STATE OF CALIFORNIA – STATE AND CONSUMER SERVICES AGENCY GOVERNOR EDMUND G. BROWN JR.

BUILDING STANDARDS COMMISSION
2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959

March 16, 2012

Sharie Apodaca, MMC, City Clerk
City of Irvine
One Civic Center Plaza
Irvine, CA 92623-9575

Dear Sharie Apodaca:

This letter is to acknowledge receipt on February 16, 2012 of the City of Irvine submittal pertaining to Ordinance No. 12-03 with findings and is acceptable for filing. Your filing attests to your understanding that according to Health and Safety Code Section 17958.7 no modification or change to the California Building Standards Code shall become effective or operative for any purpose until the findings and the modifications or changes have been filed with the California Building Standards Commission (the Commission).

This letter attests only to the filing of these local modifications with the Commission, which is not authorized by law to determine the merit of the filing.

As a reminder, local modifications are specific to a particular edition of the Code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the Code is published. In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [H&SC Section 13869.7(c)], attention State Housing Law Program Manager, rather than the Commission.

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 (949) 724-6000

February 14, 2012

Building Standards Commission
Attn: Enrique M. Rodriguez, Associate Construction Analyst
2525 Natomas Park Drive, Suite 130
Sacramento, CA 95833

SUBJECT: Resolution and Ordinance Regarding Updated Wildland Fire Hazard Map

Dear Mr. Rodriguez:

Enclosed please find certified copies of City Council Resolution No. 12-19, and Ordinance No. 12-03 regarding the updated Wildland Fire Hazard Map for the City of Irvine.

If you have any questions, or if we can be of further assistance, please call the City Clerk's office at (949) 724-6205.

Sincerely,

Sharie Apodaca, MMC
City Clerk

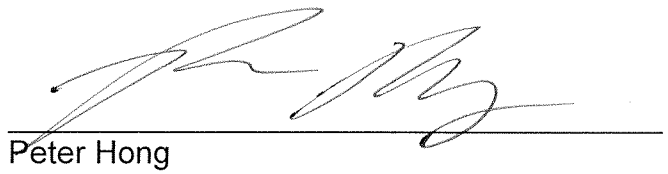
Cc: Eric Tolles, Director of Community Development
Joe Kirkpatrick, Chief Building Official

Enclosure

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, Peter Hong, Deputy City Clerk in and for the City of Irvine, State of California, do hereby certify the attached to be a full, true and correct copy of City Council Ordinance No. 12-03 passed and adopted on February 7, 2012 by the City Council of the City of Irvine as the same appears on record in my office, with the original of which said copy has been compared by me, and is a true transcript there from.

IN WITNESS WHEREOF I have hereunto set my hand and affixed the Seal of said City, at my office in the City of Irvine, this 14th day of February, 2012.



Peter Hong
Deputy City Clerk of the City of Irvine

CITY COUNCIL ORDINANCE NO. 12-03

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE REPEALING ORDINANCE NO. 95-14 IN ITS ENTIRETY AND ADOPTING AN UPDATED WILDLAND FIRE HAZARD MAP FOR THE CITY OF IRVINE AND AMENDING AFFECTED PROVISIONS OF CHAPTER 4 OF DIVISION 9 OF SECTION 5 OF THE IRVINE MUNICIPAL CODE PERTAINING TO BUILDING AND FIRE CODE TECHNICAL PROVISIONS

WHEREAS, the Legislature has declared in Government Code Section 51175 (a): 1) that fires are extremely costly, not only to property owners and residents, but also to local agencies; 2) that fires pose a serious threat to the preservation of public peace, health, and safety; 3) that it is necessary that cities, counties, special districts, state agencies, and federal agencies work together to bring raging fires under control; and 4) that preventative measures are needed to ensure the preservation of the public peace, health, and safety; and

WHEREAS, the Legislature has declared in Government Code Section 51175(b), that the prevention of fires is not a municipal affair, but is, instead, a matter of statewide concern; and

WHEREAS, on July 31, 1995, pursuant to Government Code Section 51178, the Director of Forestry and Fire Protection ("Director") identified areas within the County of Orange as Very High Fire Hazard Severity Zones; and

WHEREAS, THE City of Irvine adopted Ordinance 95-14 on October 10, 1995 to establish the Very High Fire Severity Zones within the City consistent with the Director's findings; and

WHEREAS, pursuant to Government Code Section 51181, the Director periodically reviews the areas in the state identified as Very High Fire Hazard Severity Zones and as necessary makes recommendations about any appropriate modifications to the geographic alignment of said zones; and

WHEREAS, the Director completed a review of the designated Very High Fire Severity Zones and made updated recommendations based upon the use of current scientific methods which assessed, vegetation, slope, fire history, weather patterns and significantly improved accuracy by establishing the impact of flames, heat, and flying fire embers; and

WHEREAS, pursuant to Government Code Section 51179, the Director has published a new map depicting areas designated as a Very High Fire Hazard Severity Zone, and has recommended that local agencies adopt these zones through local

ordinances; and, Government Code Section 51179(a) requires the City of Irvine to designate by ordinance Very High Fire Hazard Severity Zones in its jurisdiction within 120 days after receiving the recommendations from the Director; and

WHEREAS, the Director has also published maps depicting High and Moderate Fire Severity Zones for local use in deciding planning and fire protection issues; and

WHEREAS, the City and the Orange County Fire Authority have utilized the maps depicting High and Moderate Fire Severity Zones to define 100 foot buffer zones along existing development areas adjoining fuel modification zones and/or open spaces containing native or hazardous vegetation; and

WHEREAS, the City and the Orange County Fire Authority have reviewed the Very High Fire Severity Zone maps and believe, in consideration of the City's adopted development standards that with the addition of 100 foot buffer zones, the fire hazards within the City are accurately represented.

NOW, THEREFORE, *the City Council of the City of Irvine DOES HEREBY ORDAIN as follows:*

SECTION 1. Repeal of Ordinance No. 95-14 adopting previously designated Very High Fire Hazard Severity Zones in its entirety.

SECTION 2. Designation of Replacement Very High Fire Hazard Severity Zones and 100 foot buffer zones.

The City of Irvine designates Very High Fire Severity Zones in accordance with Section 51179(a) of the California Government Code, and 100 foot buffer zones pursuant to its authority under Sections 13143.5 and 17958.7 of the Health and Safety Code. These zones are identified on Exhibit "A" attached hereto and known as The 2012 Wildland Fire Hazard Map for the City of Irvine.

SECTION 3. Chapter 4 of Section 5 of Division 9 of the Irvine Municipal Code, AMENDMENTS TO BUILDING AND FIRE CODE TECHNICAL REGULATIONS is hereby amended as follows:

Section 5-9-401. Building Code.

1. New Item G. is added as follows and existing items G. through O. are relabeled as H. through P.

   G. Materials and Construction Methods for Exterior Wildfire Exposure. Chapter 7A of the California Building Code is hereby modified as follows:

   1. Section 701A.3 Application is amended to read:

      701A.3 Application. New buildings, structures, additions, and alterations pursuant to 701A.3.1.1 located in any Very High Fire Hazard Severity Zone,

or within a *100 Foot Buffer Zone* so designated on the currently adopted Wildland Fire Hazard Map for the City of Irvine constructed after the application date shall comply with the provisions of this chapter.

Exceptions:

1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.

2. Buildings of an accessory character classified as Group U occupancy of any size located least 50 feet from an applicable building.

3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C - Group U Agricultural Buildings), when located at least 50 feet from an applicable building.

4. Additions to and remodels of buildings shall comply with the provisions of this chapter, or an approved *Fire Protection Plan.*

5. Within a *100 Foot Buffer Zone;* only decks, porches, balconies, exterior stairs, and patio covers need comply with the specific provisions contained in Section 701A3.2.

2. Section 701A.3.1.1 Existing Buildings is added to read:

   701A.3.1.1 Existing Buildings. When an existing building undergoes alterations or additions, only those construction elements altered or added to the original structure must be made to comply with this chapter.

3. Section 701A3.2 Construction Features for decks, porches, balconies, exterior stairs, and patio covers within a 100 Foot Buffer Zone is added to read:

   701A3.2 Construction Features for decks, porches, balconies, exterior stairs, and patio covers within a designated *100 Foot Buffer Zone.*

   701A3.2.1 Decks, porches, balconies, and stairs within a designated *100 Foot Buffer Zone* shall comply with the provisions of Section 709A when the walking surface of a single porch, deck, or balcony is greater than 100 square feet, or 120 square feet when connected to stairs.

   701A3.2.2 Patio covers shall be of non-combustible or ignition-resistant materials.

Exception: When the construction features meet all of the following:

A. Columns consist of lumber having 4x4, minimum, nominal dimensions.
B. Horizontal beams consist of lumber having 4x6, minimum, nominal dimensions.
C. Roof shall be open lattice with framing having a minimum of two inches of clear spacing, or may have solid roofing having a Class A minimum rating.

4. Section 702A Definitions is amended to include the term 100 Foot Buffer Zone and after the term it's definition to read as follows:

100 Foot Buffer Zone *is that area on private property within 100 feet of a fuel modification or open space area containing native or hazardous vegetation, and which is designated on the currently adopted Wildland Fire Hazard Map for the City of Irvine.*

Section 5-9-402. Residential Code.

1. New Item C. is added as follows and existing items C. through F are relabeled as D. through G.

C. Materials and Construction Methods for Exterior Wildfire Exposure. Section R327 of the California Residential Code is hereby modified as follows:

1. Section R327.1.3 Application is amended to read:

R327.1.3 Application. New buildings, structures, additions, and alterations pursuant to R327.1.3.1.1 located in any Very High Fire Hazard Severity Zone, or within a *100 Foot Buffer Zone* so designated on the currently adopted Wildland Fire Hazard Map for the City of Irvine constructed after the application date shall comply with the provisions of this chapter.

Exceptions:

1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.

2. Buildings of an accessory character classified as Group U occupancy of any size located least 50 feet from an applicable building.

3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C - Group U Agricultural Buildings), when located at least 50 feet from an applicable building.

4. Additions to and remodels of buildings shall comply with the provisions of this chapter, or an approved *Fire Protection Plan.*

5. Within a *100 Foot Buffer Zone,* only decks, porches, balconies, exterior stairs, and patio covers need comply with the specific provisions contained in Section R327.1.3.2.

2. Section R327.1.3.1.1 Existing Buildings is added to read:

   Section R327.1.3.1.1 Existing Buildings. When an existing building undergoes alterations or additions, only those construction elements altered or added to the original structure must be made to comply with this chapter.

3. Section R327.1.3.2 Construction Features for decks, porches, balconies, exterior stairs, and patio covers within a designated 100 Foot Buffer Zone is added to read:

   Section R327.1.3.2 Construction Features for decks, porches, balconies, exterior stairs, and patio covers within a designated *100 Foot Buffer Zone.*

   R327.1.3.2.1 Decks, porches, balconies, and stairs within a designated *100 Foot Buffer Zone* shall comply with the provisions of Section R327.9 when the walking surface of a single porch, deck, or balcony is greater than 100 square feet or 120 square feet when connected to stairs.

   R327.1.3.2.2 Patio covers shall be of non-combustible or ignition-resistant materials.

   Exception: When the construction features meet all of the following:

   A. Columns consist of lumber having 4x4, minimum, nominal dimensions.

   B. Horizontal beams consist of lumber having 4x6, minimum, nominal dimensions.

   C. Roof shall be open lattice with framing having a minimum of two inches of clear spacing, or may have solid roofing having a Class A minimum rating.

4. Section R327.2 Definitions is amended to include the term 100 Foot Buffer Zone and after the term its definition to read as follows:

100 Foot Buffer Zone *is that area on private property within 100 feet of a fuel modification or open space area containing native or hazardous vegetation, and which is designated on the currently adopted Wildland Fire Hazard Map for the City of Irvine.*

PASSED AND ADOPTED by the City Council of the City of Irvine at an adjourned regular meeting held on the 7th day of February, 2012.

MAYOR OF THE CITY OF IRVINE

ATTEST:

CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, SHARIE APODACA, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Ordinance was introduced for first reading on January 24, 2012 and duly adopted at an adjourned regular meeting of the City Council of the City of Irvine held on the 7th day of February, 2012, by the following vote:

AYES:	5	COUNCILMEMBERS:	Agran, Choi, Krom, Lalloway and Kang
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	0	COUNCILMEMBERS:	None

CITY CLERK OF THE CITY OF IRVINE

2012 Wildland Fire Hazard Map for the City of Irvine

DATA SOURCES
CAL FIRE Fire Hazard Severity Zones (FHSZL06_1)
CAL FIRE Very High Fire Hazard Severity Zones in LRA - Orange (c30fhszl06_3)
City of Irvine GIS

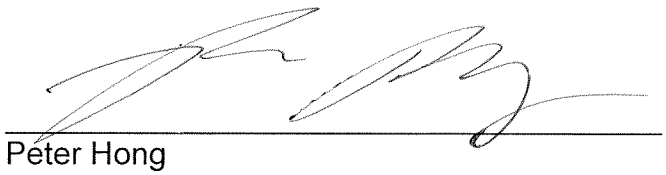
December 5, 2011

N:\CommDev\GIS SG\SGIS_DATA\Outside_data\OCFA\OCFA_FHSZ_11_2011\2012_WildlandFireHazard_20111206.mxd

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, Peter Hong, Deputy City Clerk in and for the City of Irvine, State of California, do hereby certify the attached to be a full, true and correct copy of City Council Resolution No. 12-19 passed and adopted on January 24, 2012 by the City Council of the City of Irvine as the same appears on record in my office, with the original of which said copy has been compared by me, and is a true transcript there from.

IN WITNESS WHEREOF I have hereunto set my hand and affixed the Seal of said City, at my office in the City of Irvine, this 14th day of February, 2012.



Peter Hong
Deputy City Clerk of the City of Irvine

CITY COUNCIL RESOLUTION NO. 12-19

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE SETTING FORTH FINDINGS WITH RESPECT TO LOCAL CONDITIONS AND IN CONSIDERATION OF THE PROPOSED UPDATED WILDLAND FIRE HAZARD MAP THAT REQUIRE CERTAIN MODIFICATIONS AND CHANGES TO THE CALIFORNIA BUILDING STANDARDS CODE REASONABLY NECESSARY FOR BUILDING OCCUPANCIES IN THE CITY OF IRVINE

WHEREAS, pursuant to Government Code Section 51179, the Director of Forestry and Fire Protection published a new map depicting areas designated as a Very High Fire Hazard Severity Zone, and recommended that local agencies adopt these zones through local ordinance. Government Code Section 51179 (a) requires the City of Irvine to designate by ordinance Very High Fire Hazard Severity Zones in its jurisdiction within 120 days after receiving the recommendations from the Director of Forestry and Fire Protection; and

WHEREAS, the Orange County Fire Authority has reviewed the Very High Fire Severity Zone map and believes, with the addition of 100 Foot Buffer Zones along development areas adjoining fuel modification zones and/or open spaces containing native or hazardous vegetation, it accurately represents the Very High Fire Hazard Severity Zone and additional 100 Foot Buffer Zone areas of concern within the City; and

WHEREAS, Health and Safety Code Sections 13143.5 and 17958 authorizes the City to make changes or modifications to the California Building Standards Codes, including the California Building Code and the California Residential Code, (hereinafter referred to collectively as "Codes") as are reasonably necessary to address local conditions; and

WHEREAS, Health and Safety Code Sections 13143.5 and 17958.7 require the governing body of a City to make express findings that such changes or modifications are needed due to climatic, geologic, or topographic conditions; and

WHEREAS, the Chief Building Official and the Orange County Fire Authority have recommended that changes and modifications be made to the Codes and have advised that certain of said changes and modifications to the California Building Standards Code provisions of the 2010 California Building Code and the 2010 California Residential Code are reasonably necessary to safeguard life and property due to local conditions in the City of Irvine.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Irvine, as follows:

SECTION 1. The following changes and modifications to the 2010 California Building Code and the 2010 California Residential Code as recommended by the Chief Building Official and Orange County Fire Authority are hereby found to be reasonably necessary due to the following local climatic, geological, or topographic conditions.

A. California Building Code Sections 701A.3, 701A3.1.1, 702A, and California Residential Code Sections R327.1.3, 327.1.3.1.1, R327.2 are amended to include 100 Foot Buffer Zones, clarify the application of Fire Protection Plan requirements, and maintain the continuity of application of the code requirements for additions and remodels.

Findings:

1. Hot, dry Santa Ana winds are common to the City of Irvine and Orange County.

2. Certain areas of the City are located within, or adjacent to wildland areas.

3. Significant growths of vegetation of a highly combustible nature occur in the wildland areas.

4. Buildings and structures located within or adjacent to wildland areas face a severe fire hazard during periods of high velocity winds and low humidity, and warrant additional fire resistive features for their protection.

5. The City of Irvine contains certain areas designated by State Government Code Section 51178 as Very High Fire Severity Zones due to the type and condition of vegetation, topography, weather and structure density which potentially increases the possibility of wildland conflagration fires.

B. California Building Code Section 701A.3.2 and California Residential Code Section R327.1.3.2 added to define construction requirements for decks, porches, balconies, exterior stairs, and patio covers located within a 100 Foot Buffer Zone.

Findings:

1. Hot, dry Santa Ana winds are common to the City of Irvine and Orange County.

2. Certain areas of the City are located adjacent to a fuel modification or open space area containing native or hazardous vegetation.

3. Significant growths of vegetation of a highly combustible nature occur in open spaces.

4. Buildings and structures located adjacent to fuel modification or open space areas face a heightened fire hazard during periods of high velocity winds and low humidity, and warrant additional fire resistive features for their protection.

5. The City of Irvine contains certain areas recommended by OCFA to be designated as 100 foot buffer zones due to the type and condition of vegetation, topography, weather and structure density which potentially increases the possibility of wildland conflagration fires.

SECTION 2. A copy of this Resolution together with the Ordinance amending the 2010 California Building Code and 2010 California Residential Code, shall be filed with the California Building Standards Commission by the Chief Building Official of the City of Irvine.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 24th day of January, 2012.

MAYOR OF THE CITY OF IRVINE

ATTEST:

CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, SHARIE APODACA, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at regular meeting of the City Council of the City of Irvine, held on the 24th day of January, 2012.

AYES:	5	COUNCILMEMBERS:	Agran, Choi, Krom, Lalloway and Kang
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	0	COUNCILMEMBERS:	None

CITY CLERK OF THE CITY OF IRVINE

BUILDING STANDARDS COMMISSION
2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959

February 15, 2011

Sharie Apodaca, City Clerk
City of Irvine
P.O. Box 19575
Irvine, CA 92623-9575

Dear Sharie Apodaca:

This letter is to acknowledge receipt on January 18, 2011 of the City of Irvine submittal pertaining to Ordinance No. 10-09 with findings and is acceptable for filing. Your filing attests to your understanding that according to Health and Safety Code Section 17958.7 no modification or change to the California Building Standards Code shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission (the Commission).

This letter attests only to the filing of these local modifications with the Commission, which is not authorized by law to determine the merit of the filing.

As a reminder, local modifications are specific to a particular edition of the Code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the Code is published. In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [H&SC Section 13869.7(c)], attention State Housing Law Program Manager, rather than the Commission.

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

CITY COUNCIL RESOLUTION NO. 10-138

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE SETTING FORTH FINDINGS WITH RESPECT TO LOCAL CONDITIONS THAT REQUIRE CERTAIN MODIFICATIONS AND CHANGES TO THE CALIFORNIA BUILDING STANDARDS CODE REASONABLY NECESSARY FOR BUILDING OCCUPANCIES IN THE CITY OF IRVINE

WHEREAS, Health and Safety Code Section 17958 mandates that the City of Irvine shall adopt ordinances or regulations imposing the same requirements as are contained in the regulations adopted by the state pursuant to Health and Safety Code Section 17922; and

WHEREAS, the State of California is mandated by Health and Safety Code Sections 13143.5 and 17922 to impose substantially the same or more stringent requirements as are contained in the most recent edition of the California Building Standards Code, including the California Building Code, the California Residential Code, the California Fire Code, the California Plumbing Code, the California Mechanical Code, the California Electrical Code, the California Green Building Standards Code, and the California Existing Building Code (hereinafter referred to collectively as "Codes"; and

WHEREAS, Health and Safety Code Sections 13143.5, 17958, and 13869.7 permit the City to make such changes or modifications to the Codes as are reasonably necessary because of local conditions; and

WHEREAS, Health and Safety Code Sections 13143.5, 17958.7, and 13869.7 require the governing body of a City to make express findings that such changes or modifications are needed due to climatic, geologic, or topographic conditions; and

WHEREAS, the Chief Building Official has recommended that changes and modifications be made to the Codes and has advised that certain of said changes and modifications to the California Building Standards Code provisions of the 2010 California Building Code, the 2010 California Residential Code, the 2010 California Fire Code, the 2010 California Mechanical Code, the 2010 California Plumbing Code, the 2010 California Electrical Code; and the 2010 California Existing Building Code are reasonably necessary to safeguard life and property due to local conditions in the City of Irvine and has further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Irvine, as follows:

SECTION 1. The following changes and modifications to the 2010 California Building Code, the 2010 California Residential Code, and 2010 California Fire Code as recommended by the Chief Building Official and Orange County Fire Authority are hereby found to be reasonably necessary due to the following local climatic, geological, or topographic conditions.

