any list that is to be deemed a qualified list be first review by a professional historian, historic architect or the like before the list can be considered a being qualified?

Response: The response to the first part of the comment is the CHBC is organized by Chapters and Sections. Chapter 8-2 is Definitions. The response to the second part of the comment is that the SHBSB has recognized any list that is “deemed of importance... by an appropriate local, state or national governmental jurisdiction.” The SHBSB interprets the definition to mean any list that a jurisdiction deems valid and or adopts. “Appropriate” is interpreted to mean a government body, commission, council, board or agent of a government entity. Whether that means the building is “historical” based on any other standard, or has other policy or governmental implications is not a concern of the SHBSB. The SHBSB has supported the most inclusive definition possible in order to provide the CHBC to the broadest possible set of historical buildings or properties.

Comment: 2. Section 8-410 and related fire sprinkler sections discusses the need for fire sprinklers in high rise and other buildings according to various codes (e.g. NFPA 13). Many communities limit the piping used to do such work to galvanized metal piping. A long standing debate has taken place in California as to if the state should allow the use of fire rated plastic sprinkler piping instead of the metal piping or not? We hope that the answer is yes because it will encourage more building owners to install sprinklers due to its lower installation cost and superior ability to be used in and around historic fabric and building elements.

Response: The 2001 California State Fire Code, Section 1003 – Fire Extinguishing Systems. Section 1003.1.2 Standards, references 1997 Uniform Building Code Standard 9-1. “Fire extinguishing systems shall comply with the Building Code. (see UBC Standard 9-1). 1997 UBC Standard 9-1 in Section 2-3.5 as amended by section 9.101 – Amendments states: “Other types of pipe or tube, such as plastic, may be used if it is investigated and found to be listed for this service.” Plastic pipe is available and has been used in California for years.



Comment: 3. Section 8-502.3 and Section 8-504 says that if there is a “distinct hazard” a property is to use regular building codes instead of those in the CHBC. If a distinct hazard is deemed to exist one is not allowed to keep historic elements in a building. It appears that a local jurisdiction has only to say that a distinct hazard exists and then, presto, elements of a building built to a standard that differs from current codes will have to be changed. Codes change mostly because somebody determined that the new code was safety than the old code. If one accepts that approach we will never be able to qualify an element of a building as not being a distinct hazard. This section needs to be very clear that a significant hazard has to exist before a code interpretation can require an historic element of a building (i.e. stair risers) to be redone to new code requirements. Some difference in the absolute level of safety that is required needs to be permitted to remain.

Response: Distinct hazard is defined as “Any clear and evident condition that exists as an immediate danger to the safety of the occupants. Conditions that do not meet the requirements of current regular codes and ordinances do, not of themselves, constitute a distinct hazard.” The comment has been dwelt with in the earlier CHBC editions.

Comments received from the
Historic Preservation Review Commission
County of Tuolumne
Sonora, CA
Shelly Davis-King
July 21, 2006

Definitions

Comment: Architectural Significance. Why was this definition deleted?

Response: Unless a CHBC specific use of this word requires a unique definition, the SHBSB has determined that similar definitions to the Secretary of the Interior's Standards would be confusing or repetitive.

Comment: Building. The word "property" has replaced "structure" throughout the document but it is not adequately defined. The definition for "structure" remains (p.9) and structure property refers to a number of historical features (access ways, courtyards, ditches, fences, flume, gardens, landscapes, mines and related equipment, open space, parking space, patios, promenades, towers, wells and other utility systems, and others).

Response: Where the word "property" is used in the phrase "qualified historical building or property," the phrase is defined, not the word. In some places, mostly in Chapters 8-7 and 8-8, the word "structure" is used singularly and is therefore defined in Chapter 8-2.

Comment: Character-Defining Feature. Line 2: "a" is the proper article before "historical"

Response: The editorial comment is accepted.

Comment: Distinct Hazard. Line 3: "constitute a distinct" – insert "hazard" before the period.

