



**DATE:** December 6, 2016

**TO:** Mayor and City Council

**FROM:** Development Services Director and Fire Chief

**SUBJECT:**

Adoption of the California Code of Regulations 2016 edition of Title 24, including the 2016 Building, Fire, Plumbing, Mechanical, Electrical, Energy and Green Building Codes; and Related Amendments, Including to the Hayward Municipal Code

#### **RECOMMENDATION**

That the City Council adopts the attached resolutions and introduces the attached ordinances.

#### **SUMMARY**

Every three years, all of the codes that regulate construction in California (Title 24 of the California Code of Regulations) are comprehensively updated by the State. Jurisdictions throughout California adopt the State codes to serve as local codes, sometimes with amendments to the State codes, as Hayward has done historically. The 2016 State codes will be in effect throughout California on January 1, 2017, whether local jurisdictions adopt them or not.

This report and attached resolutions and ordinances recommend that the City Council adopts the State Codes with some amendments, and also codifies the Building Codes to become part of Chapter 9 (Building Regulations) of the Hayward Municipal Code, which they have not been previously. Doing so will allow the code regulations to be more accessible and usable by the public.

#### **BACKGROUND**

Title 24 is a comprehensive series of regulations that governs all aspects of construction. This set of codes covers everything from fire safety to green building and energy efficiency. State law requires that all communities enforce these building standards in their entirety. The enforcement of these regulations is accomplished through a combination of plan review and onsite field inspections. The Building Division of the Development Services Department is responsible for enforcing the majority of Title 24 in Hayward. The Hayward Fire Department is specifically responsible for enforcing Part 9 of Title 24, which is the California Fire Code. Title 24 covers five broad topics:

- LIFE SAFETY (earthquake and fire safety through the Building Code and Fire Code)
- CONSTRUCTION QUALITY and SANITATION (core system functioning - through the Plumbing Code, Electrical Code and Mechanical Code)
- CIVIL RIGHTS (disabled access provisions through the Building Code)
- ENERGY CONSERVATION (through the Energy Code)
- GREEN BUILDING (through the California Green Building Standards Code, or 'CalGreen')

Building staff provided a brief [summary](#) of the energy efficiency and green building components of the new Building Code to the Council Sustainability Committee on November 14, 2016.

## **DISCUSSION**

Most jurisdictions undergo a code adoption process every three years to formally incorporate the California Building Code and Fire Code into their municipal regulations. This local adoption process is not mandatory since state law automatically requires all jurisdictions in California to enforce the current version of Title 24 on the effective date. However, if the local jurisdiction chooses to modify the state codes in any way, this must be done through an ordinance. There are specific guidelines for this local adoption process in state law. The modifications proposed by any local jurisdiction must meet the following criteria:

- Local code amendments must not be less restrictive than the state codes.
- Technical modifications must have reasonable findings based on climatic, geologic or topographical conditions that impose particular constraints within the jurisdiction.
- Findings related to local conditions must be submitted to the California Building Standards Commission for recordation.
- Changes to the administrative sections of the code (non-technical components) do not require findings. Examples include policies related to refunds or plan review expiration.

### *Building Code (Attachments II and III)*

As part of this code cycle, staff is recommending making several changes to the administrative section of the Building Code and making three technical changes/amendments based on the City's seismic zone. To view these changes and a brief explanation of the rationale, please see the second page of Attachment III (2016 Building Code Ordinance) for a summary. For the full rationale, please see Attachment II (2016 Building Code Resolution).

Another aspect of the code adoption process is to check existing ordinances against the new codes and remove any outdated or redundant regulations. As part of this exercise, staff is recommending deleting outdated and/or conflicting sections in the Municipal Code, which will eliminate confusion. The problem of overlapping regulations mainly occurs because certain regulations were adopted before the Building Code ultimately addressed the same topic. As staff is recommending that the Building Code become part of the Municipal Code, staff is recommending this “clean-up” of the Municipal Code at this time. Specifically, staff recommends removing the following article in the Municipal Code:

- **Moved Buildings: Chapter 9, Article 2** -- The entire ordinance is disconnected from the State Building Code adoption process and has become outdated (created in 1964 and not updated since). The California Building Code covers all of the issues associated with moved buildings under a modern set of regulations.

Removing *Chapter 9, Article 2* results in a vacancy in the Municipal Code which could be filled with the new Building Code. Currently, *Chapter 9, Article 1* of the Municipal Code addresses “Building Along Watercourses.” Due to the importance of the Building Code, however, staff recommends that it be codified as Chapter 9, Article 1. The current *Chapter 9, Article 1* would be re-codified as *Chapter 9, Article 2*, thereby filling the vacancy created by the removal of the current *Chapter 9, Article 2*.