A. California Building Code Sections 403.1.1 and 907.2.13; and California Fire Code Sections 907.2.13 and 907.7.3.2 are amended to identify high rise buildings as any structure having floors used for human occupancy located more than fifty-five (55) feet above the lowest level of local fire department vehicle access to the floor level.

Findings:

1. The jurisdiction of Irvine is located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds, which may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials. Frequent periods of drought and low humidity add to the fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are also prone to disrupt utility services throughout the County. Obstacles to arriving at an incident generated by a strong wind, such as fallen trees, street lights and utility poles, and the requirement in tall buildings to climb 75 feet vertically up flights of stairs upon arriving at an incident will greatly impact the response time to reach an incident scene. Additionally, there is a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type fire fighting apparatus above this height would place rescue personnel at increased risk of injury.

2. The City of Irvine is located in the middle of the seismically active area adjacent to the Newport-Inglewood and San Joaquin Hills Faults. The viability of the public water system may be questionable immediately after a major seismic event. This would leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of any available water to floors above the 55-foot level. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks, there exists a need to provide increased protection for anyone on upper floors.

B. California Building Code Sections 403.4.7.2 and 403.4.8.1 and California Fire Code Sections 604.2.15.1.1 and 604.2.15.2.1 are amended to revise standby and emergency power load provisions for elevators and smoke-proof enclosures.

Findings:

1. Hot, dry Santa Ana winds are common to the City of Irvine and Orange County. These winds constitute a contributing factor which causes small fires originating in high density housing and commercial areas to spread quickly and creates the need for an increased level of fire protection. The protection added by the referenced modification to the Codes will supplement normal fire department response available in high density occupancies, and provide immediate protection for life and safety of multiple occupancy occupants during fire events.

2. Traffic and circulation congestion presently existing in the City of Irvine and County of Orange often places fire department response time to fire events at risk. This condition makes the need for automatic on-site protection for property occupants necessary.

3. The City of Irvine is in an active seismic region. Multiple structure fires are known to occur after large seismic events. Earthquake events are known to negatively impact rescue and fire suppression activities. Aftershocks create ongoing hazards to building occupants and building systems. This situation creates the need for both additional fire protection and automatic fire sprinkler suppression systems to protect life and property following seismic events.

C. California Fire Code Sections 4906.3 is amended and 4908 and 4909 are added to control landscaping and vegetation, and to limit blasting and explosives in Very High Fire Severity Zones and Wildland-Urban Interface Areas.

Findings:

1. Hot, dry Santa Ana winds are common to the City of Irvine and Orange County.

2. Certain areas of the City are located within, or adjacent to wildland areas.

3. Significant growths of vegetation of a highly combustible nature occur in the wildland areas.

4. Buildings and structures located within or adjacent to wildland areas face a severe fire hazard during periods of high velocity winds and low humidity, and warrant additional fire resistive features for their protection.

5. The City of Irvine contains certain areas designated by State Government Code Section 51178 as Very High Fire Severity Zones due to the type and condition of vegetation, topography, weather, and structure density which potentially increases the possibility of wildland conflagration fires.

D. California Building Code Sections 903.2, 903.2.8, 903.3.1.1.1, 903.4, 905.4, and 910.3.2.2, and California Residential Code Sections R313 and R313.2 and California Fire Code Sections 903.2, 903.2.8, 903.3.1.1.1, 903.4, 904.3.5, and 905.4 are amended to require installation of approved automatic fire sprinkler systems, monitoring and standpipe connections in buildings and structures of certain types and occupancies in addition to other requirements of the California Building Code for the following reasons:

Findings:

1. Hot, dry Santa Ana winds are common to the City of Irvine and Orange County. These winds constitute a contributing factor which causes small fires originating in high density housing and commercial areas to spread quickly and creates the need for an increased level of fire protection. The protection added by the referenced modification to the Codes will supplement normal fire department response available in high density occupancies, and provide immediate protection for life and safety of multiple occupancy occupants during fire events.

2. Traffic and circulation congestion presently existing in the City of Irvine and County of Orange often places fire department response time to fire events at risk. This condition makes the need for automatic on-site protection for property occupants necessary.

3. The City of Irvine is in an active seismic region. Multiple structure fires are known to occur after large seismic events. Earthquake events are known to negatively impact rescue and fire suppression activities. Aftershocks create ongoing hazards to building occupants and building systems. This situation creates the need for both additional fire protection and automatic fire sprinkler suppression systems to protect life and property following seismic events.

E. California Building Code Sections 907.3.1, 907.5.2.2 and 907.6.3.2 and California Fire Code Sections 907.4.17.6.2.2, are amended for installation requirements of duct smoke detectors and emergency alarm systems in addition to other requirements of the California Building Code.

Findings:

1. Hot, dry Santa Ana winds are common to the City of Irvine and Orange County. These winds constitute a contributing factor which causes small

fires originating in high density housing and commercial areas to spread quickly and creates the need for an increased level of fire protection. The protection added by the referenced modification to the Codes will supplement normal fire department response available in high density occupancies, and provide immediate protection for life and safety of multiple occupancy occupants during fire events.

2. Traffic and circulation congestion presently existing in the City of Irvine and County of Orange often places fire department response time to fire events at risk. This condition makes the need for automatic on-site protection for property occupants necessary.

3. The City of Irvine is in an active seismic region. Multiple structure fires are known to occur after large seismic events. Earthquake events are known to negatively impact rescue and fire suppression activities. Aftershocks create ongoing hazards to building occupants and building systems. This situation creates the need for both additional fire protection and automatic fire sprinkler suppression systems to protect life and property following seismic events.

F. California Building Code Section 1203.2.1 and 1203.3.1 and California Residential Code Sections R408 and R806 are amended to require smaller vent mesh size to prevent ember intrusion at attic and under-floor ventilation openings.

Findings:

1. Hot, dry Santa Ana winds are common to the City of Irvine and Orange County.

2. Unprotected ventilation openings have been shown to contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds. Burning embers are carried by the wind and pushed into openings thereby causing fire to spread rapidly.

G. California Building Code Section 1505.1 and Table 1505.1 and California Residential Code Sections R902.1 and R902.1.3 are amended to require materials for roofing to have a Class A rating.

Findings:

1. Hot, dry Santa Ana winds are common to the City of Irvine and Orange County.

2. Unprotected roofs cause or contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds.

Pieces of burning wood roofs become flying brands and are carried by the wind to other locations and thereby spread fire rapidly.

3. Providing a Class A rating for roofing was recommended by the 2002-2003 Orange County Grand Jury.

H. Section 1616 is added to the California Building Code to amend minimum seismic base shear requirements.

Findings:

The City of Irvine is in an active seismic region. Orange County is a densely populated area having buildings constructed over and near fault systems capable of producing major earthquakes. The need to incorporate this modification into the current code will help assure that new tall buildings are designed and constructed in accordance with earthquake design building performance recognized by previous building codes, Division of the State Architect and Office of Statewide Health Planning and Development agencies, and recent research.

I. Sections 3109.4.4.1 and Section 3109.4.4.2.1 are added to the California Building Code to require enclosure of yards containing private pools.

Findings:

The City of Irvine is in a warm arid climate and has a large number of private swimming pools in neighborhoods of closely separated homes populated with families with small children. Emergency response can be delayed by traffic congestion. State codes provide requirements between a home and pool, but do not specifically address barriers between pools and adjacent properties.

California Fire Code Sections 304.1.2, 305.5, 319 through 325 are amended to require spark arresters on chimneys and equipment and fuel modification requirements for new construction.

Findings:

The City of Irvine is located in an area subject to a climatic condition of high winds, low humidity, and wildland areas. This combination of conditions creates an environment which is conducive to ignition of wildland vegetation and necessitates the control of ignition sources and reduction of wildland fuels adjacent to structures.

K. California Building Code Section 412.2 is amended and 412.7.5 is added and California Fire Code Section 1108 is amended to require emergency helicopter landing facilities on top of all high rise buildings for evacuation purposes.

Findings:

Fire history indicates that many evacuations of people above the fire floor take place from the roof. The City is located in a seismically active area that could require the evacuation of high-rise buildings following a large seismic event or fire.

L. California Fire Code Section 318 is added to require gas mitigation for development near land with emitting gases.

Findings:

Land in portions of the City has been subject to land uses whereby soils may emit a variety of gasses, liquids and vapors. These compounds may present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary to implement appropriate mitigation.

M. California Fire Code Sections 503.1.1, 503.2.1, 503.4, 503.6, 505.1, 507.5.1 are amended and 503.2.1.1 is added to define standards for emergency response access, and hydrant locations.

Findings:

1. Hot, dry Santa Ana winds are common to the City of Irvine and Orange County. These winds constitute a contributing factor which causes small fires originating in high density housing and commercial areas to spread quickly and creates the need for an increased level of fire response access.

2. Traffic and circulation congestion presently existing in the City of Irvine and County of Orange often places fire department response time to fire events at risk. This condition makes the need for modified standards for property occupants protection necessary.

N. California Fire Code Sections 510.1, 510.2 are amended to be consistent with for requirements for Public Safety Radio System Coverage in new buildings.

Findings:

The City of Irvine is a densely populated area with buildings of large size and in close proximity to one another causing significant degradation of radio signal strength from within certain types of buildings. This condition makes the need for focused compliance standards necessary.

O. California Fire Code Sections 606.8 and 606.10.1.2 are amended for requirements for refrigeration systems; and Section 608.1 and 608.10 is amended for electric battery charging systems; and Section 2308.3 is amended for high-piled storage flue spacerequirements.

Findings:

The City of Irvine is in an active seismic region. Multiple structure fires are known to occur after large seismic events. Earthquake events are known to negatively impact rescue and fire suppression activities. Aftershocks create ongoing hazards to building occupants and building systems. This situation creates the need for both additional fire protection and automatic fire sprinkler suppression systems to protect life and property following seismic events.

P. California Fire Code Sections 2701.5.2, 2703.1.1, 2703.5 and 3704.2.2.7 are amended for requirements for hazardous, highly toxic, toxic materials, and oxidizer materials.

Findings:

The City of Irvine is in an active seismic region. Multiple structure fires are known to occur after large seismic events. Earthquake events are known to negatively impact rescue and fire suppression activities. Aftershocks create ongoing hazards to building occupants and building systems. This situation creates the need for both additional fire protections including for toxic and flammable materials.

Q. California Fire Code Section 3203.4.1 is amended regarding signage requirements for cryogenic fluids.

Findings:

The City of Irvine is in an active seismic region. Earthquake events are known to cause releases of materials hazardous to emergency responders thus creating a need for standard informational sign requirements.

R. California Fire Code Sections 3301.2, 3301.3, 3301.8, and 3308.2 are added regarding fireworks and pyrotechnic materials to prohibit the use and sale of fireworks and regulate fireworks displays and model rocketry.

Findings:

The City of Irvine is located in an area subject to a climatic condition of high winds, low humidity, and wildland areas. This combination of conditions creates an environment which is conductive to ignition of roofs and vegetation and necessitates the control of fireworks and firework displays.

S. California Building Code Chapter 35, California Fire Code Chapter 47, and California Residential Code Chapter 44 are amended to enhance fire suppression and notification systems standards which are an integral part of the buildings fire life safety systems to improve reliability and reduce the probability of system failure or delayed notification.

Findings:

1. The jurisdiction of Irvine is located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds, which may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials. Frequent periods of drought and low humidity add to the fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are also prone to disrupt utility services throughout the County.

2. The City of Irvine is located in the middle of the seismically active area adjacent to the Newport-Inglewood and San Joaquin Hills Faults. The viability of the public water system may be questionable immediately after a major seismic event. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks, there exists a need to provide increased general protection.

3. The type of soil prevalent in the City of Irvine is highly corrosive and detrimental to buried metallic materials.

SECTION 2. The following changes and modifications to the 2010 California Plumbing Code as recommended by the Chief Building Official are hereby found to be reasonably necessary due to the following local climatic, geologic, or topographic conditions:

A. Section 602.5 is amended to restrict the use of water softeners, when permitted by state law, which discharge any saline waste in areas served by Irvine Ranch Water District.

Findings:

1. The City of Irvine is in an arid area with minimal rainfall which necessitates maximizing the use of reclaimed water for irrigation to conserve potable water supplies. Minimizing saline discharge is necessary to maintain water quality suitable for irrigation purposes.

B. Section 604.1 is amended to prohibit the use of underground galvanized malleable iron, galvanized wrought iron, and galvanized steel.

C. Section 1209.5.1.1 is amended to prohibit the use of metallic gas pipe underground.

Findings for B and C:

1. Local soil conditions in the City of Irvine are detrimental to buried metallic materials. The type of soil prevalent in the City of Irvine is highly corrosive to metal.

SECTION 3. The following changes and modifications to the 2010 California Electrical Code, as recommended by the Chief Building Official, are hereby found to be reasonably necessary due to the following local climatic, geologic, or topographic conditions.

A. Section 300.1 is amended to prohibit outside overhead wiring.

Findings:

1. Zoning regulations prohibit overhead wiring on private properties in the City.

2. The City of Irvine is in an active seismic region. Locating electrical wiring underground reduces damage to electrical system infrastructure and the likelihood of fires caused by falling wires in an earthquake event.

B. Section 310.2 is amended to require continuous inspection when aluminum conductors No. 6 and smaller are used for branch circuits.

Findings:

1. Improper installation creates a fire hazard and aluminum wire size No. 6 and smaller requires greater precision and care for proper installation.

2. Fires due to improper installation have occurred in the City, which makes this provision necessary. The regulation of aluminum wire size No. 6 and smaller is reasonably necessary to safeguard life and property with the City of Irvine.

SECTION 4. Additional amendments have been made to the administrative provisions of the 2010 California Building Code, the 2010 California Fire Code, the 2010 California Mechanical Code, the 2010 California Plumbing Code; the 2010 California Electrical Code, the 2010 California Existing Building Code, and the 2010

California Residential Code. On the recommendation of the Chief Building Official and the Fire Chief, such amendments are hereby found to be either administrative or procedural in nature. The changes made include provisions making each of said codes compatible with other codes and ordinances enforced by the City and fee schedules adopted by City Council resolution.

SECTION 5. A copy of this Resolution together with the Ordinance adopting the 2010 California Building Code, the 2010 California Fire Code, the 2010 California Mechanical Code, the 2010 California Plumbing Code, the 2010 California Electrical Code, the 2010 California Existing Building Code, 2010 California Residential Code, and all City amendments thereto shall be filed with the California Building Standards Commission by the Chief Building Official of the City of Irvine.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 23rd day of November, 2010.

MAYOR OF THE CITY OF IRVINE

ATTEST:

CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, SHARIE APODACA, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 23rd day of November, 2010.

AYES:	5	COUNCILMEMBERS:	Agran, Choi, Krom, Shea and Kang
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	0	COUNCILMEMBERS:	None

CITY CLERK OF THE CITY OF IRVINE

CITY COUNCIL ORDINANCE NO. 10-09

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AMENDING CHAPTERS 1, 2, 3, 4, 5, AND 6 OF DIVISION 9 OF SECTION 5 AND CHAPTER 9 OF DIVISION 7 OF SECTION 6 OF THE IRVINE MUNICIPAL CODE PERTAINING TO BUILDING AND FIRE CODE REGULATIONS

The City Council of the City of Irvine DOES HEREBY ORDAIN as follows:

SECTION 1. Unless otherwise amended or added, Section 5 of Division 9 of the Irvine Municipal Code is hereby incorporated by reference.

SECTION 2. Chapter 1 of Section 5 of Division 9 of the Irvine Municipal Code is hereby deleted in its entirety and amended to read as follows:

CHAPTER 1. ADOPTION OF BUILDING AND FIRE CODE

Section 5-9-101. Adoption of Building Code.

There is hereby adopted by the City Council for the purpose of prescribing regulations for the construction, alteration, movement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures, the following building codes by reference subject to the modifications set forth in this Division:

1. California Building Code Volumes 1 and 2, 2010 edition with errata (Title 24, Part 2, California Code of Regulations), based on the 2009 International Building Code as published by the International Code Council.

2. California Residential Code (excluding Chapter 1, Division II), 2010 edition with errata (Title 24, Part 2.5, California Code of Regulations), based on the 2009 International Residential Code as published by the International Code Council.

3. 2010 California Green Building Standards Code with errata (Title 24, Part 11, California Code of Regulations) as published by the International Code Council.

4. California Electrical Code, 2010 edition with errata (Title 24, Part 3, California Code of Regulations), based on the 2008 National Electrical Code, as published by the National Fire Protection Association.

5. California Mechanical Code, 2010 edition with errata (Title 24, Part 4, California Code of Regulations), based on the 2009 Uniform Mechanical

Code, including Appendix Chapters A and D, as published by the International Association of Plumbing and Mechanical Officials.

6. California Plumbing Code, 2010 edition with errata (Title 24, Part 5, California Code of Regulations), based on the 2009 Uniform Plumbing Code, including Appendices A, B, D, G, I and K, as published by the International Association of Plumbing and Mechanical Officials.

7. California Energy Code, 2008 edition with errata (Title 24, Part 6, California Code of Regulations).

8. California Existing Building Code, 2010 edition with errata (Title 24, Part 10, California Code of Regulations).

9. Uniform Housing Code, 1997 edition, Chapters 5, 6, 7, 8, 9, and 10 as published by the International Conference of Building Officials.

10. Uniform Swimming Pool, Spa, and Hot Tub Code, 2009 edition with errata, as published by the International Association of Plumbing and Mechanical Officials.

The provisions of these codes as amended by the provisions of this Division of the Irvine Municipal Code shall constitute the Building Code Regulations of the City of Irvine.

Section 5-9-102. Adoption of Fire Code.

There is hereby adopted by the Irvine City Council for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, the following Fire Code by reference subject to the modifications set forth in this Division:

California Fire Code, 2010 edition with errata (Title 24, Part 9, California Code of Regulations), the 2009 International Fire Code published by the International Code Council (ICC), and the whole thereof, including, Appendix B, Appendix BB, Appendix C and Appendix CC.

The provisions of this Code as amended by the provisions of this Division of the Irvine Municipal Code shall constitute the Fire Code Regulations of the City of Irvine.

SECTION 3. Chapter 2 of Section 5 of Division 9 of the Irvine Municipal Code is hereby deleted in its entirety and amended to read as follows:

CHAPTER 2. ADMINISTRATIVE CODE FOR BUILDING CODE REGULATIONS

Section 5-9-201. Adoption of administrative provisions.

A. Building Code administrative provisions.

There is hereby adopted by the City Council for the purpose of prescribing administrative regulations for the Building Code Regulations of the City of Irvine, the following Administrative Code provisions by reference subject to the modifications set forth in this Division:

Chapter 1, Division II of the California Building Code, 2010 edition (Title 24, Part 2, California Code of Regulations).

Section 5-9-202. Scope and General.

A. Section 101.2 Scope, of Chapter 1, Division II of the California Building Code is amended to add a new second paragraph to read: The provisions of these codes shall apply to and affect all of the territory of the City of Irvine, except work located primarily in a public way; public utility towers and poles; mechanical equipment not specifically regulated in these codes; hydraulic flood control structures; facilities for the production, generation, storage or transmission of water or electrical energy by a local agency; and the buildings or structures of administration and instruction of public schools when acting under the State Contract Act, and except as exempted by these codes.

B. Section 101.2 of Chapter 1, Division II of the California Building Code is amended to delete and replace the Exception to 101.2 Scope to read:

Exception: Except for administrative provisions contained in Chapter 1, Division II of the California Building Code detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above the grade plane in height with a separate means of egress and their accessory structures shall comply with the California Residential Code.

C. Section 101.4 of Chapter 1, Division II of the California Building Code is amended to delete and replace 101.4.1 through 101.4.6 and add 101.4.7 to read:

101.4.1 Electrical. The provisions of the California Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

101.4.2 Gas. The provisions of the California Mechanical Code shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

101.4.3 Mechanical. The provisions of the California Mechanical Code shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

101.4.4 Plumbing. The provisions of the California Plumbing Code shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. The provisions of the California Plumbing Code shall apply to private sewage disposal systems.

101.4.5 Reserved.

101.4.6 Fire prevention. The provisions of the California Fire Code shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

101.4.7 Energy. The provisions of the California Energy Code, Title 24, Part 6, shall apply to all matters governing the design and construction of buildings for energy efficiency.

Section 5-9-203. Division of Building and Safety.