Response: The editorial comment is accepted.

Comment: District. Why is definition deleted?

Response: See response above.

Comment: Preservation. Line 2: "an" should be "a" qualified historical property..."

Response: The editorial comment is accepted.

Comment: Qualified Historical Building or Property. Line 2: “structure” is deleted and replace by “property,” but is not deleted in line 3, “collection of structures.”

Response: Structure was stricken and property was inserted by mistake.

Comment: 8-301.1 Purpose. “Solutions regulations” makes no sense, nor does the substitution of “solution”, a noun, for “alternative, an adjective, elsewhere in the proposed regulations.

Response: “Alternative” was replaced by “Solution” using a word processor find/replace function which caused a number of grammatical errors that must be corrected.

Comment: 8-410.1 Exception. “a” should be “an” and see comment re: “solution” above.

Response: Both editorial comments are accepted.

Comment: 8-703.1 Scope. 8-703.3. Historical Records. 8-704 Non-Historical Additions and Non-Historical Alterations. 8-706.5 Non-Structural Features. 8-801.3 Scope. 8-806.3 Requirements. 8-809 Steel and Iron. Replace “structure” with “building or property” for consistency with proposed changes in the rest of the document.

Response: The SHBSB considered the use of the word “structure” in this instance and decided to leave it there. When the section is headed “Structural Survey” within a Chapter headed “Structural Regulations,” and when the intent of the chapter is directed towards structural engineering, the Board feels the word is used correctly. The word is also left in Chapter 8-2, Definitions.

Comment: 8-706.3 Load Path. Lines 2 and 3, insert “system” after “structure” (i.e. “portion of the structure system to the ground.”

Response: The Board will consider this change. “Structure” should be changed to “structural,” “structural system.”

Comment: 8-801.1 Purpose. Add “s” to “require”. “The CHBC requires enforcing agencies...”

Response: The editorial comment is accepted.

Response to comments received by e-mail from
Nels Roselund
San Gabriel, California,
Friday July 7, 2006

Comment 1. Section 8-706.1 Lateral Loads.

The first and second sentence is unclear. Should “the 1995 edition of the California Building Code (CBC)” be shown as deleted? Or should there be a phrase that relates the first sentence to the reference to the 2006 IBC.

Response: The reference to the 1995 CBC is incorrect. The first sentence should appear in Express Terms as follows: “The forces used to evaluate the structure for resistance to wind and seismic loads need not exceed 0.75 times the seismic forces prescribed by the ~~1995 Edition of the California Building Code (CBC)~~. 2006 IBC requirements but the seismic base shear need not exceed 0.45W.”

Comment 2. Section 8-706.5. Non-Structural Features. “Non-structural features of a an qualified historical structure.”

Should “a” not be deleted and “an” not be added?

Response: The editorial comment is accepted.

Comments Received from the
California Energy Commission
Gary Flamm, Lighting Program Lead
Sacramento, CA
July 25, 2006

I was able to review your 45 day language, and I had no comments.

I am hoping that we will be able to work together to improve the Title 24, Part 1 and Part 6 language for the 2008 update.

Thanks,

Gary Flamm
Lighting Program Lead
California Energy Commission
1516 Ninth Street, Mail Stop 25
Sacramento, CA 95814

Comments received from
ELT Associates
E. Leroy Tolles, P.E. Ph.D.
Lafayette, California
July 21, 2006

Comment: I am writing concerning the proposed changes to the CHBC. My particular expertise is in the seismic design and retrofit of adobe buildings. In previous discussion with Loring Wylie, I understand that the intention of the new CHBC is not to make any significant changes to the design values. Nevertheless, it appears that the net affect on the static design values has increased by over 10 percent compared to the 2001 version of the CHBC. Given that I feel the previous design values were adequate, I hope that the lateral force values can be decreased. Alternatively, the allowable stress levels for adobe should be increased. The previous maximum lateral force base shear was $0.132W$ and the allowable shear stress was 4 psi. The allowable stress is now increased to 12 psi but in converting to the strength design values the lateral force limitation is $0.45W$. The preferred lateral force value would be just under $0.40W$ to keep the net affect on design the same as in the 2001 version of the CHBC. The more fundamental problem is the use of static design methodologies for use on thick-walled buildings but that is beyond the scope of the current CHBC.

