

PSFSS COMMITTEE AGENDA:

ITEM:

CED COMMITTEE AGENDA:

ITEM: 41



Memorandum

**TO: Community and Economic Development
Public Safety, Finance and Strategic
Support Committees**

**FROM: Joseph Horwedel
Darryl Von Raesfeld**

SUBJECT: See Below

DATE: October 8, 2007

Approved Paul Kruth Date 10/12/07

SUBJECT: Summary of the Ordinance for the Adoption of the 2007 California Building Standards, CCR Title 24, Parts 2, 3, 4, 5, 8, and 10, and the International Existing Building Code Appendix Chapters A2 and A3

RECOMMENDATION

Direct staff to present to the City Council an City Ordinance amending Title 24 of the San Jose Municipal Code (1) to adopt the 2007 editions of the California Building Code (CBC), California Electrical Code (CEC), California Mechanical Code (CMC), California Plumbing Code (CPC), California Historical Building Code (CHBC), California Existing Building Code (CEBC) and the International Existing Building Code Appendix Chapters A2 and A3 and (2) to adopt local amendments regarding certain structural design requirements, compliance with FEMA regulations, fire sprinkler regulations, and other building, electrical and plumbing requirements.

BACKGROUND

Prior to 2000, there were three model codes in the United States. The model codes were published by three code making organizations - the International Conference of Building Officials (ICBO), the Building Officials and Code Administrators International (BOCA) and Southern Building Code Congress International (SBCC). In 1994, ICBO, BOCA, and SBCC created the International Code Council (ICC) to develop a single set of comprehensive and coordinated model construction codes for use throughout the United States. By 2000, a complete set of construction codes was published by the ICC. Upon its publication in 2000, most of the states adopted the combined and comprehensive International Codes. In 2007, California and Hawaii became the last states to adopt the International Code Council model codes as the official state building related codes.

On January 30, 2007, California adopted and approved the 2007 edition of the California Building Standard Codes. The 2007 California Building Standard Codes will apply to any

October 8, 2007

Community and Economic Development and
Public Safety, Finance and Strategic Support Committees

Subject: Summary of the Ordinance for the Adoption of the 2007 California Building Standards, CCR Title 24,
Parts 2, 3, 4, 5, 8, and 10, and the International Existing Building Code, Appendix Chapters A2 and A3

Page 2

building or structure for which application for a building permit is made on or after January 1, 2008. While the 2007 CBC is based on the 2006 International Building Code, the 2007 CMC and 2007 CPC are still based on the 2006 Uniform Mechanical Code and the 2006 Uniform Plumbing Code respectively.

Due to the substantial differences between the current 2001 CBC and the new 2007 CBC, staff in its September 2007 report to the Community and Economic Development (CED) and the Public Safety, Finance and Strategic Support (PSFSS) Committees provided a timeline for the adoption of the 2007 California Building Standards that included roundtable meetings and training sessions to assist the customers in understanding the code changes.

The State of California allows local municipalities to modify the state adopted building standards to make them more restrictive (not less), provided certain express findings are made that the proposed modifications are necessary due to special local climatic, geological, or topographical conditions that can affect the health, welfare, and safety of local residents. Any local amendments must be made prior to the effective date of State Codes (January 1, 2008).

In accordance with the timeline, staff is presenting for approval of the CED and PSFSS Committees a summary of proposed amendments to Title 24 of the San Jose Municipal Code to Adopt the 2007 California Building Standards, California Code of Regulations (CCR) Title 24, Parts 2, 3, 4, 5, and 10, and the International Existing Building Code Appendix Chapters A2 and A3. Upon approval, staff will present to the City Council proposed amendments to the 2007 California Building Standards.

The Building related codes that will be adopted in the proposed ordinance are:

- 2007 California Building Code - CCR Title 24 Part 2
- 2007 California Electrical Code - CCR Title 24 Part 3
- 2007 California Mechanical Code - CCR Title 24 Part 4
- 2007 California Plumbing Code - CCR Title 24 Part 5
- 2007 California Historical Building - CCR Title 24 Part 8
- 2007 California Existing Building Code - CCR Title 24 Part 10
- 2006 International Existing Building Code, Appendix Chapters A2 and A3

ANALYSIS

Participation in the Code Adoption Process and Uniformity in Local Code Amendments

The City of San Jose was well represented during the state adoption process. The City's Chief Building Official and Fire Marshal were key members of the State Fire Marshal's Core Committee that reviewed all proposed state amendments to the 2006 International Building and Fire Codes. Additionally, Building and Fire staff members were significant contributors in the

October 8, 2007

Community and Economic Development and
Public Safety, Finance and Strategic Support Committees

Subject: Summary of the Ordinance for the Adoption of the 2007 California Building Standards, CCR Title 24,
Parts 2, 3, 4, 5, 8, and 10, and the International Existing Building Code, Appendix Chapters A2 and A3

Page 3

state's various working groups that reviewed the 2006 International Codes and recommended state amendments to the Core Committee.

To establish uniformity in adopting code amendments in the Bay area, City staff worked with other local jurisdictions by participating in the Tri-Chapter Uniform Code Program. The cities and counties that participate in this program stretch from Contra Costa County in the north to San Benito County in the South. As a result of this program, eight technical amendments are being proposed based upon local geographic, topographic and climatic conditions. These amendments will be adopted uniformly in the neighboring cities and counties with some local variations. At both regional and state levels, Staff will continue to assume a leadership role in order to reduce individual differences between cities in Silicon Valley.

Green Buildings

The California Building Standards being adopted do not address the requirements for the design and construction of green buildings. However, the California Building Standards Commission recently created a committee whose task is to formulate the State's Green Building Codes. Staff will continue to maintain communication with state code officials in order to ensure that the City is aware of developments pertaining to green buildings.