A. Division of Building and Safety. The title of Section 103 and all places where "Department of Building and Safety" or "department" occurs in Chapter 1, Division II of the California Building Code is amended to delete:

"Department of Building and Safety", and amended to substitute:

"Division of Building and Safety"

B. Chief Building Official. Section 103.1 of Chapter 1, Division II of the California Building Code is amended to add a second sentence to read:

Where referred to by this Code, "building official" shall mean the Chief Building Official of the City of Irvine. Any and all classification or title changes are made with respect to approvals thereto by the City Council.

Section 5-9-204. Duties and Powers of Building Official.

A. Right of Entry. Section 104.6 of Chapter 1, Division II of the California Building Code is amended to add a second paragraph to read:

When the Chief Building Official or his authorized representative shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care of control of any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Chief Building Official or his authorized representative for the purpose of inspection and examination pursuant to this Code. Emergency Abatement Authority. Appendix Chapter 1, Division II of the California Building Code is amended to add Section 104.12 to read:

Section 104.12 Emergency Abatement Authority

1. Authority. Whenever the Chief Building Official determines that an imminent life safety hazard exists that requires immediate correction or elimination, the Chief Building Official or his designee may exercise any or all of the following powers:

    a. Order the immediate vacation of any tenants and prohibit occupancy until all repairs are completed.
    b. Post the premises as unsafe, substandard or dangerous.
    c. Board, fence or secure the building or site.
    d. Raze and grade that portion of the building or site to prevent further collapse and remove any hazard to the general public.
    e. Make minimal emergency repairs as necessary to eliminate any imminent life safety hazard.
    f. Cause any dangerous water, electrical, gas or plumbing connections to be disconnected.
    g. Take any other action as appropriate under the circumstances.

2. Procedures. The Chief Building Official or his designee shall comply with the following emergency abatement procedures:

    a. In determining the existence of an imminent life safety hazard, the Chief Building Official or his designee shall conduct a personal inspection of the hazard and issue a brief written report identifying the nature, scope and condition of the hazard.

    b. The Chief Building Official or his designee shall give notice, setting forth the imminent life safety hazard found, to the owner, occupant, other responsible person or authorized representative of the building, structure or site upon which the hazardous condition exists. If the Chief Building Official or his designee determines that, under the

circumstances, notice cannot be given or is impractical, correction or abatement of the hazard can be commenced without prior notice.

c. The level of correction or abatement as necessary to eliminate the immediacy of the hazard shall be determined by the Chief Building Official or his designee.

d. The Chief Building Official or his designee may also pursue any administrative or judicial remedy to abate any remaining public nuisance.

Section 5-9-205. Permits.

A. Section 105.1 Required, of Chapter 1, Division II of the California Building Code is amended to add Section 105.1.3 to read:

Section 105.1.3 Permit exemption. Permits are required for installations described in all codes adopted by reference unless specifically exempted by these codes or by the Chief Building Official for proper cause on an individual case basis after consideration of all circumstances and facts presented. Exemptions from permit requirements of this Code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Code or any other laws or ordinances of this jurisdiction.

B. Section 105.2 Work exempt from permit, of Chapter 1, Division II of the California Building Code, is modified as follows:

Building Permits:

1. Amend Section 105.2 Building: 1. to read:

1. One story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (1.1 m^2) and conforming to the Zoning Code.

2. Delete Section 105.2 Building: 5. Water tanks.

3. Amend Section 105.2 Building 11. to read:

11. Swings and other playground equipment. Exemptions from permit requirements of this Code for playground equipment shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Code or any other State laws or ordinances of this jurisdiction and equipment is subject to City review and approval when

otherwise required by State or local laws, regulations or standards.

4. Amend Section 105.2 Building to add item 14 to read:

    14. Replacement windows and doors having the same dimension as those being replaced and not requiring any change to the structural frame or opening size. Such replacements must still conform to all technical codes and applicable City, County and State ordinances relating to weather proofing, security and energy efficiency.

Plumbing Permits:

1. Amend Section 105.2 Plumbing 2. to read:

    1. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation or replacement of water closets, sinks, garbage disposals or dishwashers, provided such work does not involve or require the replacement or rearrangement of valves, pipes or fixtures and is in conformance with this Code and applicable State laws.

C. Time limitation of application. Section 105.3.2 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 105.3.2 Time limitation of application. Applications for a permit for any proposed work for which no permit is issued shall be deemed to have expired 360 days after the date of filing. The Chief Building Official is authorized to grant one extension of time for action by the applicant for a period not exceeding 180 days. The extension shall be requested in writing and justifiable cause demonstrated. When required by State law or City ordinance, extended permit applications shall be amended to comply with pertinent State laws and City ordinances adopted subsequent to the date of application. Plans and other data submitted for review and relating to an expired application may be returned to the applicant or destroyed by the Chief Building Official.

Applications for a permit for any proposed work submitted as the result of a Code Enforcement written notice of violation for which no permit is issued shall be deemed to have expired thirty (30) days from the date of filing. The Chief Building Official is authorized to grant extension of time for justifiable good cause.

D. Expiration. Section 105.5 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within one hundred eighty (180) days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of one hundred eighty (180) days after the time the work is commenced. The Chief Building Official is authorized to grant, in writing, no more than two extensions of time, for periods not more than 180 days each. Such extensions may require the payment of permit fees based on the remainder of work to be completed. The extension shall be requested in writing and justifiable cause demonstrated.

E. Placement of permit and inspection record card. Section 105.7 of Chapter 1, Division II of the California Building Code is amended to read:

Section 105.7 Placement of permit and inspection record card. The building permit or copy and the inspection record card shall be kept on site and maintained available by the permit holder until final approval has been granted by the Chief Building Official.

F. Residential Remodeling. Chapter 1, Division II of the California Building Code is amended to add Section 105.8 to read:

Section 105.8 Residential Remodeling. The following regulations and definitions shall apply to all remodeling construction on residential buildings and properties:

1. Completion of construction. All building permits for residential remodeling shall expire in accordance with the provisions of the Building Code if work is not commenced within one hundred eighty (180) days from the date of such permit, or if the work authorized by permit is suspended or abandoned, for one hundred eighty (180) days at any time after the work is commenced. Notwithstanding the above, and subject to the provisions for extensions provided in subsection 2 below, all residential remodeling shall be completed by the owner, owner's agent, or the permittee and approved by the City within the following time frame:

a. Room additions (exterior of buildings and property area)	18 months
b. Pools/spas	12 months
c. Patio covers	6 months
d. Water heaters, water softeners, and air conditioners	6 months
e. Fireplaces	6 months
f. Skylights	6 months

g. All other remodeling or building air conditioners — 6 months

2. Extensions. Upon written request of the owner or permittee, the Chief Building Official or his designated representative may extend the period for completion of construction in writing for a period not-to-exceed one hundred eighty (180) days. The written request must demonstrate that (1) due to circumstances beyond the owner's or permittee's control, construction could not be completed within the time frame allowed by this section.; (2) that reasonable progress has been made; (3) that the condition of the property presents no health or safety hazard; and, (4) that the continued delay will not create any unreasonable visual or physical detriment to the neighborhood. The decision of the Chief Building Official may be appealed to the Irvine City Council by any person who owns property or resides within three hundred (300) feet of the boundaries of the subject property.

   Any extension beyond one hundred eighty (180) days must be approved by the Planning Commission. The Planning Commission's decision regarding approval or denial of the application for additional extension shall be based upon the applicant's ability to demonstrate the same factors required for the initial extension of the building construction period.

3. Maintenance of property during remodeling. During remodeling, all property shall be maintained in a reasonable clean and well-kept manner. All lumber and building materials shall be neatly piled or stacked in a safe manner and stored in the rear yard of the residential property or inside the building construction perimeter except that building materials may be stored in a front yard for a period not to exceed thirty (30) days. Properties shall be secured by fencing when the Chief Building Official determines fencing is necessary for public safety and welfare.

   Exterior walls and roofs of buildings shall be covered with finished materials, in accordance with City-approved plans and the Building Code within six (6) months from the commencement of construction. A written waiver of this requirement may be obtained from the Chief Building Official or his designated representative if the construction is screened from view from adjacent occupied or public property with fencing materials approved by City zoning and building regulations.

4. Definitions.

   a. Remodeling. "Residential remodeling construction" is defined as construction of work which constitutes construction, enlargement, alteration, erection, repair, demolition or improvement, of an existing residential structure or other improvement located on residential property.

b. Reasonable progress. "Reasonable progress" shall mean a demonstration that all means reasonably available to the permittee to complete the work within the prescribed time have been exhausted.

G. Change of contractor or of ownership. Chapter 1, Division II of the California Building Code is amended to add Section 105.9 to read:

Section 105.9 Change of Contractor or of Ownership. A permit issued hereunder shall expire upon a change of ownership or a change of contractor for the building, structure or grading for which said permit was issued if the work thereon has not been completed, and a new permit shall be required for the completion of the work. If no changes have been made to the plans or specifications last submitted to the Chief Building Official, a permit issuance fee as set forth in the City's Fee Resolution shall be charged to the permit applicant. If changes to the plans or specifications have been made, the Chief Building Official shall determine appropriate permit fees in accordance with the City's Fee Resolution.

H. Subcontractors. Chapter 1, Division II of the California Building Code is amended to add Section 105.10 to read:

Section 105.10 Subcontractors. At the time of permit issuance, the applicant shall complete a form provided by the City Division of Building and Safety, which lists all subcontractors, and shows verification of Workers' Compensation insurance, State contractor license and license category, City business license and Federal tax identification number. No person shall contract or sub-contract construction work without a valid contractor's license pursuant to applicable provisions of the State of California Business and Professions Code.

In the event that the applicant cannot provide a complete list of valid subcontractors at the time of permit issuance, the applicant shall provide such information to the City, within a reasonable period of time after award of each permit. Failure to provide timely valid and current sub-contractor listings shall result in the permit applicant paying a penalty for default to the City in an amount equal to the original permit fee for each sub-contractor violation in order to defray City costs of enforcement of this section. Failure to remit penalty payment shall constitute a violation of this Code, punishable as a misdemeanor under the City charter.

I. Approvals. Chapter 1, Division II of the California Building Code is amended to added Section 105.11 to read:

Section 105.11 Approvals. To be valid, any approval, waiver, determination, or similar action referenced in this Code benefiting the

party so requesting such action must be in writing and prepared by a City individual with authority to provide the same.

Section 5-9-206. Construction documents.

A. Means of egress. Section 107.2.3 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 106.1.2 Means of egress. The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this Code. In Group A occupancies, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

Section 5-9-207. Reserved.

Section 5-9-208. Fees.

A. Schedule of plan review, permit and investigation fees. Section 109.2 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 109.2 Schedule of plan check and permit fees. A fee for each building, electrical, plumbing or mechanical permit shall be paid as established by City Council resolution in effect at the time of issuance of the permit.

Section 109.2.1 Permit fees. The fee for each permit shall be as set forth in the fee schedule established by City Council resolution in effect at the time of issuance of the permit.

Section 109.2.2 Plan review fees. When submittal documents are required by California Building Code Chapter 1, Division II Section 107.1, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. Said plan review fees shall be as set forth in the fee schedule established by City Council resolution in effect at the time of plan review submittal.

The plan review fees specified in this section are separate fees from the permit fees specified in Section 109.2.1 and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review, or when the project involves deferred submittal items as defined in Section 107.3.4.2, an additional plan review fee shall be charged as set forth in the fee schedule established by the City Council

resolution in effect at the time of the additional or defined plan review submittal.

Section 109.2.3 Investigation fees. Whenever work for which a permit is required by this Code has been commenced without first obtaining a permit, the Chief Building Official may require an investigation to be made before a permit may be issued for such work.

An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued to recover City costs of investigation. The payment of such investigation fee shall not exempt an applicant from compliance with all other provisions of either this Code, or the technical codes nor from the penalty prescribed by law.

B. Building permit valuations. Section 109.3 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 109.3 Building permit valuations. The determination of value or valuation under any of the provisions of these Codes shall be made as set forth in the fee schedule established by City Council resolution in effect at the time of plan review submittal. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work, including materials and labor, for which the permit is issued as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems and other permanent equipment.

C. Refunds. Section 109.6 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 109.6 Refunds. The Chief Building Official may authorize refunding of a fee paid hereunder which was erroneously paid or collected.

The Chief Building Official may authorize refunding not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this Code.

The Chief Building Official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any examination time has been expended.

The Chief Building Official shall not authorize the refunding of any fee paid except upon written application filed by the permittee not later than 360 days after the date of fee payment or as otherwise required by law.

D. Strong Motion Instrumentation Program fee. Section 109.7 of Chapter 1, Division II of the California Building Code is added to read:

1. Scope and purpose. In accordance with Public Resources Code Division 2, Chapter 8 (Public Resources Code § 2700 *et seq.*), each applicant for a building permit pursuant to this division shall be charged a fee as described herein for purposes of administering the State of California Strong Motion Instrumentation Program. Said fees are in addition to any and all other fees required for applicants for the issuance of building permits.

2. Definitions.

   Building. For the purpose of this section, a building is any structure built for the support, shelter, or enclosure of persons, animals, chattels, or property of any kind.

3. Fee schedule. Every applicant for a building permit shall pay a Strong Motion Instrumentation Program fee in the amount stipulated by the State of California.

4. Administration. The Manager of Fiscal Services or his/her authorized representative shall file all reports and pay all fees as required by the provisions of Chapter 8, Division 2 of the California Public Resources Code (Public Resources Code § 2700 *et seq.*), and shall comply with all rules and regulations of the State of California Department of Conservation, as administrative agency for the program.

Section 5-9-209. Inspections.

A. Required inspections. Section 110.3 of Chapter 1, Division II of the California Building Code is amended to read:

110.3 Required inspections. The building official, upon notification to the City shall make the inspections set forth in Sections 110.3.1 through 110.3.11.

110.3.1 Pre-Construction Inspection. A pre-construction inspection shall be conducted prior to start of construction for all projects involving new buildings and additions to non-residential structures unless waived by the Chief Building Official.

110.3.2 Footing and foundation inspection. Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the

foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94 in which case the concrete need not be on the job.

110.3.3 Concrete slab and under-floor inspection. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.

110.3.4 Lowest floor elevation. In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in Section 1612.5 shall be submitted to the Building Official.

110.3.5 Frame inspection. Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.

110.3.6 Lath and gypsum board inspection. Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

Exception: Gypsum board that is not part of a fire-resistance-rated assembly or a shear assembly.

110.3.7 Fire-resistant penetrations. Protection of joints and penetrations in fire-resistance-rated assemblies.

110.3.8 Energy efficiency inspections. Inspections shall be made to determine compliance with Chapter 13 and shall include, but not be limited to, inspections for: envelope insulation R and U values, fenestration U value, duct system R value, and HVAC and water-heating equipment efficiency.

110.3.9 Other inspections. In addition to the inspections specified above, the Building Official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this Code and other laws that are enforced by the Department of Building Safety.

110.3.10 Special inspections. For special inspections, see Section 1704.

110.3.11 Final inspection. The final inspection shall be made after all work required by the building permit is completed.

Section 5-9-210. Certificate of Occupancy

A. Section 111.1 Use and Occupancy, of Chapter 1, Division II of the California Building Code is amended to delete and replace the exception to read:

Exception: R-3 occupancies and work exempt from permits under Section 105.2.

B. Section 111.2 Certificate Issued, of Chapter 1, Division II of the California Building Code is amended to delete items 10 and 12 and replace to read:

10. The design occupant load when required by the Chief Building Official.

11. Any special stipulations and conditions of the building permit when required by the Chief Building Official.

Section 5-9-211. Reserved.

Section 5-9-212. Board of Appeals.

A. Section 113.1 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 113.1 General. An Appeals Board Committee shall be established, either prior to or immediately following receipt of a completed application for an appeal hearing, to hear and decide appeals of orders, decisions or determinations made by the Chief Building Official relative to the application and interpretation of this Code. This Appeals Board Committee shall consist of one (1) member appointed by each City Council member each of whom are qualified by experience and training to pass upon matters pertaining to building construction and who are not employees of the City of Irvine. An additional two (2) physically disabled persons shall be appointed by the City Council to participate and vote only on matters concerning physically disabled access.

The Chief Building Official shall be an ex-officio member of the Appeals Board Committee and shall act as Secretary to said Board but have no vote upon any matter before the Appeals Board Committee.

The Appeals Board Committee shall render decisions by majority vote in response to City staff reports. Minutes of all proceedings shall be maintained by City staff.

The hearing is intended to be informal in nature. Formal rules of the California Evidence Code and discovery shall not apply, except that irrelevant and unduly repetitious evidence may be excluded at the

Appeals Board Committee's discretion. Each party shall have the opportunity to offer testimony and evidence and cross-examine witnesses in support of his or her case.

The Chief Building Official shall maintain a full set of records for each case in accordance with the City of Irvine records retention schedule.

Section 113.1.1 Application and request for hearing. Within 15 calendar days from the date the order, decision or determination of the Chief Building Official, the applicant must make a written request for a hearing. If no appeal notice is filed within the 15-calendar-day period, the decision shall be deemed confirmed.

Applicants for a hearing before the Appeals Board Committee shall pay a fee in the amount set by City Council resolution prior to administrative processing for any proceedings. The applicant shall complete the established City application form for an appeals hearing along with submittal of required fees.

Section 113.1.2 Notification of hearing. At least 15 calendar days prior to the date of the hearing, the City shall, by registered or certified mail or personal service, give notice to the applicant of the time, date, and location of the hearing.

Section 113.1.3 Notification of decision. Within ten days of the hearing's conclusion, the Chief Building Official shall provide the applicant with the Appeals Board Committee decision in writing. The written decision shall contain the Appeals Board Committee findings of fact and conclusions.

B. Limitations on authority. Section 113.2 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this Code or rules legally adopted thereunder has been incorrectly interpreted, the provisions of this Code do not fully apply or an equally good or better form of construction is proposed. The Board shall have no authority relative to interpretation of the administrative provisions of this Code or to waive requirements of either the administrative or technical codes.

Section 5-9-213. Violations.

A. Unlawful acts. Section 114.1 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 114.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove,

demolish or occupy any building, structure or equipment regulated by this Code, or cause same to be done, in conflict with or in violation of any of the provisions of the codes and ordinances adopted by the City of Irvine.

B. Violations and penalties. Section 114.4 of Chapter 1, Division II of the California Building Code is deleted and amended to read:

Section 114.4 Violations and penalties. Any person, firm or corporation violating any of the provisions of the codes adopted by the City of Irvine or failing to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued according to the provisions of this Code, shall be deemed guilty of a misdemeanor; and each such person, firm or corporation shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation is committed, continued or permitted; and upon conviction of any such violation such person shall be punished by a fine or by imprisonment as prescribed in Section 4-13-201 of the Municipal Code; or by both such fine and imprisonment.

C. Attorney fees and costs. Section 114.5 of Chapter 1, Division II of the California Building Code is added to read:

Section 114.5 Attorneys' fees and costs. Any person violating the provisions of this chapter shall reimburse the City for any and all costs, expenses and fees incurred by the City in responding to, investigating, assessing, monitoring, treating, cleaning, removing, or remediating any action taken or condition caused in violation of this chapter. Such costs, expenses and fees to be paid to the City shall include all administrative expenses and all legal expenses, including costs and attorneys' fees in obtaining compliance and in litigation, including all costs and attorneys' fees on any appeal. The costs to be recovered pursuant to this section shall be recoverable from any and all persons violating this Code.

Section 5-9-214. Reserved.

Section 5-9-215. Reserved.

SECTION 4. Chapter 3 of Section 5 of Division 9 of the Irvine Municipal Code is hereby deleted in its entirety and amended to read as follows:

CHAPTER 3. ADMINISTRATIVE CODE FOR FIRE CODE REGULATIONS

Section 5-9-301. Adoption of administrative provisions.

A. Fire Code administrative provisions.

There is hereby adopted by the City Council for the purpose of prescribing administrative regulations for the Fire Code Regulations of the City of Irvine, the following administrative code provisions by reference subject to the modifications set forth in this Division:

Chapter 1, Division II of the California Fire Code, 2010 edition (Title 24, Part 9, California Code of Regulations).

B. Enforcement. The California Fire Code with amendments set forth in this Division shall be enforced by the Orange County Fire Authority, which shall be operated under the Fire Chief of the Orange County Fire Authority. The Fire Chief of the Orange County Fire Authority may designate such members of the Fire Authority as inspectors as shall be necessary from time to time.

Section 5-9-302. Reserved.

Section 5-9-303. Required Operational Permits.

A. Required Operational Permits. Section 105.6 of 1, Division II of the California Fire Code is hereby amended by modifying and deleting permit categories as follows:

1. Amend Subsection 105.6.29 Miscellaneous combustible storage, to read:

Subsection 105.6.29 Miscellaneous combustible storage. An operational permit is required to store in any building or upon any premise in excess of 2500 cu. ft. gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork, composting, green waste, or similar combustible material.