Response: The Board will consider this comment. The value of $0.40W$ is a reasonable value.

Comments received from
Fred Webster, Ph.D, P.E. Fred Webster Associates
Menlo Park, CA
May 22, 2006

Chapter 8-7 Structural Regulations

Section 8-706.1 Lateral Loads:

Comment: The "1995 Edition of the California Building Code (CBC)" should be scratched.

Response: The editorial comment is accepted.

Comment: The "need not exceed 0.45 W" statement in the first sentence appears to be a ratcheting up of the base shear requirement over what has been in use in the 1994 UCBC, the basis for addressing unreinforced masonry in the 2001 CHBC. Both the 1994 and 1997 editions of the UCBC specify a minimum lateral design force in seismic zone 4 of 0.132 W for an occupancy load of 100 or more, and 0.1 W for lesser occupancy loads. Using a factor of three (3) to transform from the working stress design basis of the 2001CHBC to a strength design basis of the Express Terms –State Historical Building Code, as is done in Section 8-806.5 for the strength based allowable shear for adobe, the first minimum would correspond to a limit of 0.4 W, the second to a limit of 0.3 W. I see no compelling reason to extend the limit to 0.45 W. Why not use 0.4 W or 0.3 W as the limit for unreinforced masonry? For other materials, the 0.75 times the lateral forces prescribed by the 2006 IBC appears to be compatible with the lateral force basis in the 2001 CHBC;

Response: The Board has looked back at buildings designed under the 1998 CHBC and no issues have been raised about their performance (when properly designed and detailed) during recent seismic events. The regular code has continued to raise the requirements for seismic design of new buildings. This is partially because the design and materials of construction continue to change. The historic (original) design of unreinforced masonry buildings does not change. There are no "new" historic URM buildings, only more of the old ones to be retrofitted. The Board does not want to raise the requirement for seismic design. Other comments have expressed concern over the proposal for 0.45W maximum base shear. The Board agrees that the base shear requirement of .40W is acceptable.

Comment: The Express Terms –State Historical Building Code references both the 2006 IBC and the Chapter A1 of the 2006 IEBC for determining lateral load regulations. When Chapter A1 of the 2006 IEBC and the 2006 IBC have different requirements for the same thing, and the IEBC requirement is more restrictive, which should govern? For example, Section A113.1.3 of the 2006 IEBS specifies a minimum anchorage for masonry walls of 0.9 SDS times the tributary weight. Whereas, Section 12.11.2.1 of the ASCE 7-5, which is adopted by the 2006 IBC, specifies the out-of-plane force for the

anchorage of masonry walls be 0.8 SDS times the tributary weight.

Response: The CHBC reference to the 2007 CBC value pertains to all types of construction while the CHBC reference to the IEBC pertains specifically to URM. While the referenced 2007 CBC does have a masonry standard, it is the intent of the CHBC to have that overridden by the IEBC standard.

Comment: The following comment is relative to Sections 8-806.3 Requirements and 8-806.5 Shear Values:

- The h/t requirements for one- and two-story adobe buildings in Section 8-806.3 of the Express Terms –State Historical Building Code (e.g., 6 for a one-story structure) are more restrictive than those in the IEBC (e.g., 8 for a one-story building), but the maximum shear stress allowed in Section 8-806.5 is less restrictive than the IEBC (12 psi versus 9 psi). Why do these discrepancies still exist when I thought one of the ideas for rewriting the CHBC was to tie it to the latest IEBC, thereby making it less confusing to use these documents?