#### Fire Code (Attachments IV and V)

Staff is recommending that City Council adopts the 2016 California Fire Code with local amendments that the Fire Chief proposes in an effort to further strengthen the 2016 Hayward Fire Ordinance. This includes adopting previously adopted amendments, such as designating a Hazardous Fire Area in the Hayward Hills, east of Mission Boulevard and south of D Street; and amendments to clarify construction method requirements within the Hazardous Fire Area and the Photovoltaic (“Solar”) System Installation Guidelines. Additional amendments include a continuation of the prohibition of flammable and combustible liquids in aboveground storage tanks, with minor exceptions; and the inclusion into the code of currently implemented standards of secondary containment to capture potential releases of hazardous materials if a primary container were to fail. The Fire Code will be incorporated into the City’s Municipal Code as Chapter 3, Article 14 in an effort to make the Fire Code more accessible to the public.

Environmental Review: The recommended actions are exempt from the California Environmental Quality Act (CEQA), pursuant to Section 15378(b)(1) of the CEQA guidelines, which is an exemption for legislative action as required by the state. In this case, the adoption of the state building codes is mandated as discussed above.

#### **ECONOMIC IMPACT**

The economic impact of the 2016 Building Codes will be primarily focused on new homes. The 2016 Energy Code requirements for residential buildings represent the biggest code

change with a cost impact to developers. The California Energy Commission estimates that the new 2016 standards will increase the construction costs of a home by an average of \$2,700. The same study notes that over a thirty-year period, the cost of these enhanced energy efficiency features will yield an average savings of \$7,400 to the homeowner. While these added costs will be absorbed over the life of a conventional loan, the initial price of a new (more energy-efficient home) will be slightly higher under these new standards.

The remainder of the Building Code and Fire Code updates outside of the energy regulations are incremental in nature and do not represent any substantial changes that will have an economic impact.

## **FISCAL IMPACT**

With the increase in efficiency moving towards zero net energy standards (ZNE), enforcement of the new codes will have an impact on staff. Additional training is required and projects will take longer to complete during the plan review and inspection stages. Staff does not foresee an immediate substantial fiscal impact from adopting the new codes, but over the course of the code cycle, staffing may need to be adjusted (internally and/or through consulting services) to maintain our present review timelines. There also may be a need to increase the training budget as staff learns and implements these new standards.

## **SUSTAINABILITY FEATURES**

In terms of green building and energy efficiency, the new codes represent a significant leap forward in order to reach California's target of zero net energy (ZNE) for all new residential buildings in 2020 and all new commercial buildings in 2030. This code cycle is the final update to the Energy Code before all new homes in California must be ZNE, or produce all of the energy they consume on site.

Given that in three years with the next code cycle, all new residential structures in California will need to perform at ZNE standards, the major changes in this code cycle are focused on the energy efficiency of homes. The Energy Code applies to new buildings, remodels, repairs and additions to existing buildings.

Homes have four focal points for conservation in the Energy Code:

- Insulation (this includes walls, roofs, floors, attics and windows)
- Water Heating
- Heating and Cooling Systems (Furnaces and air conditioners)
- Lighting

The major efficiency increases relate to wall insulation, lighting and water heating. Most homes built starting in 2017 will utilize on-demand or "tankless" water heaters, which are approximately 30% more efficient than conventional storage tank water heaters. New homes will also include thicker walls with both internal and external insulation. Finally, new homes

will not be allowed to use any incandescent lighting as part of this new code cycle. All installed fixtures will be either compact fluorescent or LED.

To learn more about the sustainability features of the new codes and zero net energy, please see the [staff report on this specific topic](#) prepared for the Council Sustainability Committee on November 14, 2016.

## **PUBLIC OUTREACH**

Staff has directly contacted all developers with active projects that are nearing submittal to notify them of the upcoming code changes. Staff will also include notifications on the City's website and provide useful links for developers and homeowners to learn about the new codes.

## **NEXT STEPS**

If the City Council agrees with the proposed changes to the California Building Code and the California Fire Code and adopts the attached resolutions and introduces the attached ordinances, the ordinances will be adopted on December 13 and the new 2016 codes with amendments will be in effect on January 1, 2017.

Once the 2016 Building Code Ordinance and the 2016 Fire Code Ordinance are adopted, City staff and the City Clerk's Office will work with the Municipal Code publishers to reformat any of the new ordinances with the goal of remaining consistent with other parts of the Municipal Code.

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Approved by:



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Kelly McAdoo, City Manager