2. Delete without substitution Subsection 105.6.35 Private fire hydrants.

Section 5-9-304. Reserved.

Section 5-9-305. Violation penalties.

A. Violation penalties. Section 109.3 of 1, Division II of the California Fire Code is hereby amended to read:

Section 109.3 Violation penalties. Persons who shall violate a provision of this Code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the Fire Code Official, or of a permit or certificate used under provisions of this code, shall be guilty of either a misdemeanor, infraction or both as prescribed in Section 109.3.2 and 109.3.3. Penalties shall be as prescribed in local ordinance. Each day that a

violation continues after due notice has been served shall be deemed a separate offense.

B. Infraction. Section 109.3.2 is hereby added to 1, Division II of the California Fire Code to read:

Section 109.3.2 Infraction. Except as provided in Section 109.3.3, persons operating or maintaining any occupancy, premises or vehicle subject to this Code that shall permit any fire or life safety hazard to exist on premises under their control shall be guilty of an infraction.

C. Misdemeanor. Section 109.3.3 is hereby added to 1, Division II of the California Fire Code to read:

Section 109.3.3 Misdemeanor. Persons who fail to take immediate action to abate a fire or life safety hazard when ordered or notified to do so by the Chief or a duly authorized representative, or who violate any of the following sections of this Code, shall be guilty of a misdemeanor:

104.11.2	Obstructing operations
104.11.3	Systems and Devices
107.6	Overcrowding
109.2.2	Compliance with Orders and Notices
111.4	Failure to comply
305.4	Deliberate or negligent burning
308.2.1	Throwing or placing sources of ignition
310.7	Burning Objects
2404.7	Open or exposed flame

SECTION 5. Chapter 4, Amendments to Technical Codes, of Section 5 of Division 9 of the Irvine Municipal Code is hereby deleted in its entirety and amended to read as follows:

CHAPTER 4. AMENDMENTS TO BUILDING AND FIRE CODE TECHNICAL REGULATIONS

Section 5-9-401 Building Code.

A. General Definitions. Section 202 of Chapter 2 of the California Building Code (CBC) is amended to add or modify the following definitions to read:

Floor Area, Fire Sprinkler. For the purpose of calculating square footage for application of fire sprinkler requirements, the floor area shall be determined in accordance with the CBC definition for "Floor Area, Gross". For Group R-3 occupancies portions of the structure not required to be protected by the automatic sprinkler system do not need to be included into the floor area calculation.

B. Section 403.1.1 Definitions of Chapter 4 of the California Building Code (CBC) is amended to add or modify the following definition to read:

High-Rise Building. Item 2.

"High-rise structure" means every building of any type of construction or occupancy having floors used for human occupancy located more than 55 feet above the lowest floor level having building access, except buildings used as hospitals as defined in Health and Safety Code Section 1250.

C. Standby power loads. Section 403.4.7.2 of the California Building Code is deleted and amended to read:

403.4.7.2 Standby power loads. The following are classified as standby power loads:

1. Power and lighting for the fire command center required by Section 403.4.5; and
2. Standby power shall be provided for elevators in accordance with Sections 1007.4, 3003, 3007 and 3008.

D. Emergency power loads. Section 403.4.8.1 of the California Building Code is deleted and amended to read:

403.4.8.1 Emergency power loads. The following are classified as emergency power loads:

1. Exit signs and means of egress illumination required by Chapter 10;
2. Elevator car lighting;
3. Emergency voice/alarm communications systems;
4. Automatic fire detection systems;
5. Fire alarm systems;
6. Electrically powered fire pumps;
7. Ventilation and automatic fire detection equipment for smoke-proof enclosures; and,
8. Aircraft warning lights

E. Emergency helicopter landing facility. Section 412.2 of the California Building Code is amended to add the following definitions to read:

Approach-Departure Path. The flight path of the helicopter as it approaches or departs from the landing pad.

Emergency Helicopter Landing Facility (EHLF). A landing area on the roof of a high-rise building that is not intended to function as a heliport or

helistop but is capable of accommodating fire or medical helicopters engaged in emergency operations.

Safety Area. A defined area surrounding the landing pad which is free of obstructions.

Takeoff and Landing Area. The combination of the landing pad centered within the surrounding safety area.

F. Emergency Helicopter Landing Facility (EHLF). Section 412.7 of the California Building Code is amended to add Section 412.7.5 to read:

Section 412.7.5. Emergency Helicopter Landing Facility. Emergency Helicopter Landing Facility (EHLF) shall be constructed as specified in Section 412.7.5.1 through 412.7.5.13.

Section 412.7.5.1 General. Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 ft above the lowest level of the fire department vehicle access shall have a rooftop Emergency Helicopter Landing Facility (EHLF) in a location approved by the Fire Code Official for only use by fire, police, and emergency medical helicopters.

Section 412.7.5.2 Rooftop Landing Pad. The landing pad shall be 50 feet x 50 feet or a 50 foot diameter circle that is pitched or sloped to provide drainage away from access points and passenger holding areas at a slope of 0.5 percent to 2 percent. The landing pad surface shall be constructed of approved non-combustible, nonporous materials. It shall be capable of supporting a helicopter with a maximum gross weight of 15,000 lbs. For structural design requirements, see California Building Code.

Section 412.7.5.3 Approach-Departure Path. The emergency helicopter landing facility shall have two approach-departure paths separated in plan from each other by at least 90 degrees. No objects shall penetrate above the approach-departure paths. The approach-departure path begins at the edge of the landing pad, with the same width or diameter as the landing pad and is a rising slope extending outward and upward at a ratio of 8 feet horizontal distance for every 1 foot of vertical height.

Section 412.7.5.4 Safety Area. The safety area is a horizontal plane level with the landing pad surface and shall extend 25 feet in all directions from the edge of the landing pad. No objects shall penetrate above the plane of the safety area.

Section 412.7.5.5 Safety Net. If the rooftop landing pad is elevated more than 30 inches (2 feet 6 inches) above the adjoining surfaces, a 6-foot-wide horizontal safety net capable of supporting 25 lbs/psf shall be

provided around the perimeter of the landing pad. The inner edge of the safety net attached to the landing pad shall be slightly dropped (greater than 5 inches but less than 18 inches) below the pad elevation. The safety net shall slope upward but the outer safety net edge shall not be above the elevation of the landing pad.

Section 412.7.5.6 Take-off and Landing Area. The takeoff and landing area shall be free of obstructions and 100 feet x 100 feet or a 100 foot diameter.

Section 412.7.5.7 Wind Indicating Device. An approved wind indicating device shall be provided but shall not extend into the safety area or the approach-departure paths.

Section 412.7.5.8 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 1108.1.7 of Section 5-9-405 Fire Code Item I. 2.

Section 412.7.5.9 Emergency Helicopter Landing Facility Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with CFC 1009.4.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

Section 412.7.5.10 Standpipe systems. The standpipe system shall be extended to the roof level on which the Emergency Helicopter Landing Facility (EHLF) is located. All portions of the EHLF area shall be within 150 feet of a 2.5 inch outlet on a Class I or III standpipe.

Section 412.7.5.11 Fire extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairways or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area. Installation, inspection, and maintenance of extinguishers shall be in accordance with the CFC, Section 906.

Section 412.7.5.13 Emergency Helicopter Landing Facility. Fueling, maintenance, repairs, or storage of helicopters shall not be permitted.

G. Fire Protection Systems. Chapter 9 of the California Building Code is modified as follows:

1. Section 903.2 Where required. Section 903.2 is deleted and amended to read:

Section 903.2 Where required. Approved automatic sprinkler systems in buildings and structures shall be provided in the following locations:

1. New buildings or structures: Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.12, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area, as defined in Section 502.1, exceeds 5,000 square feet (465 m^2), or more than two stories in height, regardless of fire areas or allowable area.

   Exceptions:

   a. Group R-3 occupancies. Group R-3 occupancies shall comply with Section 903.2.8.

   b. Subject to approval by the Fire Code Official, open parking garages in accordance with Section 406.3 of the California Building Code.

2. Alterations to existing non-sprinklered non-residential buildings or structures: Approved automatic sprinkler systems shall be provided throughout existing non-sprinklered buildings and structures when the floor area of alterations within any two-year period exceeds 75% of the area of the existing structure and the alteration includes structural modifications other than seismic upgrades.

3. Additions to existing non-sprinklered non-residential buildings or structures: Approved automatic sprinkler systems shall be provided throughout the entire building or structure when the gross floor area of the existing building or structure and addition exceeds 6,000 square feet and the addition is greater than 1,000 square feet in gross floor area.

2. Section 903.2.8 Group R. The first paragraph of Section 903.2.8 is deleted and amended to read:

   Section 903.2.8. Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all new buildings with a Group R fire area.

   An automatic sprinkler system shall be installed throughout any existing building when the floor area of alterations within any two- year period exceeds 50% of gross floor area of the existing structure and the building gross floor area exceeds 5,500 square feet.

3. Section 903.3.1.1.1 Exempt locations. Section 903.3.1.1.1 Exception 4 is deleted and amended to read:

Exception 4:

4. When approved by the Fire Code Official spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, and associated electrical power distribution equipment, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by fire barriers consisting of not less than 1-hour fire-barriers constructed in accordance with Section 707 or not less than 2-hour horizontal assemblies constructed in accordance with Section 712, or both.

4. Section 903.4 Sprinkler system monitoring and alarms. Section 903.4 Exceptions – are deleted and amended to read:

   Exceptions:

   1. Automatic sprinkler systems protecting one- and two-family dwellings.
   2. Limited area systems serving fewer than 20 sprinklers.
   3. (deleted)
   4. Jockey pump control valves that are sealed or locked in the open position.
   5. (deleted).
   6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
   7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

5. Section 904.3.5 Monitoring. Section 904.3.5 is deleted and amended to read:

   [F] 904.3.5 Monitoring. Where a building fire alarm or monitoring system is installed, automatic fire-extinguishing systems shall be monitored by the building fire alarm or monitoring system in accordance with NFPA 72.

6. Section 905.4 Location of Class I standpipe hose connections. Section 905.4 is amended by adding items 7 and 8 to read:

   7. The centerline of the 2.5 inch outlet shall be no less than 18 inches above and no more than 24 inches above the finished floor.
   8. Every new building with any horizontal dimensions greater than 300 feet (91,440 mm) shall be provided with either access doors or a 2.5 inch outlet so that all portions of the building can be reached with 150 feet (45,720 mm) of hose from an access

door or hose outlet. Required access doors shall be located in the exterior of the building and shall be accessible without the use of a ladder. The door dimensions shall be not less than 3 feet (914 mm) in width, and not less than 6 feet 8 inches (2,032 mm) in height.

7. Section 907.2.13 High-rise buildings and Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department access. Section 907.2.13 is deleted and amended to read:

   [F] 907.2.13 High-rise buildings *having occupied floors located more than 55 feet above the lowest level of fire department vehicle access* and Group I-2 occupancies having floors located more than 75 feet above the lowest level fire department vehicle access. High-rise buildings having occupied floors located more than 55 feet above the lowest level of fire department vehicle access and Group I-2 occupancies having floors located more than 75 feet above the lowest level fire department vehicle access shall be provided with an automatic smoke detection system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

   Exceptions:

   1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412.
   2. Open parking garages in accordance with Section 406.3.
   3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1.
   4. Low-hazard special occupancies in accordance with Section 503.1.1.
   5. In Group I-2 and R-2.1 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcast by the emergency voice/alarm communication system.

8. Section 907.3.1 Duct smoke detectors is hereby amended as follows:

   [F] 907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is installed. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the California

Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

Exception: In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

9. Section 907.5.2.2 Emergency voice/alarm communication system is revised as follows.

[F] 907.5.2.2 Emergency voice/alarm communication system. Emergency voice/alarm communication system required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404. In high-rise buildings having occupied floors located more than 55 feet above the lowest level of fire department vehicle access, and Group I-2 occupancies having floors located more than 75 feet above the lowest level fire department vehicle access, the system shall operate on a minimum of the alarming floor, the floor above and the floor below. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

1. Elevator groups.
2. Exit stairways.
3. Each floor.
4. Areas of refuge as defined in Section 1002.1.
5. Dwelling Units in apartment houses.
6. Hotel guest rooms or suites.

Exception: In Group I-1 and R-2.1 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

10. Section 907.6.3.2 High-rise buildings is hereby revised as follows.

907.6.3.2 High-rise buildings. High-rise buildings having occupied floors located more than 55 feet above the lowest level of fire department vehicle access and Group I-2 occupancies having floors located more than 75 feet above the lowest level fire department

vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler waterflow devices.
3. Manual fire alarm boxes
4. Other approved types of automatic detection devices or suppression systems.

11. Section 910.3.2.2 Sprinklered buildings. Section 910.3.2.2 is deleted and amended to read:

Section 910.3.2.2 Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically by actuation of a heat-responsive device rated at least 100° F above the operating temperature of the sprinkler, unless otherwise approved.

H. Ventilation. Section 1203 of the California Building Code is modified as follows:

1. Section 1203.2.1 Openings into attic is deleted and amended as follows:

1203.2.1 Openings into attic. Exterior openings into the attic space of any building intended for human occupancy shall be protected to prevent the entry of birds, squirrels, rodents, snakes and other similar creatures. Openings for ventilation having a least dimension of 1/16 inch (1.6 mm) minimum and 1/8 inch (3.2 mm) maximum shall be permitted. Openings for ventilation having a least dimension larger than 1/8 inch (3.2 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, or similar material with openings having a least dimension of 1/16 inch (1.6 mm) minimum and 1/8 inch (3.2 mm) maximum. Where combustion air is obtained from an attic area, it shall be in accordance with Chapter 7 of the California Mechanical Code.

Materials used shall be noncombustible except vents located under the roof covering, along the ridge of roofs, with the exposed surface of the vent covered by noncombustible wire mesh, may be of combustible materials.

2. 1203.3.1 Openings for under-floor ventilation is deleted and amended as follows:

1203.3.1 Openings for under-floor ventilation. The minimum net area of ventilation openings shall not be less than 1 square foot for each 150 square feet (0.67 m2 for each 100 m^2) of crawl-space area.

Ventilation openings shall be covered for their height and width with any of the following materials, provided that the least dimension of the covering shall not exceed 1/8 inch (3.2 mm):

1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
3. Cast-iron grills or gratings.
4. Extruded load-bearing vents.
5. Hardware cloth of 0.035 inch (0.89 mm) wire or heavier.
6. Corrosion-resistant wire mesh, with the least dimension not exceeding 1/8 inch (3.2 mm).

1203.3.1.1 [SPCB] Openings for under-floor ventilation shall be not less than 1 1/2 square feet (0.135 m^2) for each 25 linear feet (7,620 linear mm) of exterior wall. They shall be covered with corrosion-resistant wire mesh with mesh openings not less than 1/16 inch (1.6 mm) nor more than 1/8 inch (3.2 mm) in any dimension.

I. Minimum roof covering classification. Section 1505.1 of the 2010 California Building Code is modified as follows:

1. Table 1505.1 Minimum Roof Classification for Types of Construction. Table 1505.1 is deleted and amended to read:

TABLE NO. 1505.1 MINIMUM ROOF COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION (1)

TYPES OF CONSTRUCTION								
IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A	A	A	A	A	A	A	A	A

Note (1): See Section 1505.1.1 for roof covering classifications within Very High Fire Severity Zones or Wildland Urban Interface Areas.

2. Section 1505.1.1 Roof coverings within very high fire hazard severity zones. Section 1505.1.1 is amended to delete the Exception.

3. Section 1505.1.3 Roof coverings within all other areas. Section 1505.1.3 is deleted and amended to read:

1505.1.3 Roof coverings within all other areas. The entire roof covering of every existing structure where more than 50 % of the total

roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall comply with Table 1505.1.

J. Modifications to American Society of Civil Engineers (ASCE) 7. Section 1616 is added to Chapter 16 of the 2010 California Building Code to read:

Section 1616 Modifications to ASCE 7

Section 1616.1 General. The text of ASCE 7 shall be modified as indicated in this Section.

Section 1616.1.1 Minimum seismic base shear. ASCE 7, Section 12.8.1.1. Modify ASCE 7 Section 12.8.1.1 by deleting Equation 12.8-5 and amending to read:

$$C_s = 0.044\, S_{DS}\, I \geq 0.01 \qquad \text{(Eq. 12.8-5)}$$

K. Special Inspector Qualifications. Section 1704.1 of the 2010 California Building Code is amended to add Section 1704.1.3 to read:

Section 1704.1.3 Qualifications of special inspector; examination; certificate of registration.

1. The special inspector shall be a qualified person approved by the Chief Building Official or his designated representative. The special inspector shall furnish continuous or periodic inspection on the construction and work requiring his employment as prescribed in the applicable code and statement of special inspections. The special inspector shall report to the Chief Building Official in writing, noting all code violations and other information as required on forms prescribed by the City of Irvine.

2. Each person applying for listing/registration as a special inspector for the City of Irvine shall possess a valid certification as a special inspector, issued upon presentation of evidence of successful completion of testing/examination by a testing agency, which is acceptable to the Chief Building Official for each classification for which the person is applying. The Chief Building Official may, on special occasion, administer an oral review and/or testing procedures which he or she may find appropriate.

3. Each person applying for registration as a special inspector for the City of Irvine shall pay a registration fee of twenty dollars ($20.00) or as established by resolution of the City Council for each classification payable with the application upon approval for listing approval.

4. A registration card shall be issued to each such special inspector who qualifies. A renewal fee of twenty dollars ($20.00) or as established by resolution of the City Council for each classification shall be charged on July 1 of each year, thereafter, at which time the special inspector may be subject to re-examination.

5. The Chief Building Official may revoke any special inspector's certificate of registration at any time for due cause on written notice. This notice shall set forth the time and place evidence would be submitted to show cause why the certificates of registration should not be withdrawn.

6. Failure to appear at such hearing by the special inspector may result in immediate revocation of said inspector's certificate of registration.

7. Special inspector's qualification registrations are to be given only for the execution of work done under Chapter 17 of the California Building Code in the City of Irvine or for work specifically authorized by the Chief Building Official.

L. Inspection of fabricators and fabricator approval. Section 1704.2 of the 2007 California Building Code is amended to delete Section 1704.2.2 and amend Sections 1704.2 and 1704.2.1 to read:

1704.2 Inspection of fabricators. Where fabrication of structural load-bearing members and assemblies is being performed on the premises of a fabricator's shop, the fabricator must be registered and approved by a recognized agency to perform such work.

1704.2.1 Fabricator approval. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved agency. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building official stating that the work was performed in accordance with the approved construction documents.

M. Special inspection for concrete construction. Section 1704.4 of the 2010 California Building Code is amended as follows:

1. Table 1704.4. Amend item 7 to read:

7. Inspection of concrete and shotcrete placement for proper application techniques including all structural concrete placement for new swimming pools.

2. Section 1704.4 Exception. Delete items 3, 4, and 5 of the exception and amend items 3 and 4 to read:

    3. Concrete in building foundations and slabs supported on grade less than five-hundred (500) square feet in area in all occupancies and other non-building construction.
    4. Concrete patios, driveways and sidewalks on grade.
    5. (Deleted)

N. Private swimming pools. Section 3109.4.4 of the 2010 California Building Code is amended to add as follows:

1. Definitions. Section 3109.4.4.1 is amended to add the following definition to read:

    Private Pool is any constructed pool, permanent or portable, which is intended for non-commercial use as a swimming pool by not more than three owner families and their guests.

2. Enclosure of yards containing private pools. Section 3109.4.4.2.1 is added to read:

    Section 3109.4.4.2.1 Enclosure of yards containing private pools. Every person in possession of land within the City, either as owner, purchaser under contract, lessee, tenant, licensee or otherwise, upon which is situated a private swimming pool or other out-of-doors body of water designed, constructed and used for swimming, dipping or immersion by men, women or children, having a depth in excess of eighteen (18) inches, shall maintain in good condition an enclosure to completely separate the private pool from adjoining properties by fencing complying with 3109.4.4.3 or building walls, or a combination thereof, substantially constructed, not lower than five (5) feet in height above the surface of the ground measured vertically from the outside grade.

    Any pool enclosed by a fence or enclosure which does not meet the requirements of this chapter shall be drained immediately and shall not be refilled until such time as the enclosure is brought into compliance with the provisions of this article.

    All gates opening through the swimming pool yard enclosure shall be equipped with a self-closing and self-latching device designed to keep such door or gate securely closed at all times when not in actual use. Access gates through the enclosure shall open away from the swimming pool. The unlocking or unlatching device shall be located not less than five (5) feet above grade or steps at the gate or door measured vertically outside the enclosed areas. This

shall include any passage door or gate opening from an accessory building, such as a garage.

Exceptions:

1. The unlocking or unlatching device may be located on the inside of the enclosure at less than the required five (5) feet in height when not operable from the outside of the enclosure.
2. Double-gates installed across vehicular access ways shall be self-closing and shall be equipped with a latching device which may be manually operated. Such gates shall be securely closed at all times when not in actual use.

