CED AGENDA: 9/23/19 ITEM: D (5)



# Memorandum

TO: COMMUNITY & ECONOMIC DEVELOPMENT COMMITTEE

FROM: Rosalynn Hughey

Robert Sapien, Jr.

SUBJECT: SEE BELOW

DATE: September 23, 2019

Approved

Date

Sent. 14, 2019

SUBJECT:

APPROVAL OF AN ORDINANCE AMENDING TITLE 24 OF THE SAN JOSÉ MUNICIPAL CODE ADOPTING THE 2019 CALIFORNIA BUILDING STANDARDS, CCR TITLE 24, PARTS 2, 2.5, 3, 4, 5, 6, 8, 10 AND 11, AND ADOPTING CERTAIN LOCAL AMENDMENTS TO THE TECHNICAL PROVISIONS RELATING TO CERTAIN STRUCTURAL DESIGN REQUIREMENTS, FIRE SPRINKLER REGULATIONS, AND OTHER BUILDING REQUIREMENTS.

## RECOMMENDATION

- 1. Recommend the City Council approve of an Ordinance to amend Title 24 of the San José Municipal Code to:
  - a. Adopt the 2019 editions of the California Building Code (CBC), California Residential Code (CRC), California Electrical Code (CEC), California Mechanical Code (CMC), California Plumbing Code (CPC), California Historical Building Code (CHBC), California Existing Building Code (CEBC).
  - b. Find that the City of San José local climatic, geological, and topographical conditions warrant additional protections in the Municipal Code; and
  - c. Adopt local amendments regarding certain structural design requirements, fire sprinkler regulations, and other building requirements.
- 2. Recommend the City Council approve an Ordinance amending Chapter 17.12 of the San José Municipal Code to:

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- a. Adopt the 2019 edition for the California Fire Code (CFC), and the Standards referenced in 2019 CFC; and
- b. Adopt local amendments regarding the design and installation requirements for fire sprinkler systems, fire standpipe and hose systems, centrifugal fire pumps, private fire service mains, fire alarm systems, clean agent extinguishing systems, fire protection systems in clean rooms, and other fire safety requirements.

## **OUTCOME**

Approval of the Ordinance will ensure consistency of the City of San José's Building, Electrical, Mechanical, Plumbing, Historical Building and Existing Building Codes with state standards and ensure that City codes provide additional protection of the health, welfare, and safety of local residents required due to local climatic, geological, and topographical conditions.

## **BACKGROUND**

The California Building Standards Commission (CBSC) publishes triennial editions of the California Code of Regulations (CCR), Title 24, also known as the California Building Standards Code. On July 1, 2019, the CBSC published the 2019 edition of the California Building Standards Code. The 2019 California Building Standard Codes will apply to any building or structure for which application for a building permit is made on or after January 1, 2020. The CBC, CRC and CEBC are based on the 2018 International model codes published by the International Code Council, while the CMC and CPC continue to be based on the 2018 Uniform model codes published by the International Association of Plumbing and Mechanical Officials. The CEC is based on the 2017 National Electrical Code, published by the National Fire Protection Association. The CHBC, CEBC and CALGreen are developed and published by the CBSC. Building Energy Efficiency Standards developed and published by the California Energy Commission.

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.

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

- 2019 California Building Code CCR Title 24 Part 2
- 2019 California Residential Code CCR Title 24 Part 2.5
- 2019 California Electrical Code CCR Title 24 Part 3
- 2019 California Mechanical Code CCR Title 24 Part 4

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- 2019 California Plumbing Code CCR Title 24 Part 5
- 2019 California Historical Building Code CCR Title 24 Part 8
- 2019 California Existing Building Code CCR Title 24 Part 10

The 2019 Green Building Standards Code and 2019 Energy Efficiency Standards are being adopted through the Reach Code ordinance separately from this proposed ordinance.

### **ANALYSIS**

#### Summary of the Ordinance

The proposed ordinance accomplishes the following:

- 1. Adopts the 2019 edition of the California Building, Residential, Electrical, Mechanical, Plumbing, Historical Building, and Existing Building Codes by a single ordinance.
- 2. Updates previously adopted local amendments to the California codes to match current code language and cross-references.
- 3. Updates the Municipal Code to reflect the 2019 California Building Standards Code.

A complete copy of the proposed ordinance is posted for this Agenda. The Ordinance publishes the revised sections of Title 24 of the San José Municipal Code. The following is a summary of each of the Title 24 chapters:

Chapter 24.01 governs the Administrative provisions including definitions, procedures, interpretation, and authority.

Chapter 24.02 governs the issuance of Permits, including requirements, exemptions, applications, issuance, renewals and extensions, fees, inspections, certificates of occupancy, and appeals.

Chapter 24.03 adopts the California Building Code with the local amendments described below.

Chapter 24.04 adopts the California Plumbing Code with no local amendments.

Chapter 24.05 adopts the California Mechanical Code with no local amendments.

Chapter 24.06 adopts the California Electrical Code with no local amendments.

Chapter 24.07 adopts the California Existing Building Code with no local amendments.

Chapter 24.09 adopts the California Residential Code with the local amendments described below.

Chapter 24.11 adopts the California Historical Building Code with no local amendments.