Response: The intention for amending Chapter 8-7 and 8-8 was not to tie them to the IEBC. The Initial Statement of Reasons explains why the two structural chapters have been amended: "...amendments... are necessary for the CHBC to be compatible with the new regular code." The Board has attempted to change the provisions as little as possible and some discrepancies are carried over from the previous CHBC.

Comments received from
WISS, JANNEY, ELSTNER ASSOCIATES, INC.
Emeryville, CA
Una M. Gilmartin, P.E., Senior Associate
21 July 2006

Mr. Richard Conrad, FAIA
Executive Director California Historical Building Code Safety Board
1102 Q Street, Suite 5100
Sacramento, CA 95814

Comment: We are writing in response to proposed changes to California Historical Building Code Section 8-706 Lateral Load Regulations. Wiss, Janney, Elstner Associates, Inc. regularly uses the CHBC for seismic retrofit design for both private clients and state agencies, such as the State of California Department of Parks and Recreation.

We want to express our concern with the provision of *Section 8-706.1 Lateral Loads*, as currently proposed. Although it is somewhat unclear in the express terms, because the “1995 Edition of the California Building Code” has not been stricken, it appears that the intent is to change the lateral load basis from the 1995 CBC to the 2006 IBC (International Building Code). The initial statement of reasons justifies this change as necessary to “keep up” with the strength based methodologies of current code provisions, intended for new construction. The initial statement of reasons asserts that “there will be little change in how this section affects the actual construction of seismic retrofit, rehabilitation, restoration of qualified buildings and properties.”

Comment: The change of code basis from the 1995 CBC to the 2006 IBC, is in fact a significant and substantive change with great repercussions for the qualified historic buildings in California.

Response: The Building Standards Commission has adopted the 2006 IBC as the 2007 CBC. The CHBC will refer to the 2007 CBC where appropriate.

Comment: In reviewing ASCE 7-05, the basis of the 2006 IBC, it is apparent that many of the lateral force provisions have the potential to greatly increase the required lateral design forces for historic buildings. For example, many historic buildings would not be considered redundant structures per the IBC; this provision alone would increase the lateral forces for design by 30%. Many of the other lateral force provisions in the IBC, while appropriate for new construction are not appropriate for historic structures. Changes in seismicity in the 2006 IBC also have the potential to further inflate the required lateral forces for design.

Response: The 2007 CBC does have additional requirements for non-redundant structures, and many historic structures will be considered non-redundant. The CHBC mandates a limit of any increase due to redundant structure requirements by the specifying a maximum base shear maximum of 0.45W. Please note other responses. Because of comments about that limit, the Board has proposed to lower that requirement to 0.40W.

The second comment is assumed to be about near fault forces. The Board has decided that the CHBC shall address near fault issues. The fact that forces are greater nearer a fault is unarguable. To assure that retrofitted historic buildings perform to a “life safety” level, designers must assess the “hazard” presented. As with many of the CHBC provisions, there is broad room for interpretation and encouragement to resolve issues on a case by case basis where they are not easily resolved by broad scale provisions that are typical of the CHBC. When a problem is not resolvable between a designers or jurisdiction’s interpretation of this requirement, the SHBSB will provide consultation as required to resolve the issue.

Comment: Seismic upgrading is not without impact to historic buildings; oftentimes new structural elements are negative and irreversible intrusions in a historic structure. As proposed, this change to the CHBC is likely to have a significant effect on the historic resources of this state. Our opinion is that, if adopted, this provision will have a significant adverse and cumulative impact on the historic resources of the State of California, one that must be formally considered under the California Environmental Quality Act (CEQA), prior to adoption.

Response: This respondent is not an expert in CEQA, however your comment was received under California Rulemaking that is a public involvement process. The intent of CEQA was to bring decision making into the public domain through requirements for public access to the process. California Rulemaking gives the public the same or greater access to the process. The public and the decision makers may not agree on some of the eventual decisions, the process is there to attempt to incorporate reasonable proposals or explain the rationale behind the final decisions.