O. Referenced Standards. Chapter 35 of the 2010 California Building Code is revised as follows:

1. NFPA 13, 2010 Edition, Installation of Sprinkler Systems is hereby amended as follows:

A. Section 6.8.3 is deleted and amended to read:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2.5 inch inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The size of piping and the number of inlets shall be approved by the Chief. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 GPM (including inside hose stream demand) or greater, or a standpipe system is included, four 2.5 inch inlets shall be provided. The FDC may be located within 150 feet of a private fire hydrant when approved by the Chief.

B. Section 8.3.3.1 is deleted and amended to read:

8.3.3.1. When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the permit is issued. Sprinklers in light hazard occupancies shall be one of the following:

1. Quick-response type as defined in 3.6.4.7
2. Residential sprinklers in accordance with the requirements of 8.4.5

3. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
4. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

C. Section 8.16.17.1.1 is hereby added as follows:

8.16.17.1.1 Residential Waterflow Alarms. A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

D. Section 8.17.2.4.6 is deleted and amended to read:

8.17.2.4.6 Fire Department Connections shall be on the street side of buildings and shall be located and arranged so that they are immediately adjacent to the approved fire department access road and that hose lines can be readily and conveniently attached to the inlets without interference from nearby objects including buildings, fence, posts, or other Fire Department Connections.

E. Section 11.1.1.2 is hereby added as follows:

11.1.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction/s in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve "G". Use is considered undetermined if a specific tenant/occupant is not identified at the time the permit is issued. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

F. Section 11.2.3.1.1.1 is hereby added as follows:

11.2.3.1.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the Fire Code Official:

1. Subtract the project site elevation from the low water level for the appropriate pressure zone and multiplying the result by 0.433;
2. Use a maximum of 40 psi, if available;
3. Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or a professional engineer licensed in the State of California. The result shall be adjusted in accordance with the graduated scale found in the guideline.

G. Section 22.1.3 (43) is deleted and amended to read:

Section 22.1.3 (43) Size and location of hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in the flow tests shall be shown. Flow test shall be completed within six months of the plan submittal to the authority having jurisdiction.

2. NFPA 13R 2010 Edition Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

A. Section 6.16.1 is deleted and amended to read:

6.16.1 A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible in all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

B. Section 6.6.6 is deleted and amended to read:

Section 6.6.6 Sprinklers shall not be required in penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel fired equipment.

C. Section 6.6.9 is hereby added as follows:

6.6.9 Sprinklers shall not be required in attics that are not located over dwelling units. When attics are separated by unit, each unit's attic space may be protected per NFPA 13D Section 8.6.4.2. All other attics shall be protected per NFPA 13.

3. NFPA 13D 2010 Edition Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

A. Section 4.1.5 is hereby added as follows:

4.1.5 Stock of Spare Sprinklers

4.1.5.1. A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

4.1.5.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

4.1.5.3 The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100° F (38° C).

4.1.5.4 A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

B. Section 7.1.2 is deleted and amended to read:

7.1.2 The system piping shall not have a separate control valve unless supervised by a central station, proprietary or remote station alarm service.

C. Section 7.3.1 is deleted and amended to read:

7.3.1 At least one water pressure gauge shall be installed on the riser assembly.

D. Section 7.6 is deleted and amended to read:

7.6 Alarms. Exterior alarm-indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location subject to final approval by the Fire Code Official. Additional interior alarm devices shall be required to provide audibility throughout the structure. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exception:

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
2. When smoke detectors specified under CBC Section 310.9 are used to sound an alarm upon waterflow switch activation.

E. Section 8.6.4.2 is added as follows:

8.6.4.2 All attics shall be protected with an intermediate temperature quick response sprinkler which shall be located to protect attic penetrations created by the access scuttles or mechanical equipment.

4. NFPA 14, 2007 Edition, Installation of Standpipe and Hose Systems is hereby amended as follows:

A. Section 6.4.5.4.1 is deleted and amended to read:

6.4.5.4.1 The Fire Department Connection (FDC) shall have a minimum of two 2.5 inches, internal threaded (NHS) inlets. Additional inlets shall be provided on a 250 GPM per inlet ratio to meet the system demand. The inlets shall be provided with approved caps to protect the system from entry of debris. The location of the FDC shall be approved and be no more than 150 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

B. Section 7.3.1.1 is deleted and amended to read:

7.3.1.1 Hose Connection Height Class I and III Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches, or more than 24 inches above the finished floor. Class II Standpipe hose connections shall be unobstructed and shall be located not less than 3 feet or more than 5 feet above the finished floor.

5. NFPA 24, 2010 Edition, Installation of Private Fire Service Mains and Their Appurtenances is amended as follows:

A. Section 5.9.1.3 is deleted and amended to read:

5.9.1.3 The fire department connection shall be of an approved type and contain a minimum of two 2.5 inch inlets. The location shall be approved and be no more than 150 feet from a public fire hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. The supply pipe shall be painted OSHA safety red.

B. Section 5.9.1.3.1 is added as follows:

5.9.1.3.1 When the sprinkler density design is 500 GPM (including the interior hose stream demand) or greater, or a standpipe system is included, four 2.5 inch inlets shall be provided.

C. Section 5.9.1.3.2 is added as follows:

5.9.1.3.2 The Fire Department Connection (FDC) may be located within 150 feet of a private fire hydrant provided the FDC connects down-stream of an above-ground sprinkler system check valve.

D. Section 6.2.1.1 is added as follows:

6.2.1.1 The closest upstream indicating valve to the riser shall be painted OSHA safety red.

E. Section 6.2.11 (5) is deleted.

F. Section 6.2.11 (6) is deleted and amended to read:

6.2.11 (6) Control valves in a one-hour fire-rated room accessible from the exterior

G. Section 6.2.11 (7) is deleted.

H. Section 6.3.3 is added as follows:

6.3.3 All post indicator valves controlling fire suppression water supplies shall be painted OSHA safety red.

I. Section 10.1.6.3 is added as follows:

10.1.6.3 All ferrous pipe shall be coated and wrapped. Joints shall be coated and wrapped after assembly. All fittings shall be protected with a loose 8-mil polyethylene tube. The ends of the tube shall extend past the joint by a minimum of 12 inches and be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception: 316 Stainless Steel pipe and fittings

J. Section 10.3.5.2 is deleted and amended to read:

10.3.5.2 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to poly-tube, and after installation.

K. Section 10.3.5.3 is added as follows:

10.3.5.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.

L. Section 10.6.3.1 is deleted and amended to read:

10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 18 inches, as measured from the interior of the exterior wall. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints or comply with 10.6.2.

M. Section 10.6.5 is deleted and amended to read:

10.6.5 Pipe Joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints.

6. NFPA 72, 2010 Edition National Fire Alarm Code

A. Section 14.2.1.2.3 is deleted and amended to read:

14.2.1.2.3 If a defect or malfunction is not corrected at the conclusion of system inspection, testing, or maintenance, the system owner or the owner's designated representative and Fire Code Official shall be informed of the impairment in writing within 24 hours.

B. Section 23.8.2 Fire Alarm Control Units is deleted and amended to read:

23.8.2.2 Except as permitted in 23.8.2.3, the fire alarm systems components shall be permitted to share control equipment or shall be able to operate as stand-alone subsystems, but in any case, they shall be arranged to function as a single system and send a single signal to a central, remote, or proprietary station.

C. Section 23.8.2.3 is deleted.

D. Section 26.2.3.1 is amended by deleting and amending the first sentence to read:

26.2.3.1. Supervising station customers or clients and the Fire Code Official shall be notified in writing within 7 days of any scheduled change in service that results in signals from their property being handled by a different supervising station facility.

Section 5-9-402 Residential Code

A. Climatic and Geographic Design Criteria. Table R301.2(1) is deleted and amended to read:

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed (mph)	Topographic effects		Weathering	Frost line Depth	Termite					
Not applicable	85	No	D_2 or E	Negligible	Not applicable	Very Heavy	43	Not applicable	See footnote a	0	60

a. Date of the City of Irvine Entry into the National Flood Insurance Program June 21, 1974. The panel numbers of all FIRMs are: 169, 278, 279, 281, 282, 283, 284, 286, 287, 288, 289, 291, 292 293, 294, 305, 308, 313, 314, 315, 316, 402, 406, 407, 426.

B. Section R313 Automatic Fire Sprinkler Systems

1. R313.1 Townhouse automatic fire sprinkler systems. The exception to Section R313.1 is deleted and amended to read:

   Exception: An automatic sprinkler system shall be installed throughout any existing townhouse building when the floor area of alterations within any two-year period exceeds 50% of gross floor area of the existing structure and the building gross floor area exceeds 5,500 square feet.

2. R313.2 One- and two-family dwellings automatic fire sprinkler systems.

   The exception to Section R313.2 is deleted and amended to read:

   Exception: An automatic sprinkler system shall be installed throughout any existing one- or two-family dwelling building when the floor area of alterations within any two year period exceeds 50% of gross floor area of the existing structure and the building gross floor area exceeds 5,500 square feet.

C. R408 Under-Floor Space

Section R408.2 Openings for under-floor ventilation is deleted and amended to read:

R408.2 Openings for under-floor ventilation. The minimum net area of ventilation openings shall not be less than 1 square foot (0.0929 m2) for each 150 square feet (14 m2) of under-floor area. One ventilation opening shall be within 3 feet (915 mm) of each comer of the building. Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed 1/8 inch (3.2 mm):

1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
3. Cast-iron grill or grating.
4. Extruded load-bearing brick vents.

5. Hardware cloth of 0.035 inch (0.89 mm) wire or heavier.
6. Corrosion-resistant wire mesh, with the least dimension not exceeding 1/8 inch (3.2 mm).

Exception: The total area of ventilation openings shall be permitted to be reduced to *1/1,500* of the under-floor area where the ground surface is covered with an *approved* Class I vapor retarder material and the required openings are placed to provide cross ventilation of the space. The installation of operable louvers shall not be prohibited.

D. R806 Roof Ventilation.

Section 806.1 Ventilation required is deleted and amended to read:

R806.1 Ventilation required. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have a least dimension of 1/16 inch (1.6 mm) minimum and 1/8 inch (3.2 mm) maximum. Ventilation openings having a least dimension larger than 1/4 inch (3.2 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, or similar non-combustible material with openings having a least dimension of 1/16 inch (1.6 mm) minimum and 1/8 inch (3.2 mm) maximum. Openings in roof framing members shall conform to the requirements of Section R802. 7.

E. R902 Roof covering materials.

1. Section R902.1 Roof covering materials. The first paragraph is deleted and amended to read:

R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. A minimum Class A roofing shall be installed in areas designated by this section. Class A roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108.

2. R902.1.3 Roof coverings in all other areas. Is deleted and amended to read:

R902.1.3 Roof coverings in all other areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is Class A. Where less than 50 percent of the roof covering is replaced within any one-year period, the new

roof covering may be Class A, or shall have the same class rating to match the existing but in no case shall it be less than Class B.

F. Chapter 44 Referenced Standards is revised as follows

1. NFPA 13, 2010 Edition, Installation of Sprinkler Systems is hereby amended as follows:

A. Section 6.8.3 is hereby revised as follows:

6.8.3 Fire Department Connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2.5 inch inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The size of piping and the number of inlets shall be approved by the Chief. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 GPM (including inside hose stream demand) or greater, or a standpipe system is included, four 2.5 inch inlets shall be provided. FDC may be located within 150 feet of a private fire hydrant when approved by the Chief.

B. Section 8.3.3.1 is hereby revised as follows:

8.3.3.1 When fire sprinkler systems are installed in shell buildings of undetermined use other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the permit is issued. Sprinklers in light hazard occupancies shall be one of the following:

1. Quick-response type as defined in 3.6.4.7.
2. Residential sprinklers in accordance with the requirements of 8.4.5.
3. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers.
4. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems.

C. Section 8.17.1.1.1 is hereby added as follows:

8.17.1.1.1 Residential Waterflow Alarms. A local waterflow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or waterflow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one

approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible in all other living areas within each dwelling unit. When not connected to a fire alarm or waterflow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

D. Section 8.17.2.4.6 is hereby revised as follows:

8.17.2.4.6 Fire Department Connections shall be on the street side of buildings and shall be located and arranged so that they are immediately adjacent to the approved fire department access road and that hose lines can be readily and conveniently attached to the inlets without interference from nearby objects including buildings, fence, posts, or other Fire Department Connections.

E. Section 11.1.1.2 is hereby added as follows:

11.1.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction/s in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve "G". Use is considered undetermined if a specific tenant/occupant is not identified at the time the permit is issued. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

F. Section 11.2.3.1.1.1 is hereby added as follows:

11.2.3.1.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the Fire Code Official:

1. Subtract the project site elevation from the low water level for the appropriate pressure zone and multiplying the result by 0.433; or
2. Use a maximum of 40 psi, if available; or
3. Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or a professional engineer licensed in the State of California. The result shall be adjusted in accordance with the graduated scaled found in the guideline.

G. Section 22.1.3 (43) is hereby revised as follows:

22.1.3 (43) Size and location of hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in the flow tests shall be shown. Flow test shall be completed within six months of the plan submittal to the authority having jurisdiction.

2. NFPA 13R 2010 Edition Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

A. Section 6.16.1 is hereby revised as follows:

6.16.1 A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

B. Section 6.6.6 is hereby revised as follows:

Section 6.6.6 Sprinklers shall not be required in penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel fired equipment.

C. Section 6.6.9 is hereby added as follows:

6.6.9 Sprinklers shall not be required in attics that are not located over dwelling units. When attics are separated by unit, each unit's attic space may be protected per NFPA 13D Section 8.6.4.2. All other attics shall be protected per NFPA 13.

3. NFPA 13D 2010 Edition Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

A. Section 4.1.5 is hereby added as follows:

4.1.5 Stock of Spare Sprinklers

4.1.5.1. A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

4.1.5.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

4.1.5.3 The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100° F (38° C).

4.1.5.4 A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

B. Section 7.1.2 is hereby revised as follows:

7.1.2 The system piping shall not have a separate control valve unless supervised by a central station, proprietary or remote station alarm service.

C. Section 7.3 Pressure Gauges is hereby deleted and substituted with the following:

Section 7.3.1 is hereby deleted in its entirety and replaced as follows:
7.3. At least one water pressure gauge shall be installed on the riser assembly.

D. Section 7.6 is hereby deleted in its entirety and replaced as follows:

7.6 Alarms Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed.

Exterior audible devices shall be placed on the front or side of the structure and the location subject to final approval by the Fire Code Official. Additional interior alarm devices shall be required to provide audibility throughout the structure. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exceptions:

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
2. When smoke detectors specified under CBC Section 310.9 are used to sound an alarm upon waterflow switch activation.

E. Section 8.6.4.2 is hereby added as follows:

8.6.4.2 All attics shall be protected with an intermediate temperature quick response sprinkler which shall be located to protect attic penetrations created by the access scuttles or mechanical equipment

4. NFPA 14, 2007 Edition, Installation of Standpipe and Hose Systems is hereby amended as follows:

A. Section 6.4.5.4.1 is hereby deleted in its entirety and replaced as follows:

6.4.5.4.1 The Fire Department Connection (FDC) shall have a minimum of two 2.5 inch internal threaded (NHS) inlets. Additional inlets shall be provided on a 250 GPM per inlet ratio to meet the system demand. The inlets shall be provided with approved caps to protect the system from entry of debris. The location of the FDC shall be approved and be no more than 150 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire Department inlet connections shall be painted OSHA safety red.

B. Section 7.3.1.1 is hereby is deleted in its entirety and replaced as follows:

7.3.1.1 Hose Connection Height Class I and III Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches or more than 24 inches above the finished floor. Class II Standpipe hose connections shall be unobstructed and shall be

located not less than 3 feet or more than 5 feet above the finished floor.

5. NFPA 24, 2010 Edition, Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

   A. Section 5.9.1.3 is hereby revised as follows:

      5.9.1.3 The Fire Department Connection shall be of an approved type and contain a minimum of two 2.5 inch inlets. The location shall be approved and be no more than 150 feet from a public fire hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. The supply pipe shall be painted OSHA safety red.

   B. Section 5.9.1.3.1 is hereby added as follows:

      5.9.1.3.1 When the sprinkler density design is 500 GPM (including the interior hose stream demand) or greater, or a standpipe system is included, four 2.5 inch inlets shall be provided.

   C. Section 5.9.1.3.2 is hereby added as follows:

      5.9.1.3.2 The Fire Department Connection (FDC) may be located within 150 feet of a private fire hydrant provided the FDC connects down-stream of an above-ground sprinkler system check valve.

   D. Section 6.2.1.1 is hereby added as follows:

      6.2.1.1 The closest upstream indicating valve to the riser shall be painted OSHA safety red.

   E. Section 6.2.11 (5) is hereby deleted without replacement.

   F. Section 6.2.11 (6) is hereby revised as follows:

      6.2.11 (6) Control valves in a one-hour fire-rated room accessible from the exterior.

   G. Section 6.2.11 (7) is hereby deleted without replacement.

   H. Section 6.3.3 is hereby added as follows:

      6.3.3 All post indicator valves controlling fire suppression water supplies shall be painted OSHA safety red.

   I. Section 10.1.6.3 is hereby added as follows:

10.1.6.3 All ferrous pipe shall be coated and wrapped. Joints shall be coated and wrapped after assembly. All fittings shall be protected with a loose 8-mil polyethylene tube. The ends of the tube shall extend past the joint by a minimum of 12 inches and be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception: 316 Stainless Steel pipe and fittings

J. Section 10.3.5.2 is hereby revised as follows:

10.3.5.2 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to poly-tube, and after installation.

K. Section 10.3.5.3 is hereby added as follows:

10.3.5.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.

L. Section 10.6.3.1 is hereby revised as follows:

10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 18 inches, as measured from the interior of the exterior wall. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints or comply with 10.6.2.

M. Section 10.6.5 is hereby revised as follows:

10.6.5 Pipe joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints.

6. NFPA 72, 2010 Edition National Fire Alarm Code

A. Section 14.2.1.2.3 is hereby revised as follows:

14.2.1.2.3 If a defect or malfunction is not corrected at the conclusion of system inspection, testing, or maintenance, the system owner or the owner's designated representative and Fire Code Official shall be informed of the impairment in writing within 24 hours.

B. Section 23.8.2 Fire Alarm Control Units is revised as follows:

23.8.2.2 The fire alarm systems components shall be permitted to share control equipment or shall be able to operate as stand-alone

subsystems, but in any case, they shall be arranged to function as a single system and send a single signal to a central, remote, or proprietary station.

C. Section 23.8.2.3 is hereby deleted without replacement:

D. Section 26.2.3.1 is hereby amended by modifying the starting paragraph as follows:

26.2.3.1 Supervising station customers or clients and the Fire Code Official shall be notified in writing within 7 days of any scheduled change in service that results in signals from their property being handled by a different supervising station facility.

Section 5-9-403 Green Building Code - Reserved

Section 5-9-404. Electrical Code.

A. Underground wiring. Section 300.1 Scope of the 2010 California Electrical Code is amended to add the following subsection to read:

(D) All outside wiring on private property shall be underground.

Exception: For temporary wiring installed under the provisions of 590 and contained within a construction zone.

B. Conductor Material. Section 310.2(B) of the 2010 California Electrical Code is deleted and amended to read:

310.2 (B) Conductor Material. Conductors in this article shall be aluminum, copper-clad aluminum, or copper unless otherwise specified.

Aluminum conductors No. 6 and smaller shall require continuous inspection by an independent testing agency for proper torquing of connections at their termination point and prior approval by the Chief Building Official.

Section 5-9-405. Plumbing Code.

A. Saline waste. Section 602.5 of the 2010 California Plumbing Code is added to read:

602.5 Saline waste. Except where permitted by State law, it shall be unlawful to install or replace any plumbing equipment, including any automatic or self-regenerating water softener unit, the operation of which may result in the discharge of saline waste into the facilities of the Irvine

Ranch Water District, or the discharge of such wastes that might pollute any surface or underground stream, watercourse, lake or any body of water, including any underground, natural or artificial storage reservoir, or which might impair or contribute to the impairment of the usefulness of such waters for human or animal consumption, or domestic, agricultural, industrial or recreational purposes or for any other useful purpose.

B. Materials for building water piping. The second paragraph of Section 604.1 of the 2010 California Plumbing Code is deleted and amended to read:

Materials for building water piping and building supply piping shall be in accordance with the applicable standards referenced in Table 6-4. Galvanized malleable iron, galvanized wrought iron, or galvanized steel, are prohibited materials for use underground.

C. Materials for gas piping. Section 1209.5.1.1 of the 2010 California Plumbing Code is amended to read:

Section 1209.5.1.1 Acceptable Materials. Materials used for piping systems shall comply with the requirements of this chapter or shall be acceptable to the authority having jurisdiction. All pipe used for the installation, extension, alteration, or repair of any exterior underground piping system shall be approved polyethylene or other approved non-metallic pipe, tubing, and fittings.