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Building and Fire staff worked with other Bay Area 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. 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.

## Summary of Amendments

There are no new proposed amendments for this code cycle. However, staff proposes to maintain the currently adopted local amendments regarding certain structural design requirements, fire sprinkler regulations, and other building requirements due to the following express findings:

- 1. The San Francisco Bay area region is densely populated and located in an area of high seismic activities. San José is bounded by the Hayward and San Andreas faults capable of producing major earthquakes.
- 2. Concern for fire-life safety associated with a structural failure due to a seismic event considering the increasing number of buildings in the region, the use of new structural systems, the poor performance of certain materials, and the quality of construction.
- 3. Severe seismic events could disrupt communications, damage gas mains, cause extensive electrical hazards, and place extreme demands on the limited and widely dispersed resources of the Fire Department resulting in challenges to meet the fire and life safety needs of the community.
- 4. The local geographic, topographic, and climatic conditions pose an increase hazard in acceleration, spread, magnitude, and severity of potential fires in the City of San José, and may cause a delayed response from emergency responders, allowing further growth of the fire.

A summary of previously adopted amendments to the California Code that remain adopted in the Municipal Code are as follows:

#### A. Technical Amendments

- 1. Structural Design (CBC Chapter 16, referenced standard ASCE 7-16)
  - a. ASCE 7-16 Section 12.12.3 Modify CBC Standard ASCE 7-16 Section 12.12.3 to add requirements for seismic separation between adjoining buildings to allow the buildings to respond to earthquake ground motion independently.
- 2. Concrete Construction (CBC Chapter 17)
  - a. Modification to the CBC Section 1705.3 will require special inspections when the structural design of foundations, under specific conditions, is based on a specified compressive strength greater than 2,500 pounds per square inch.
- 3. Conventional Light Frame Construction (CBC Chapter 23, and CRC Chapter 6)

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#### a. CBC Section 2308.6

Modify the CBC Section 2308.6 to disallow the use of gypsum wallboard or diagonal let-in bracing in braced wall panels of conventional light-frame construction, and to limit the use of Portland cement (stucco), diagonal wall sheathing, particle board sheathing, structural fiberboard sheathing and hardboard panel siding in braced walls.

b. Wall Bracing (CRC Chapter 6) Modify CRC Table 602.10.3 (3) to disallow the use of gypsum wallboard and diagonal let-in bracing in braced wall panels, and to limit certain types of braced walls to single story use only.

# B. Fire Sprinkler Regulations (CBC Chapters 4 and 9 and CRC Chapter 3)

The CBC and CRC sections pertaining to fire sprinklers are modified to:

- a. Require automatic fire sprinklers in existing buildings when additional floor area creates a building of substantially large area in excess of 10,000 square feet, or the proposed change in use or contents of the building creates a higher risk.
- b. Require automatic fire sprinklers in new buildings that exceed 6,200 square feet in area.
- c. Require automatic fire sprinklers throughout buildings and structures four stories or greater in height, regardless of floor area.
- d. Require fire sprinklers in existing detached one- and two- family dwellings where an increase of 500 square feet is made to the floor area resulting to a total building floor area exceeding 3,600 square feet.

## C. CRC Appendices

Modify the CRC by adopting Appendices H, K, and V to address Patio Covers; Sound Transmission; and Swimming Pool Safety Act respectively.

# D. CPC Appendices

Modify the CPC by adopting Appendices A, B, D, G, H, I, and M to address Sizing Water Supply Systems, Combination Waste and Vent Systems, Stormwater Drainage Systems, Venting Systems for Appliances with Draft Hoods, Private Sewage Disposal Systems, Installation Standards, and Peak Water Demand Calculator respectively.

## E. Administrative Provisions

The proposed ordinance will continue to have a single set of administrative provisions for all adopted codes.

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## **EVALUATION AND FOLLOW-UP**

The approval of this ordinance will not impact current performance measures. However, due to changes in the codes and the referenced standards, staff and the design professionals will need time to adjust and be familiar in the application of these new codes. Current performance levels are expected to slightly decline in the first six months.

# PUBLIC OUTREACH/INTEREST

Staff is in the process of presenting the proposed remaining local amendments to design professionals, developers and contractors in roundtable meetings and will continue the effort throughout 2019 and 2020. These proposed remaining local amendments will be also posted on the City's web site (<a href="www.sanjoseca.gov/building">www.sanjoseca.gov/building</a>) and will be sent via email to stakeholders and attendees at the roundtable meetings. Information about the new codes adoption will be published on the City's web site and hard copies will be available in the Permit Center.

Free training sessions will be offered to the public early next year to introduce design professionals, developers, and contractors to significant changes between the 2016 and 2019 California Codes.

This memorandum will be posted on the October 22, 2019 City Council Agenda website.

# COORDINATION

This memorandum and proposed ordinance were coordinated with the City Attorney's Office.

# **CEQA**

Exempt, Section 15308 – Actions by Regulatory Agencies for the Protection of the Environment, File No. PP19-077.

/s/
ROSALYNN HUGHEY, Director
Planning, Building and Code Enforcement

ROBERT SAPIEN, JR., Fire Chief Fire Department

For questions please contact James Son, Deputy Director of Building Division, at (408) 535-7746.