At the local level, Planning, Building and Code Enforcement staff will continue to participate in developing a private sector green building program that will facilitate and streamline the process for "green" proposals. In addition, Staff continues to train on new developments in alternative energy and design developments to ensure that the City can process permits for "green" projects smoothly.

Summary of the Ordinance

1. Adopt the 2007 edition of the California Building, Electrical, Mechanical, Plumbing, Historical Building and Existing Building Codes and the 2006 edition of the International Existing Building Code, Appendix Chapters A2 and A3 by a single ordinance.
2. Adopt local amendments to the California Codes.
3. Publish a unified administration section to codify the administrative requirements for all codes.
4. Update or eliminate cross-references to match current code language.

SUMMARY OF AMENDMENTS

A. Technical Amendments

1. Structural Design (CBC Chapter 16)
 - a. ASCE 7-05 Equation 12.8-5

October 8, 2007

Community and Economic Development and
Public Safety, Finance and Strategic Support Committees

Subject: Summary of the Ordinance for the Adoption of the 2007 California Building Standards, CCR Title 24,
Parts 2, 3, 4, 5, 8, and 10, and the International Existing Building Code, Appendix Chapters A2 and A3

Page 4

Modify CBC Standard ASCE 7-05 Equation 12.8-5 to increase the base shear level of buildings to a level consistent with previous editions of the building code.

- b. ASCE 7-05 Table 12.8-2
Modify CBC Standard ASCE Table 12.8-2 to add the design parameters for a Buckling Restrained Braced Frame system.
 - c. ASCE 7-05 Equation 12.8-16
Modify CBC Standard ASCE 7-05 Equation 12.8-16 to add the importance factor (I) to increase the design stability of essential buildings such as hospitals, fire stations, and police stations.
 - d. ASCE 7-05 Section 12.12.3
Modify CBC Standard ASCE 7-05 Section 12.12.3 to add requirements for seismic separation between adjoining buildings to allow the buildings to respond to earthquake ground motion independently.
 - e. ACI 318 Equations 14-8 and 14-9
Modify CBC Standard ACI 318 Equations 14-8 and 14-9 to increase the strength and serviceability of slender walls to a level similar to previous editions of the building code.
2. Concrete Construction (CBC Section 1704.4)
Modification to the CBC will require special inspections when the structural design of the footing is based on a specified compressive strength greater than 2,500 pounds per square inch.
 3. Gypsum Board and Stucco (CBC Chapters 23 and 25)
Modify the CBC to limit the use of gypsum wallboard and Portland cement or stucco as shear walls due to San Jose's specific geological condition (active seismic area).
 4. Existing Structures (CBC Chapter 34)
Modify the chapter to comply with the Robert T. Stafford Disaster Relief and Emergency Assistance Act to allow building owners to avail of possible Federal Funds in a disaster or emergency.
- B. Fire Sprinkler Regulations (CBC Chapter 4 and 9)
The CBC sections pertaining to fire sprinklers are modified to maintain current standards and to require fire sprinkler systems in townhouses.
- C. Medical Emergency Service Elevator (CBC Section 3002.4a.1)
Modify the CBC to specify the emergency elevator cab dimensions to accommodate the type of gurney used by the Fire Department.
- D. CBC Appendices
Modify the CBC by adopting Appendices C, G, I and J to address Agriculture Buildings, Flood-Resistant Construction, Patio Covers and Grading respectively.

October 8, 2007

Community and Economic Development and
Public Safety, Finance and Strategic Support Committees

Subject: Summary of the Ordinance for the Adoption of the 2007 California Building Standards, CCR Title 24,
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Page 5

E. Fire Pump Disconnecting Means (CEC Section 695.4)

Modify CEC Section 695.4 to require a lockable cover for the fire pump disconnecting means to prevent the possibility of inadvertently turning-off the fire pump during a fire.

F. Plumbing Fixtures (CPC Chapter 4)

Modify the CPC by deleting Sections and Table that are in conflict with Chapter 29 of the CBC.

G. Reclaimed Water Systems (CPC)

Modify the CPC by adopting Chapter 16 Part 2 to address Reclaimed Water Systems.

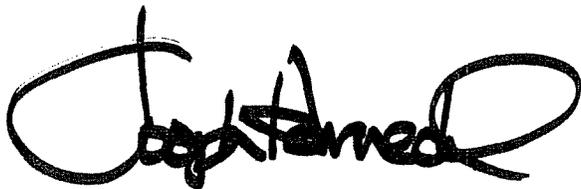
H. Administrative Provisions

The proposed ordinance will continue to have a single set of administrative provisions for all six codes. The proposed Ordinance contains the updated portions of administrative provisions to further streamline permit issuance, plan check and inspection provisions of the codes.

PUBLIC OUTREACH/INTEREST

In the Bay Area, the City of San Jose is in the forefront in identifying amendments to the 2007 California Building Standards and informing the public of these proposed amendments. Staff presented the proposed amendments to design professionals, developers and contractors in roundtable meetings held last August 23 and 24, and September 14. Information about the new codes has been published in the City's web site (www.sanjoseca.gov/building) and in the "Development News", a monthly electronic newsletter published by the City of San Jose's Planning, Building and Code Enforcement Department.

Last September 29, a free training session was conducted to introduce design professionals, developers and contractors to the significant changes between the 2001 and 2007 California Building Codes as well as the proposed local amendments to the California Building Standards. Another training session is scheduled on November 3, 2007.



Joseph Horwedel, Director
Planning, Building and Code Enforcement



 Darryl Von Raesfeld
Fire Chief