Section 5-9-406 Mechanical Code - Reserved.

Section 5-9-407 Swimming Pool Code.

Section 301.5 is hereby added to the 2009 Uniform Swimming Pool Code to read:

All swimming pool and spa water shall be maintained in a clear condition which is free of algae, insects, debris, and in a sanitary condition. The entire floor of the swimming pool or spa shall be clearly visible. Section 5-9-405 Uniform Housing Code.

A. Location on Property. Section 501 of the 1997 Uniform Housing Code is amended to read:

501 Location on Property. All buildings shall be located with respect to property lines and to other buildings on the same property as required by Chapter 6 and 7 of the Building Code and Chapter 3 of the Residential Code.

B. Hallways. Section 504.4 of the 1997 Uniform Housing Code is amended to read:

504.4 Hallways. All public hallways, stairs and other exit ways shall be adequately lighted at all times in accordance with Chapter 10 of the Building Code.

C. Water Closet Compartments. Section 505.5 of the 1997 Uniform Housing Code is amended to read:

505.5 Water Closet Compartments. Walls and floors of water closet compartments, except in dwellings, shall be finished in accordance with Chapter 12 of the Building Code.

D. Heating. Section 701.2 of the 1997 Uniform Housing Code is amended to read:

701.2 Heating. Dwelling units, guest rooms and congregate residences shall be provided with heating facilities capable of maintaining a room temperature of 70° F (21.1° C) at a point 3 feet (914 mm) above the floor in all habitable rooms. Such facilities shall be installed and maintained in a safe condition and in accordance with the Building Code, the Residential Code, the Mechanical Code and all other applicable laws. Unvented fuel-burning heaters are not permitted. All heating devices or appliances shall be of an approved type.

E. General. Section 1001.1 of the 1997 Uniform Housing Code is amended to read:

1001.1 General. Any building or portion thereof that is determined to be an unsafe building in accordance with Section 5-9-215, or any building or portion thereof, including any dwelling unit, guest room or suite of rooms, or the premises on which the same is located, in which there exists any of the conditions referenced in this section to an extent that endangers the life, limb, health, property, safety or welfare of the public or the occupants thereof, shall be deemed and hereby declared to be substandard buildings.

F. Hazardous or Insanitary Premises. Section 1001.11 of the 1997 Uniform Housing Code is amended to read:

1001.11 Hazardous or Insanitary Premises. The accumulation of weeds, vegetation, junk, dead organic matter, debris, garbage, offal, rat harborages, stagnant water, combustible materials, and similar materials or conditions on a premises constitutes fire, health or safety hazards that shall be abated in accordance with the procedures specified in Section 5-9-215.

Section 5-9-408 Fire Code

A. Definitions. Section 202 of Chapter 2 of the 2010 California Fire Code is amended to add or modify the following definitions to read:

1. Flowline is the lowest continuous elevation on a rolled curb defined by the path traced by a particle in a moving body of water at the bottom of the rolled curb.

2. Hazardous Fire Area. Includes all areas identified within Section 4906.2 and other areas as determined by the Fire Code Official due to the presence of combustible vegetation, or the proximity of the property to an area that contains combustible vegetation.

B. General Precautions Against Fire Chapter 3 of the 2010 California Fire Code is amended as follows:

1. Vegetation. Section 304.1.2 (7) is amended by adding item E:

(E) OCFA Vegetation Management Guideline.

2. Spark Arrestors. Section 305.5, is amended by adding the following section:

Section 305.5, Spark Arresters. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrestor. The spark arrester shall meet all of the following requirements:

a. The net free area of the spark arrester shall not be less than four times the net area of the outlet of the chimney; and
b. The spark arrester screen shall have heat or corrosion resistance equivalent to 12 gauge wire, 19 gauge galvanized wire or 24 gauge stainless steel; and
c. Openings shall not permit the passage of spheres having a diameter larger than ½ inch and shall not block the passage of spheres having a diameter of less than 3/8 inch; and
d. The spark arrester shall be accessible for cleaning and the screen or chimney cap shall be removable to allow for cleaning of the chimney flue.

3. Development On Or Near Land Containing Or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors. Section 318 is added as follows:

Section 318 Development On Or Near Land Containing Or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors.

The Fire Code Official may require the submittal for approval of geological studies, evaluations, reports, remedial recommendations and/or similar documentation from a State-licensed and department-approved individual or firm, on any parcel of land to be developed which has, or is adjacent to, or within 1,000 feet (304.8 m) of a parcel of land that has an active, inactive, or abandoned oil or gas well operation, petroleum or chemical refining facility, petroleum or chemical storage, or may contain or give off toxic, combustible or flammable liquids, gases or vapors.

4. Fuel Modification Requirements for New Construction. Section 319 is added as follows:

   Section 319 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in areas containing combustible vegetation shall comply with the following:

   a. Preliminary fuel modification plans shall be submitted to and approved by the Fire Code Official concurrent with the submittal for approval of any tentative map.
   b. Final fuel modification plans shall be submitted to and approved by the Fire Code Official prior to the issuance of a grading permit.
   c. The fuel modification plans shall meet the criteria set forth in the Orange County Fire Authority Fuel Modification Plan Guideline.
   d. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification shall be approved by the Fire Code Official.
   e. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

5. Clearance of brush or vegetation growth from roadways. Section 320 is added as follows:

   Section 320 Clearance of brush or vegetation growth from roadways. The Fire Code Official is authorized to cause areas within 10 feet (3,048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic to be cleared of flammable vegetation and other combustible growth. Measurement shall be from the flow-line or the end of the improved edge of the roadway surfaces.

Exception:

Single specimens of trees, ornamental shrubbery or cultivated ground cover such as green grass, ivy, succulents or similar plants used as ground covers, provided that they do not form a means of readily transmitting fire.

6. Unusual Circumstances. Section 321 is added as follows:

Section 321 Unusual Circumstances. The Fire Code Official may suspend enforcement of the vegetation management requirements and require reasonable alternative measures designed to advance the purposes of this code if determined that in any specific case that any of the following conditions exist:

1. Difficult terrain.
2. Danger of erosion.
3. Presence of plants included in any State and Federal resources agencies, California Native Plant Society and County-approved list of wildlife, plants, rare, endangered and/or threatened species.
4. Stands or groves of trees or heritage trees.
5. Other unusual circumstances that make strict compliance with the clearance of vegetation provisions of Sections 15, 16 or 17 of this appendix undesirable or impractical.

7. Use of Equipment. Section 322 is added as follows:

Section 322 Use of Equipment. Except as otherwise provided in this section, no person shall use, operate, or cause to be operated, in, upon or adjoining any hazardous fire area any internal combustion engine which uses hydrocarbon fuels, unless the engine is equipped with a spark arrester as defined in Section 322.1, maintained in effective working order, or the engine is constructed, equipped and maintained for the prevention of fire.

Exceptions:

1. Engines used to provide motor power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code of the State of California.
2. Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel,

there is no exhaust bypass to the atmosphere, and the turbocharger is in good mechanical condition.

322.1 Spark arrestors. Spark arrestors shall comply with the following:

1. A spark arrester is a device constructed of non-flammable material specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch (0.58 mm) in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.

   Spark arresters affixed to the exhaust system of engines or vehicles subject to Section 322 shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.

8. Restricted Entry. Section 323 is added as follows:

   Section 322 Restricted Entry. The fire official shall determine and publicly announce when hazardous fire areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of hazardous fire areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the hazardous fire area is closed to entry, is prohibited.

   Exceptions:

   1. Residents and owners of private property within hazardous fire areas and their invitees and guests going to or being upon their lands.
   2. Entry, in the course of duty, by peace or police officers, and other duly authorized public officers, members of a fire department and members of the United States Forest Service.

9. Trespassing on posted property. Section 324 is added as follows:

   Section 324 Trespassing on posted property. When the Fire Code Official determines that a specific area within a hazardous fire area presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be closed until changed conditions warrant termination of closure. Such areas shall be posted as hereinafter provided:

1. Signs. Approved signs prohibiting entry by unauthorized persons and referring to applicable fire code chapters shall be placed on every closed area.
2. Trespassing. Entering and remaining within areas closed and posted is prohibited.

    Exception: Owners and occupiers of private or public property within closed and posted areas, their guests or invitees, and local, State and Federal public officers and their authorized agents acting in the course of duty.

10. Outdoor fires. Section 325 is added as follows:

    Section 325 Outdoor fires. Outdoor fires shall not be built, ignited or maintained in or upon hazardous fire areas, except by permit from the Fire Code Official.

    Exception: Outdoor fires within habited premises or designated campsites where such fires are built in a permanent barbecue, portable barbecue, outdoor fireplace, incinerator or grill and are a minimum of 30 feet (9,144 mm) from a grass-, grain-, brush- or forest-covered area. Permanent barbecues, portable barbecues, outdoor fireplaces or grills shall not be used for the disposal of rubbish, trash or combustible waste material.

    Section 325.1 Outdoor fire permits. Outdoor fire permits shall incorporate such terms and conditions which will reasonably safeguard public safety and property. Outdoor fires shall not be built, ignited or maintained in or upon hazardous fire areas under the following conditions:

    1. When predicted sustained winds exceed 20 MPH at the ground level or a red flag condition has been declared,
    2. When a person age 17 or over is not present at all times to watch and tend such fire, or
    3. When public announcement is made that open burning is prohibited.

C. Emergency Planning and Preparedness. Chapter 4 of the 2010 California Fire Code is amended to delete without replacement all provisions except for sections 401, 402, 403, and 407.

D. Fire Service Features. Chapter 5 of the 2010 California Fire Code is amended as follows:

1. Section 503.1.1 Buildings and Facilities is amended by adding exception 4:

    4. For Group R-3 and Group U occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, or 903.3.1.3 the fire apparatus access road shall comply with the requirements of this section and shall extend to within 300 feet (91 m) of the main entry door to the building.

2. Section 503.2.1, Dimensions is hereby amended by adding the following sentence at the end of the first paragraph:

    Street widths are to be measured from top face of curb to top face of curb, on streets with curb and gutter, and from flowline to flowline on streets with rolled curbs.

3. Section 503.2.1.1 is added as follows:

    503.2.1.1 Hazardous Areas. In areas defined as State Responsibility Area: Very High Fire Hazard Severity Zones and Local Responsibility Area: Very High Fire Hazard Severity Zones Area as adopted by the local agencies, the minimum fire apparatus road width shall be 28 feet (8.53 m).

        Exception: When the road serves no more than 3 dwelling units and the road does not exceed 150 feet (45.7 m) in length, the road width may be 24 feet (7.3 m).

4. Section 503.4, Obstruction of fire apparatus access roads, is hereby amended by adding the following sentence at the end of the first paragraph:

    Speed bumps and speed humps shall be approved prior to installation.

5. Section 503.6, Security gates, is amended by adding the following language at the end of the first paragraph:

    Vehicle access gates or barriers shall be in accordance with the Orange County Fire Authority Guidelines "Fire Master Plan For Commercial and Residential Development". All electrically operated vehicle access gates shall be equipped with an automatic opening device in addition to a key opening switch.

6. Section 505.1 Address Identification is deleted and amended to read:

   505.1 Address identification. New buildings shall have approved address numbers, building numbers, or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm) for R-3 occupancies, for all other occupancies the numbers shall be a minimum of 6 inches high with a minimum stroke width of 1 inch. Where access is by a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure.

   Existing buildings shall maintain addressing as required by the Code in effect at the time of original construction, or, as an alternate, may conform to current requirements.

7. Section 507.5.1 Where required is deleted and replaced with the following:

   Section 507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more *than allowed in Appendix C – Fire Hydrant Locations And Distribution* from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the Fire Code Official.

   Exception: For Group R-3 and Group U occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, or 903.3.1.3, the distance requirement shall be not more than 600 feet (183 m).

8. Section 510.1 and 510.2 Emergency Responder Radio Coverage is deleted and replaced as follows:

   Section 510.1 Emergency responder radio coverage in buildings. New buildings shall comply with the City of Irvine Public Safety Radio System Coverage standards.

   Section 510.2 Radio signal strength. Emergency responder radio coverage shall satisfy the City of Irvine Public Safety Radio System Coverage standards.

E. Building Services and Systems. Chapter 6 of the 2010 California Fire Code is amended as follows:

1. Section 604.2.15.1.1 Standby power loads is deleted and amended to read:

   Section [B] 604.2.15.11 Standby power loads. The following loads are classified as standby power loads:

   a. Smoke control system.
   b. (deleted).
   c. Fire pumps.
   d. Standby power shall be provided for elevators in accordance with Section 3003.

2. Section 604.2.16.2.1 Emergency power loads is amended by adding item 6 and 7 as follows:

   6. Ventilation and automatic fire detection equipment for smoke-proof enclosures.
   7. Aircraft warning lights.

3. Section 606.8 Refrigerant Detector is amended as follows:

   Section 606.8 Refrigerant Detector. Machinery rooms shall contain a refrigerant detector with an audible and visual alarm. The detector, or a sampling tube that draws air to the detector, shall be located in an area where refrigerant from a leak will concentrate. The alarm shall be actuated at a value not greater than the corresponding TLV-TWA values shown in the California Mechanical Code for the refrigerant classification. Detectors and alarms shall be placed in approved locations. Emergency shutoff shall also be automatically activated when the concentration of refrigerant vapor exceeds 25% of LFL. The detector shall transmit a signal to an approved location.

4. Section 606.10.1.2 Manual Operation is amended as follows:

   Section 606.1.2 Manual operation. When required by the Fire Code Official, automatic crossover valves shall be capable of manual operation. The manual valves shall be located in an approved location immediately outside of the machinery room, in a secure metal box and marked as Emergency Controls.

5. Section 608.1 Scope is hereby amended as follows:

   Section 608.1, Stationary storage battery systems having an electrolyte capacity of more than 50 gallons (189 L) for flooded lead acid, nickel cadmium (Ni-Cd) and valve-regulated lead acid (VRLA), or 1,000 pounds (454 kg) for lithium-ion, used for facility standby power, emergency power, uninterrupted power supplies, shall comply with this section and Table 608.1. Indoor charging of electric carts/cars with more than 50 gallons (189 L) shall comply with Section 608.10.

6. Section 608.10 Indoor charging of electric carts/cars is added as follows:

   608.10 Indoor charging of electric carts/cars. Indoor charging of electric carts/cars where the combined volume of all electric/cars battery electrolyte exceeds 50 gallons shall comply with following:

   a. Spill control and neutralization shall be provided and comply with Section 608.5.
   b. Room ventilation shall be provided and comply with Section 608.6.1.
   c. Signage shall be provided and comply with Section 608.7.
   d. Smoke detection shall be provided and comply with Section 907.2.

7. Section 610 Photovoltaic systems is added as follows:

   Section 610 Photovoltaic systems.

   610.1 Manual Operation. Photovoltaic systems shall comply with Orange County Fire Chief's Association Guideline for Fire Safety Elements of Solar Photovoltaic Systems. The provision of this section may be applied by either the Fire Code Official or the Building Code Official.

F. Interior Finish, Decorative Materials and Furnishings. Chapter 8 of the 2010 California Fire Code is deleted except for sections 801, 802, 803, 804, and subsections 806.2, 807.1, 807.1.2, 807.4.5.1, 807.4.2.4.1, 807.4.5, 807.4.2.4, and Table 803.3.

G. Fire Protection Systems. Chapter 9 of the 2010 California Fire Code is amended as follows:

1. Section 903.2 is deleted and amended to read:

   Section 903.2, Where required. Approved automatic sprinkler systems in buildings and structures shall be provided in the following locations:

   New buildings: Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.12, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area, as defined in Section 502.1, exceeds 5,000 square feet (465 m^2), or more than two stories in height, regardless of fire areas or allowable area.

   Exceptions:

   1. Group R-3 occupancies. Group R-3 occupancies shall comply with Section 903.2.8.
   2. Open parking garages in accordance with Section 406.3 of the California Building Code.

   Alteration: When the floor area of the Alteration within any two-year period exceeds 75% of area of the existing structure and the Alteration includes structural modifications other than seismic upgrade.

   Addition: Approved automatic sprinkler systems shall be provided throughout the entire building or structure when the gross floor area of the existing building or structure and addition exceeds 6,000 square feet and the addition is greater than 1,000 square feet in gross floor area.

2. Section 903.2.8, Group R, the first paragraph is deleted and amended to read:

   Section 903.2.8 An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all new buildings with a Group R fire area.

   An automatic sprinkler system shall be installed throughout any existing building when the floor area of the Alteration within any two-year period exceeds 50% of area of the existing structure and the building area exceeds 5,500 square feet.

3. Section 903.3.1.1.1, Exempt locations, is hereby amended by deleting exception 4 and amending to read:

   4. When approved by the Fire Code Official, spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, and associated electrical power

distribution equipment, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by fire barriers consisting of not less than 1-hour fire barriers constructed in accordance with Section 707 or not less than 2-hour horizontal assemblies constructed in accordance with Section 712, or both.

4. Section 903.4, Sprinkler System Monitoring and Alarms is amended by modifying item 1, deleting items 3 and 5, and renumbering the Exceptions as follows:

    1. Automatic sprinkler systems protecting one- and two-family dwellings.
    2. Limited area systems serving fewer than 20 sprinklers.
    3. Jockey pump control valves that are sealed or locked in the open position.
    4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
    5. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

5. Section 904.3.5 Monitoring is deleted and amended to read:

    904.3.5 Monitoring. Where a building fire alarm or monitoring system is installed, automatic fire-extinguishing systems shall be monitored by the building fire alarm or monitoring system in accordance with NFPA 72.

6. Section 905.4 Location of Class I standpipe hose connections, is amended by adding items 7 and 8 as follows:

    7. The centerline of the 2.5 inch outlet shall be no less than 18 inches above and no more than 24 inches above the finished floor.
    8. Every new building with any horizontal dimensions greater than 300 feet (91,440 mm) shall be provided with either access doors or a 2.5 inch outlets so that all portions of the building can be reached with 150 feet (45,720 mm) of hose from an access door or hose outlet. Required access doors shall be located in the exterior of the building and shall be accessible without the use of a ladder. The door dimensions shall be not less than 3 feet (914 mm) in width, and not less than 6 feet 8 inches (2,032 mm) in height.

7. Section 907.2.13, High-rise Buildings, is amended by deleting and replacing the first paragraph as follows:

907.2.13 High-rise Buildings *Having Occupied Floors Located More Than 55 Feet (16,769 mm) Above the Lowest Level of Fire Department Vehicle Access* and Group I-2 occupancies having floors located more than 75 feet (22,860 mm) above the lowest level fire department vehicle access. High-rise buildings having occupied floors located more than 55 feet (16,769 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having floors located more than 75 feet (22,860 mm) above the lowest level fire department vehicle access shall be provided with an automatic smoke detector in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.6.2.2.

8. Section 907.4.1 Duct smoke detectors, is deleted and amended to read:

Section 907.4.1 Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is installed. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly-attended location and shall perform the intended fire safety function in accordance with this code and the California Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

Exception: In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

9. Section 907.6.2.2, Emergency voice/alarm communication system, is amended to read:

Section 907.6.2.2 Emergency voice/alarm communication system. Emergency voice/alarm communication systems required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler water-flow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's plans required by *Section 404. In high-rise buildings having occupied floors located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access, and Group* I-2 occupancies having floors located more than 75 feet (22,860 mm) above the lowest level fire department vehicle access,

the system shall operate on a minimum of the alarming floor, the floor above and the floor below. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

1. Elevator groups.
2. Exit stairways.
3. Each floor.
4. Areas of refuge as defined in Section 1002.1.
5. Dwelling Units in apartment houses.
6. Hotel guest rooms or suites.

Exception: In Group I-1 and R-2.1 occupancies, the alarm shall sound in a constantly-attended area and a general occupant notification shall be broadcast over the overhead page. Signal shall be in an approved location and shall be identified as air duct detector trouble.

10. Section 907.7.3.2 High-rise buildings is deleted and amended to read:

907.7.3.2 High-rise buildings. High-rise buildings having occupied floors located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having occupied floors located more than 75 feet (22,860 mm) above the lowest level fire department vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic detection devices or suppression systems.

11. Section 910.3.2.2 Sprinklered buildings, is deleted and amended to read:

Section 910.3.2.2 Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically by actuation of a heat-responsive device rated at least 100° F above the operating temperature of the sprinkler, unless otherwise approved.

H. Aviation Facilities. Chapter 11 of the 2010 California Fire Code is amended as follows:

1. Section 1102.1 is amended by adding the following definitions:

   Approach-Departure Path. The flight path of the helicopter as it approaches or departs from the landing pad.

   Emergency Helicopter Landing Facility (EHLF). A landing area on the roof of a high rise building that is not intended to function as a heliport or helistop but is capable of accommodating fire or medical helicopters engaged in emergency operations.

   Safety Area. A defined area surrounding the landing pad which is free of obstructions.

   Takeoff and Landing Area. The combination of the landing pad centered within the surrounding safety area.

2. Section 1108, Emergency Helicopter Landing Facility is amended by adding the following subsections:

   Section 1108.1 General. Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet above the lowest level of the fire department vehicle access shall have a rooftop Emergency Helicopter Landing Facility (EHLF) in a location approved by the Fire Code Official for use by fire, police, and emergency medical helicopters only.

   Section 1108.1.1 Rooftop Landing Pad. The landing pad shall be 50 feet x 50 feet or a 50 foot diameter circle that is pitched or sloped to provide drainage away from access points and passenger holding areas at a slope of 0.5 percent to 2 percent. The landing pad surface shall be constructed of approved non-combustible, nonporous materials. It shall be capable of supporting a helicopter with a maximum gross weight of 15,000 lbs. For structural design requirements, see California Building Code.

   Section 1108.1.2 Approach-Departure Path. The Emergency Helicopter Landing Facility shall have two approach-departure paths separated in plan from each other by at least 90 degrees. No objects shall penetrate above the Approach-Departure Paths. The Approach-Departure Path begins at the edge of the landing pad, with the same width or diameter as the landing pad and is a rising slope extending outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.

   Section 1108.1.3 Safety Area. The Safety Area is a horizontal plane level with the landing pad surface and shall extend 25 feet in all directions from the edge of the landing pad. No objects shall

penetrate above the plane of the Safety Area.

Section 1108.1.4 Safety Net. If the rooftop landing pad is elevated more than 30 inches (2 feet 6inches) above the adjoining surfaces, a 6 foot wide horizontal Safety Net capable of supporting 25 lbs/psf shall be provided around the perimeter of the landing pad. The inner edge of the Safety Net attached to the landing pad shall be slightly dropped (greater than 5 inches but less than 18 inches) below the pad elevation. The Safety Net shall slope upward but the outer Safety Net edge shall not be above the elevation of the landing pad.

Section 1108.1.5 Take-off and Landing Area. The Takeoff and Landing Area shall be free of obstructions and have a minimum area of 100 feet x 100 feet or a 100 foot diameter.

Section 1108.1.6 Wind Indicating Device. An approved wind indicating device shall be provided but shall not extend into the safety area or the approach-departure paths.

Section 1108.1.7 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 1108.1.7

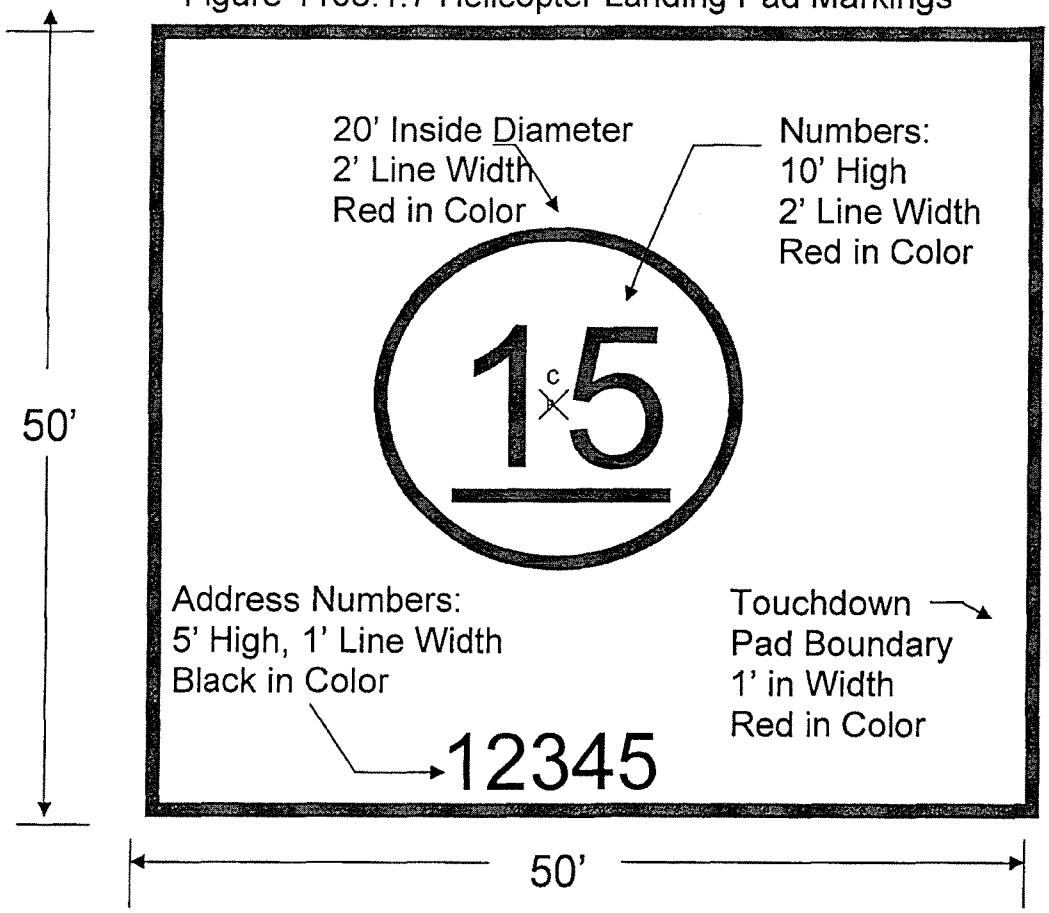
Section 1108.1.8 Emergency Helicopter Landing Facility Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with CFC 1009.4.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

Section 1108.1.9 Standpipe systems. The standpipe system shall be extended to the roof level on which the EHLF is located. All portions of the EHLF area shall be within 150 feet of a 2.5 inch outlet on a Class I or III standpipe.

Section 1108.1.10 Fire extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairways or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area. Installation, inspection, and maintenance of extinguishers shall be in accordance with the California Fire Code, Section 906.

Section 1108.1.11 Emergency Helicopter Landing Facility Fueling, maintenance, repairs, or storage of helicopters shall not be permitted.

Figure 1108.1.7 Helicopter Landing Pad Markings



1. The preferred background is white or tan.
2. The circled red numbers indicate the allowable weight that the facility is capable of supporting in thousands of pounds.
3. The numbers shall be oriented towards the preferred flight (typically facing the prevailing wind).

I. Lumber Yards and Woodworking Facilities. Chapter 19 of the 2010 California Fire Code is amended as follows:

1. Section 1901.2 Permit, is deleted and amended to read:

   Section 1901.2 Permit. Permits shall be required as set forth in Section 105.6. For Miscellaneous Combustible Storage Permit, see Section 105.6.29.

2. Section 1908.1, General, is deleted and amended to read:

   Section 1908.1 General. The storage and processing of more than 400 cubic feet of wood chips, hogged materials, fines, compost, green waste, and raw product produced from yard waste, debris, and recycling facilities shall comply with sections 1908.2 through 1908.10.

3. Section 1908.2, Storage site, is deleted and amended to read:

   Section 1908.2 Storage site. Storage sites shall be level and on solid ground or other all-weather surface. Sites shall be thoroughly cleaned and approval from Fire Code Official obtained before transferring products to the site.

4. Section 1908.3, Size of piles, is amended to modify the first sentence as follows:

   Section 1908.3 Size of piles. Piles shall not exceed 15 feet in height, 50 feet in width and 100 feet in length.

5. Section 1908.7, Pile fire protection, is amended by adding the following sentence to the end of the paragraph:

   Oscillating sprinklers with a sufficient projectile reach to maintain a 40% to 60% moisture content and wet down burning/smoldering areas.

6. Section 1908.9, Material handling equipment, is amended by adding the following sentence at the beginning of the section:

   All material handling equipment operated by an internal combustion engine shall be provided and maintained with an approved spark arrester.

J. High-Piled Combustible Storage. Chapter 23 of the 2010 California Fire Code is amended as follows:

1. Section 2308.3, Flue spaces, is deleted and amended to read:

Section 2308.3 Flue spaces. Flue spaces shall be provided in accordance with Table 2308.3. Required flue spaces shall be maintained. In double-row racks a pallet/commodity stop shall be provided along the longitudinal flue space at each level. The stop shall be steel or other ferrous material .25 inch thick and in the mounted position shall extend a minimum of 4 inches above the shelf or cross member, or other method approved by Fire Code Official. In double row racks and where products are hand-stacked chain link shall be securely attached to the rear of both racks. Chain link shall be a minimum of 12 gauge. Attachment method shall be in compliance with Figure 2308.3 or other methods as approved by the Fire Code Official.

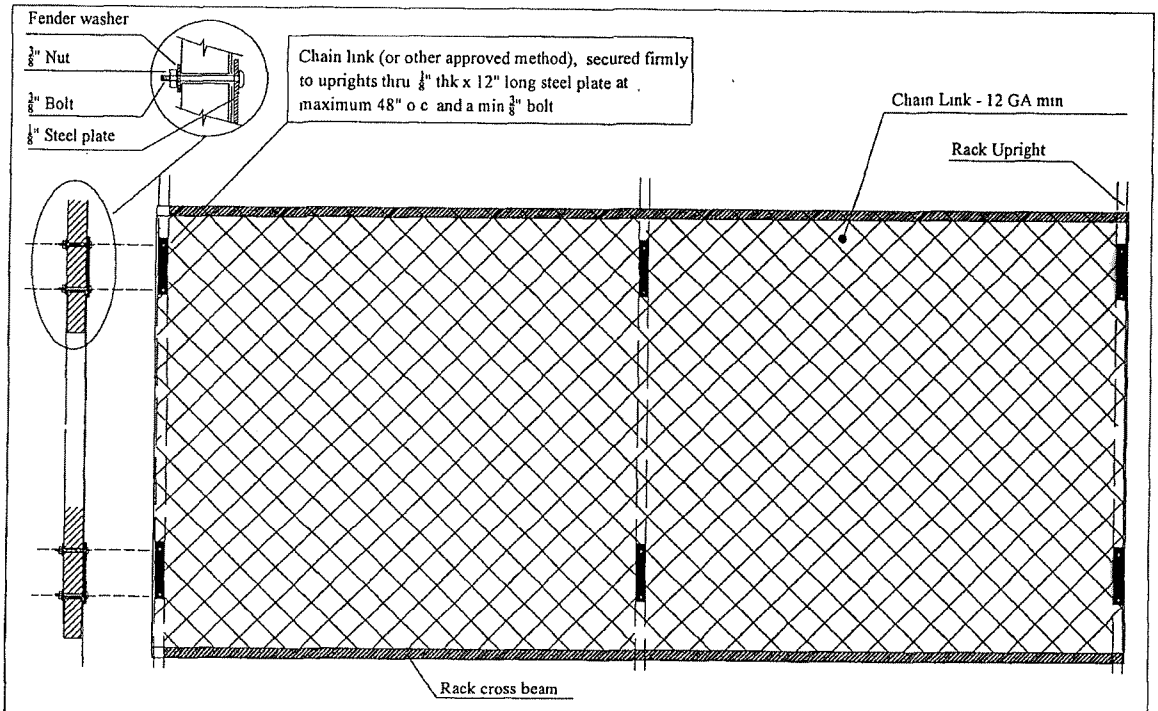


Fig 2308.3 - Chain Link Attachment Method Detail - NTS

2. **Table 2308.3** Required Flue Spaces for Rack Storage is deleted and amended to read:

TABLE 2308.3: REQUIRED FLUE SPACES FOR RACK STORAGE

RACK CONFIGURATION	FIRE SPRINKLER PROTECTION Storage Height		SPRINKLER AT THE CEILING WITH OR WITHOUT MINIMUM IN-RACK SPRINKLERS			IN-RACK SPRINKLERS AT EVERY TIER	NON-SPRINKLERED
			≤ 25 feet		> 25 feet	Any Height	Any Height
			Option 1	Option 2			
Single-row Rack	Transverse Flue Space	Size [b]	3 inch	NA	3 inch	NR	NR
		Vertically Aligned	NR	NA	Yes	NA	
	Longitudinal Flue Space		NR	NA	NR	NR	
Double-row Rack	Transverse Flue Space	Size [b]	6 inch [a, c]	3 inch	3 inch	NR	
		Vertically Aligned	NR	NR	Yes	NA	
	Longitudinal Flue Space		NR	6 inch	6 inch	NR	
Multi-row Rack	Transverse Flue Space	Size [b]	6 inch [c]	NA	6 inch	NR	
		Vertically Aligned	NR	NA	Yes	NA	
	Longitudinal Flue Space		NR	NA	NR	NR	

NR = "not required"
NA means "not applicable"
[a] Three-inch transverse flue spaces shall be provided at least every 10 feet where ESFR sprinkler protection is provided.
[b] Random variations are allowed, provided that the configuration does not obstruct water penetration.
[c] *Transverse flue space shall be maintained by mechanical means as approved.*

K. Hazardous Materials – General Provisions. Chapter 27 of the 2010 California Fire Code is amended as follows:

1. Section 2701.5.2, Hazardous Materials Inventory Statement, is amended by deleting and amending the first paragraph to read:

   Section 2701.5.2 Hazardous Materials Inventory Statement (HMIS).

   When required by the *Fire Code Official*, an application for a permit shall include *Orange County Fire Authority's Chemical Classification Packet* which shall be completed and approved prior to approval of plans, and/or the storage, use or handling of chemicals on the premises. The HMIS shall include the following information:

2. Section 2703.1.1, Maximum allowable quantity per control area, is amended by deleting Footnote K.

3. Section 2703.1.1.1 Extremely Hazardous Substances is added as follows:

Section 2703.1.1.1 Extremely Hazardous Substances. No person shall use or store any amount of extremely hazardous substances (EHS) in excess of the disclosable amounts (see Health and Safety Code Section 25500 *et al*) in a residentially zoned or any residentially developed property.

4. Section 2703.5, Hazard Identification Signs, is deleted and amended to read:

   Section 2703.5 Hazard Identification Signs. Unless otherwise exempted by the Fire Code Official, visible hazard identification signs as specified in the Orange County Fire Authority Signage Guidelines for the specific material contained shall be placed on stationary containers and above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used or handled in quantities requiring a permit and at specific entrances and locations designated by the Fire Code Official.

L. Cryogenic Fluids. Chapter 32 of the 2010 California Fire Code is amended as follows:

   1. Section 3203.4.1 Identification signs is deleted and amended to read:

      Section 3203.4.1 Identification Signs. Visible hazard identification signs in accordance with the Orange County Fire Authority Signage Guidelines shall be provided at entrances to buildings or areas in which cryogenic fluids are stored, handled or used.

M. Explosives and Fireworks Chapter 33 of the 2010 California Fire Code is amended as follows:

   1. Section 3301.2 Retail Fireworks is added to read:

      33101.2 Retail Fireworks. The storage, use, sale, possession, and handling of fireworks 1.4G (commonly referred to as Safe & Sane) and fireworks 1.3G is prohibited.

      Exception:

      Fireworks 1.4G and fireworks 1.3G may be part of an electrically fired public display when permitted and conducted by a licensed pyrotechnic operator.

2. Section 3301.3 Seizure of Fireworks is added to read:

   3301.3 Seizure of Fireworks. The Fire Code Official shall have the authority to seize, take, and/or remove all fireworks stored, sold, offered for sale, used or handled in violation of the provisions of Title 19 CCR, Chapter 6. Any seizure or removal pursuant to this section shall be in compliance with all applicable statutory, constitutional, and decisional law.

3. Section 3308.1 General is deleted and amended to read:

   3308.1 General. Outdoor fireworks displays, use of pyrotechnics before proximity audience and pyrotechnic special effects in theatrical, and group entertainment productions, shall comply with California Code of Regulations, Title 19 , Division 1, Chapter 6 – Fireworks, the Orange County Fire Authority Guidelines for Public Fireworks Displays, and with the conditions of the permit as approved by the Fire Code Official.

4. Section 3308.2 Firing is added to read:

   3308.2 Firing. All fireworks displays shall be electrically fired.

N. Flammable and Combustible Liquids Chapter 34 of the 2010 California Fire Code is amended as follows:

   Section 3404.2.3.2 Label or Placard, is amended by deleting and replacing the first paragraph to read:

   3404.2.3.2 Label or Placard. Tanks more than 100 gallons (379 liters) in capacity, which are permanently installed or mounted and used for the storage of Class I, II or III liquids, shall bear a label and placard identifying the material therein. Placards shall be in accordance with the Orange County Fire Authority Signage Guidelines.

O. Highly Toxic and Toxic Materials Chapter 37 of the California Fire Code is amended as follows:

   Section 3704.2.2.7. Treatment System, is hereby amended by deleting exceptions 1 and 2 and replacing them with the following Exception:

   Exception:

   Toxic gases – storage/use. Treatment systems are not required for toxic gases supplied by cylinders or portable tanks not exceeding 1,700 pounds (772 Kg) water capacity when the following are provided:

1.1. A listed or approved gas detection system with a sensing interval not exceeding 5 minutes.

1.2. For storage, valve outlets are equipped with gas-tight outlet plugs or caps.

1.3. For use, an approved A-listed or approved automatic-closing fail-safe valve located immediately adjacent to cylinder valves. The fail-safe valve shall close when gas is detected at the Permissible Exposure Limit (PEL) by a gas detection system monitoring the exhaust system at the point of discharge from the gas cabinet, exhausted enclosure, ventilated enclosure or gas room. The gas detection system shall comply with Section 3704.2.2.10.

P. Construction Requirements for Existing Buildings. Chapter 46 of the 2010 California Fire Code is deleted except for the sections listed below:

1. Section 4606
2. Subsection 4603.6
3. Subsection 4603.6.3
4. Subsection 4603.6.3.1
5. Subsection 4603.6.8 through 4603.6.8.2
6. Subsection 4603.6.9 through 4603.6.9.10
7. Subsection 4603.7 through 4603.7.5.3

Q. Chapter 47 Referenced Standards

Chapter 47 Referenced Standards is revised as follows:

1. NFPA 13, 2010 Edition, Installation of Sprinkler Systems is hereby amended as follows:

Section 6.8.5 is hereby revised as follows:

6.8.5 Fire Department Connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2.5 inch inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The size of piping and the number of inlets shall be approved by the Chief. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 GPM (including inside hose stream demand) or greater, or a standpipe system is included, four 2.5 inch inlets shall be provided. FDC may be located within 150 feet of a private fire hydrant when approved by the Chief.

Section 8.3.3.1 is hereby revised as follows:

8.3.3.1 When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the permit is issued. Sprinklers in light hazard occupancies shall be one of the following:

1. Quick-response type as defined in 3.6.4.7.
2. Residential sprinklers in accordance with the requirements of 8.4.5.
3. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers.
4. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems.

Section 8.16.1.1.1 is hereby added as follows

8.16.1.1.1 Residential Waterflow Alarms. Local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally-operated appliances in the residence.

Section 8.17.2.4.6 is hereby revised as follows:

8.17.2.4.6 Fire Department Connections shall be on the street side of buildings and shall be located and arranged so that they are immediately adjacent to the approved fire department access road and that hose lines can be readily and conveniently attached to the inlets without interference from nearby objects including buildings, fences, posts, or other fire department connections.

Section 11.1.1.2 is hereby added as follows:

11.1.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction(s) in density or design

area. Warehouse fire sprinkler systems shall be designed to Figure 12.3.2.1.2 (d) curve "G".

Use is considered undetermined if a specific tenant/occupant is not identified at the time the permit is issued. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

Section 11.2.3.1.1.1 is hereby added as follows:

11.2.3.1.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the Fire Code Official:

1. Subtract the project site elevation from the low water level for the appropriate pressure zone and multiplying the result by 0.433;
2. Use a maximum of 40 psi, if available;
3. Utilize the Orange County Fire Authority water flow test form/directions to document a flow test conducted by the local water agency or a professional engineer licensed in the State of California. The result shall be adjusted in accordance with the graduated scale found in the guideline.

Section 22.1.3 (43) is hereby revised as follows:

22.1.3 (43). Size and location of hydrants, showing the size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in the flow tests shall be shown. Flow test shall be completed within six months of the plan submittal to the authority having jurisdiction.

2. NFPA 13D, 2010 Edition, Installation of Sprinkler Systems in One-and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

Section 4.1.5 is hereby added as follows:

4.1.5 Stock of Spare Sprinklers

4.1.5.1 A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

4.1.5.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

4.1.5.3 The sprinkler shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100°F (38°C).

4.1.5.4 A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

Section 7.1.2 is hereby revised as follows:

7.1.2 The system piping shall not have a separate control valve unless supervised by a central station, proprietary or remote station alarm service.

Section 7.3.1 is hereby deleted in its entirety and replaced as follows:

7.3.1 At least one water pressure gauge shall be installed on the riser assembly.

Section 7.6 is hereby deleted in its entirety and replaced as follows:

7.6 Alarms. Exterior alarm-indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location subject to final approval by the Fire Code Official. Additional interior alarm devices shall be required to provide audibility throughout the structure. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally-operated appliances in the residence.

Exception 1: When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.

Exception 2: When smoke detectors specified under California Building Code Section 310.9 are used to sound an alarm upon waterflow switch activation.

Section 8.6.4.2 is hereby added as follows:

8.6.4.2 All attics shall be protected with an intermediate temperature quick response sprinkler which shall be located to protect attic penetrations created by the access scuttles or mechanical equipment.

3. NFPA 13R, 2010 Edition, Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

   Section 6.16.1 is hereby revised as follows:

   6.16.1 Local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

   There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

   Section 6.6.6 is hereby revised as follows:

   6.6.6 Sprinklers shall not be required in penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, non-combustible elevator shafts where the elevator cars comply with ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel-fired equipment.

   Section 6.6.9 is hereby added as follows:

   6.6.9 Sprinklers shall not be required in attics that are not located over dwelling units. When attics are separated by unit, each unit's attic space may be protected per NFPA 13D Section 8.6.4.2. All other attics shall be protected per NFPA 13.

4. NFPA 14, 2007 Edition, Installation of Standpipe and Hose Systems is hereby amended as follows:

Section 6.3.5.4.1 is hereby deleted in its entirety and replaced as follows:

6.3.5.4.1 The Fire Department Connection (FDC) shall have a minimum of two 2.5 inch internal threaded (NHS) inlets. Additional inlets shall be provided on a 250 GPM per inlet ratio to meet the system demand. The inlets shall be provided with approved caps to protect the system from entry of debris. The location of the FDC shall be approved and be no more than 150 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

Section 7.3.1.1 is hereby is deleted in its entirety and replaced as follows:

7.3.1.1 Hose Connection Height Class I and III. Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches or more than 24 inches above the finished floor. Class II Standpipe hose connections shall be unobstructed and shall be located not less than 3 feet or more than 5 feet above the finished floor.

5. NFPA 24, 2010 Edition, Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

Section 5.9.1.3 is hereby revised as follows:

5.9.1.3 The Fire Department Connection shall be of an approved type and contain a minimum of two 2.5 inch inlets. The location shall be approved and be no more than 150 feet from a public fire hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. The supply pipe shall be painted OSHA safety red.

Section 5.9.1.3.1 is hereby added as follows:

5.9.1.3.1 When the sprinkler density design is 500 GPM (including the interior hose stream demand) or greater, or a standpipe system is included, four 2.5 inch inlets shall be provided.

Section 5.9.1.3.2 is hereby added as follows:

5.9.1.3.2 The Fire Department Connection (FDC) may be located within 150 feet of a private fire hydrant provided the FDC connects down-stream of an above-ground sprinkler system check valve.

Section 6.2.1.1 is hereby added as follows:

6.2.1.1 The closest upstream indicating valve to the riser shall be painted OSHA safety red.

Section 6.2.11 (5) is hereby deleted without replacement.

Section 6.2.11 (6) is hereby revised as follows:

6.2.11 (6) Control valves in a one-hour fire-rated room accessible from the exterior

Section 6.2.11 (7) is hereby deleted without replacement.

Section 6.3.3 is herby added as follows:

6.3.3 All post indicator valves controlling fire suppression water supplies shall be painted OSHA safety red.

Section 10.1.6.3 is hereby added as follows:

10.1.6.3 All ferrous pipe shall be coated and wrapped. Joints shall be coated and wrapped after assembly. All fittings shall be protected with a loose 8-mil polyethylene tube. The ends of the tube shall be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception:

316 Stainless Steel pipe fittings.

Section 10.3.5.2 is hereby revised as follows:

10.3.5.2 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to poly-tube, and after installation.

Section 10.3.5.3 is hereby added as follows:

10.3.5.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.

Section 10.6.3.1 is hereby revised as follows:

10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 18 inches, as measured from the interior of the exterior wall. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints or comply with 10.6.2.

Section 10.6.5 is hereby revised as follows:

10.6.5 Pipe Joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints.

6. NFPA 72, 2010 Edition, National Fire Alarm Code is hereby amended as follows:

Section 14.2.1.2.3 is hereby revised as follows:

14.2.1.2.3 If a defect or malfunction is not corrected at the conclusion of system inspection, testing, or maintenance, the system owner or the owner's designated representative and Fire Code Official shall be informed of the impairment in writing within 24 hours.

Section 23.8.2 Fire Alarm Control Units is revised as follows:

23.8.2.2 Except as permitted in 23.8.2.3, the fire alarm systems components shall be permitted to share control equipment or shall be able to operate as stand-alone subsystems, but in any case, they shall be arranged to function as a single system and send a single signal to a central, remote, or proprietary station.

Section 23.8.2.3 is hereby deleted without replacement.

Section 26.2.3.1 is hereby amended by modifying the starting paragraph as follows:

26.2.3.1 Supervising station customers or clients and the Fire Code Official shall be notified in writing within 7 days of any scheduled change in service that results in signals from their property being handled by a different supervising station facility.

R. Requirements for Wildland-Urban Interface Fire Areas. Chapter 49 of the California Fire Code is amended as follows:

1. Section 4906.3 Vegetation is hereby revised by adding Section "(5)" as follows:

(5) OCFA Vegetation Management Guideline.

2. Section 4908 Fuel Modification Requirements for New Construction is hereby added as follows:

4908 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in hazardous fire areas shall comply with the following:

1. Preliminary fuel modification plans shall be submitted to and approved by the Fire Code Official concurrent with the submittal for approval of any tentative map.
2. Final fuel modification plans shall be submitted to and approved by the Fire Code Official prior to the issuance of a grading permit.
3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.
4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval by the Fire Code Official.
5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

3. Section 4909 Explosives and blasting is hereby added as follows:

4909 Explosives and blasting. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within wildland-urban interface areas or hazardous fire areas except by permit from the Fire Code Official.

S. Fire Flow Requirements for Buildings. Appendix B of the California Fire Code is amended as follows:

1. Section B105.1, Section B105.1 One- and two-family dwellings is added to read:

B105.1 One- and two-family dwellings. The minimum fire-flow and flow duration requirements for one- and two-family dwellings having a fire-flow calculation area that does not exceed 3,600 square feet (344.5 m^2) shall be 1,000 gallons per minute (3,785.4 liters/min) for 1 hour. Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5 m^2) shall not be less than that specified in Table B105.1.

Exception:

When the building is equipped with an approved automatic sprinkler system, the fire-flow requirements of Table B105.1 are reduced by 50%, provided that the resulting fire-flow is not less than 1,000 gallons per minute (3785.4 liters/min) for 1 hour.

Section 5. Chapter 5 of Section 5 of Division 9 of the Irvine Municipal Code is hereby amended as follows:

Section 5-9-516 Special residential building provisions

1. Item B. 3 is deleted and amended to read:

   3. Buildings farther than 100 feet from the center line of the addressed street, or where at least two homes are accessed off the same driveway or common area walkway, shall, in addition to the illuminated address fixture, provide three-inch high numerals, placed, when possible, on the right side of the driveway or common area roadway or pedestrian entrance, at a height between 24 inches and 42 inches. Landscaping at full maturity or cars parked on the street shall not obstruct such additional addressing. A range of address numbers may be used when there are multiple buildings instead of listing individual address numbers. The range of addresses shall note if all numbers are even or odd based upon existing or potential addressing on the opposite side of the addressed street, with the word "even" or "odd" incorporated into the sign.

2. New Item B. 4 is added and existing B. 4 is renumbered to B. 5. and amended:

   4. Numerals shall be in a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.

   5. Any building which affords vehicular access to the rear through a public or private alley shall display, in a clearly visible location, an address number that is a minimum of four inches in height.

3. Item C. Multiple family buildings shall display a street address number conforming to the following specifications, is deleted and amended to read:

   C. Multiple family buildings shall display a street address number conforming to the following specifications. Dual signage may be required to meet accessibility requirements of the California Building Code including but not limited to mounting height, size, font, Braille, and tactile standards:

      1. Each individual unit within the complex shall display a prominent identification number at the main dwelling entry door, but not on the entry door, of a contrasting color to the background to which it is affixed and clearly visible to approaching vehicles and/or pedestrians. Size and design shall conform to the following:

         a. Minimum four inches in height; or
         b. Minimum two inches in height if the entry door is located within a fully enclosed corridor; or

c. Minimum two inches in height if, from the interior of the building common space area, the sight line to the entry door from any approach does not exceed 50 feet; and,
d. Numerals shall be in a Sans Serif font with a stroke weight of regular to medium, or an approved equivalent font which is clearly legible.

2. Numerals shall be located within one foot of the door frame and illuminated during the hours of darkness. The numerals and light source shall be contained with a single, weather-resistant fixture. The light source shall be provided with an uninterruptible A.C. power source or controlled only by a photoelectric device. Nothing in this section shall preclude the requirement for circuit protection devices where applicable. An illuminated fixture is not required when the address number can be lighted by area lighting as required in section 5-9-516 E regarding walkways and doors.

3. For buildings containing ten or more units, each side which affords vehicle and/or pedestrian access, the primary address number or range of primary address numbers within the building and range of unit numbers within the building where a multi-building complex has one primary address number shall be displayed. If the building has vehicle or pedestrian access from an adjacent street not associated with the building addressing, then in addition to the address numbers, the addressed street name must also be displayed. Numerals and any lettering shall be a minimum of eight inches in height. The font used shall be Sans Serif with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible. Such numerals and any lettering shall be of contrasting color to the background to which they are attached, and mounted not less than 10 feet nor more than 20 feet from ground level. Addressing shall be clearly illuminated during the hours of darkness with an uninterruptible A.C. power source or controlled only by a photoelectric device, which may be the common area site lighting. Building landscaping at full maturity shall not obstruct visibility to the numerals.

4. Complexes where all unit address numbers are not visible from the addressed public or private street and with more than one building shall provide vehicle directional signage from point of entry onto the property to each building parking area and/or building entrance and at all decision making locations along walkways. Signs shall display building addresses or unit number range, and be located at the complex entry and at all turning points along the route to a building entrance or parking area. Range of addresses shall note if all numbers are even or odd based upon existing or potential addressing on the opposite side of the addressed street, with the word "even" or "odd" in minimum 1.5 inch high letters. Signs shall contain directional arrows

and street name, in minimum 1.5 inch high letters, if the complex has more than one addressed street. Numerals shall be no less than two feet from ground level and not obstructed by building landscaping at full maturity or by parked cars. Numerals shall be at least 3 inches in height using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.

5. There shall be positioned, at each vehicle entrance of a multiple family dwelling complex with more than two buildings, an illuminated diagrammatic representation of the complex, which depicts the location of the viewer and the unit designations within the complex. The diagram shall be of a size clearly readable from a distance of at least 10 feet. It shall be lighted during the hours of darkness utilizing a light source, constructed of weather and vandal resistant materials, and provided with an uninterruptible A.C. power source or controlled by a photoelectric device. Nothing in this section shall preclude the requirement for circuit protection devices where applicable.

6. There shall be positioned, at each common area pedestrian entrance of a multiple-family dwelling complex having buildings that are at least four stories in height, an illuminated diagrammatic representation of the complex, which depicts the location of the viewer and the unit designations within the complex. The diagram shall be of a size clearly readable from a distance of 5 feet. It shall be lighted during the hours of darkness utilizing a light source, constructed of weather- and vandal-resistant materials, and provided with an uninterruptible A.C. power source or controlled by a photoelectric device. Nothing in this section shall preclude the requirement for circuit protection devices where applicable.

7. Pedestrian directional signage shall be provided to guide persons to dwelling units and amenities within and around buildings, being posted at all decision-making locations, including: entrances, elevators, stair landings, and walkway intersections. Signage shall include the street name if more than one street name applies to the complex and be so positioned such that text and numerals are mounted between 4 and 6 feet in height, clearly illuminated by dedicated or common area lighting, and not obstructed by landscaping at full maturity. Numerals and lettering shall be at least 2 inches in height using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.

8. A Wayfinding Plan shall be developed indicating the following:

    a. Location and wording of directional signage for vehicles and pedestrians;
    b. location of building address numbers;

c. landscaping details for areas near any signage or address numbers.

The plan shall include design drawings or exhibits that clearly illustrate the intent of the Wayfinding Plan.

9. In multiple-family complexes, garages or carports not directly attached to the dwelling unit or placed next to the dwelling unit and discernible as being associated with one addressed dwelling unit shall not use corresponding dwelling unit addresses to identify the garage or carport. Where garages are attached and the dwelling unit number is not adjacent to the garage door, an address number shall be displayed, in a clearly visible location, using an address number a minimum of four inches in height.

10. Exterior address identification numbers and/or letters shall not be affixed to a surface using two-sided tape or any material not resistant to weather conditions.

11. An 8.5 inch by 11 inch site plan(s) of the complex shall be provided to the Police and Fire Authority. It shall contain all streets, sidewalks, buildings, including identification numbers and/or descriptions, emergency services access key vaults or key override switches, radio controlled entry system access points, and fire hydrants.

Section 5-9-517 Special nonresidential building provisions

1. Item L. Nonresidential buildings shall display a street address number conforming to the following specifications, is deleted and amended to read:

L. Addressing for nonresidential buildings shall conform to the following specifications:

1. Numerals shall be mounted on the wall, be no higher than 30 feet, and face the street on which the building is addressed. Numerals are to be clearly visible from this same street and not obscured by building landscaping at full maturity. Addressing shall be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions.

2. Where distance or intervening obstructions impair visibility from the street, addressing shall be mounted on all buildings so as to be visible from drive aisles and walkways internal to the site, and each such address, or an encompassing range of addresses, shall be displayed on monument signs visible from each site entrance from all

approaching directions. In such cases, directional wayfinding signs shall be provided per No. 5 below.

3. Numerals shall be no less than six inches in height, if located less than 100 feet from the center line of the addressed street or 12 inches in height if placed further than 100 feet from the center line of the addressed street. The numerals shall be in a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible, and illuminated during the hours of darkness using a light source provided with an uninterruptible A.C. power source or controlled only by a photoelectric device, which may be the common area site lighting.

4. The rear doors of all buildings shall have address numbers not less than six inches in height, using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible, and be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions.

5. For sites having multiple buildings for which addressing mounted on the building is not clearly visible from the street, or for which drive aisles diverge from a site entrance in a manner such that the direct route to each building is not obvious, vehicle directional signs shall be provided. Vehicle direction signage from the point of site entry to each building entrance shall display building addresses or unit number range, and be located at all turning points along the route to a building entrance. Signs shall be no less than 2 feet from ground level and not obstructed by landscaping at full maturity or parked cars. Numerals shall be at least 3 inches in height using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.

6. Buildings with a total square footage of at least 10,000 square feet shall have rooftop numbers placed parallel to the addressed street, screened from public view and only visible from the air. The numerals are to be white, block lettered, constructed of weather resistant material, and placed against a black background. Address numbers are to be a minimum of 4 feet in height and 18 inches wide. When more than one street address is assigned to a building, the beginning and ending address numbers are to be placed on the rooftop at opposite ends of the building, reflecting the approximate location of these addresses.

Exceptions:

1. For buildings having white roofing, black lettering shall be used in lieu of white lettering.
2. Buildings providing addressing for a helipad as specified in the California Building Code.

Section 5-9-518 Special Parking Facilities provisions.

1. Item A is deleted and amended to read:

   A. Remote or detached parking facilities or any other parking surfaces which are constructed as a separate entity shall be assigned a street address number. Addressing for parking structures shall conform to the following specifications:

      1. Numerals shall be mounted on the wall, no higher than 30 feet, and face the street on which the building is addressed. Numerals are to be clearly visible from this same street and not obscured by landscaping at full maturity. The numerals shall be placed in such a location that it is evident the parking structure has this address or, when not visible from the street, numerals are to be located on a corner of the structure and not over the vehicle entrance. If references to the parking structure servicing a particular building are over the entrance, such references are to include wording clearly identifying parking for a particular building so as not to confuse the structure address with the building address. Numbers and any lettering shall be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions.

      2. Numerals shall be no less than 6 inches in height, using a Sans Serif font with a stroke weight of medium to bold, or approved equivalent font which is clearly legible, and shall be illuminated during the hours of darkness using a light source provided with an uninterruptible A.C. power source or controlled only by a photoelectric device, which may be the common area site lighting.

      3. Residential parking structures only shall be provided with rooftop addressing to meet the requirements as specified in Section L.5 of 5-9-517. Non-residential parking structures shall not have rooftop addressing.

SECTION 5-9-519 Emergency access

1. Section 5-1-519 is deleted and amended to read:

   A. Private roads and parking areas or parking facilities when controlled by unmanned automated parking gates shall provide for police emergency

access utilizing an approved radio controlled entry system and approved key switch device to be installed and designed as follows:

1. The key switch control shall be installed at a height of 42 inches from finished driveway grade and a minimum of 15 feet from the entry/exit gate, and be located on the driver's side of the road or driveway. The key switch is to be accessible in such a manner as to not require a person to exit their vehicle to reach it; nor to require any back-up movements in order to enter/exit the gate. The key switch may be installed within a visitor telephone/intercom call box if meeting the above criteria. The control housing shall consist of heavy gauge metal, and be vandal- and weather-resistant and be mounted on a substantial structure such as a steel post, concrete, or masonry pedestal.
2. Key switches shall be secured to the control housing or telephone/intercom call box utilizing tamper resistant screws.
3. Except for an open surface parking lot with less than 100 parking spaces, a radio controlled entry system shall be installed per City specifications.
4. Vehicle gates shall be designed to open in a power failure.

B. All lockable pedestrian gates or doors to common area walkways and recreation areas/buildings of residential multi-family complexes or tract of homes shall provide for police emergency access utilizing an approved radio controlled entry system and approved key switch device or approved key vault which shall be installed as follows:

1. Pedestrian gates/doors using an electrically automated type lock shall be provided with an approved radio controlled entry system and a key switch within a telephone/intercom console, or installed adjacent to the door inside a wall/door frame, or in a control housing as described in section (A)(1) above or in a method approved by the enforcing authority. Key switches shall be secured utilizing tamper resistant screws. The radio controlled receiver shall be visible in order to determine, when activated, if the signal was received by illuminating a light. More than one gate or door which is in close proximity to another may be operated by the radio controlled entry system if approved by the police department.
2. Pedestrian gates or doors utilizing mechanical locks shall be provided with a key vault adjacent to each gate or door, securely attaching it to a fence or wall, mounted 4 feet above finished grade and within 2 feet of the locking device
3. Pedestrian gates in perimeter community walls or fencing shall utilize a key switch if using an electronically automated type lock, or if a mechanical lock is used, a key vault, mounted 4 feet above finished grade and within 2 feet of the locking device.

4. Pool gates shall only utilize a key vault, mounted 4 feet above finished grade and within 2 feet of the locking device.

5. Elevators with access control systems shall be provided with a key switch adjacent to the access control reader utilizing tamper resistant screws.

C. Nonresidential multi-tenant buildings with a common area entrance and interior walkway shall provide police emergency access utilizing an approved radio controlled entry system and approved key switch device or approved key vault which shall be installed as follows:

1. All common area doors using an electrically automated type lock shall be provided with a key switch device within the building's exterior telephone/intercom call box or in a control housing as described in section A.1 above, or in a method approved by the enforcing authority and located within close proximity and in a visible area near the door mounted 4 feet above finished grade. Key switches shall be secured utilizing tamper resistant screws.
2. Exterior entry common area doors utilizing mechanical door locks shall be provided with a key vault within close proximity and in a visible area near the door mounted 4 feet above finished grade.
3. Elevators with access control systems shall install a key switch adjacent to the access control reader utilizing tamper resistant screws.

D. Emergency vehicle access gates shall be designed so as to provide access to the padlock from either side of the gate. A key vault shall be installed on each side of the gate. Owner's padlock shall be used to secure the gate.

E. All key switches, key vaults, and padlocks shall be sub-mastered to an Orange County Fire Authority key for access by the police department. The radio controlled entry system shall be programmed to frequencies approved by the police department and Orange County Fire Authority.

F. Key switches, key vaults, padlocks, and radio controlled entry system installations shall be identifiable to approaching police personnel in a manner as approved by the police department.

G. An Emergency Access Plan shall be required when a radio controlled entry system, key switch, or key vault is required to be installed. The plan is to identify the location of each device on a site plan.

Section 5-9-520 Special Recreational Spaces Provisions.

1. The first paragraph is deleted and amended to read:

The provisions of this section shall apply to all public and private community buildings, parks, open spaces, trails, community swimming pools, recreation centers, and associated sidewalks and parking lots.

2. Item C. 5 is deleted and amended to read:

    5. Emergency access to locked gates is to be provided through installation of a Knox box key vault which shall contain a mechanical key for the gate. The vault shall be sub-mastered to the Orange County Fire Authority for access by the police department. The mounting location shall be 4 feet above finish grade and within 2 feet of the locking device.

3. Items C. 8 is deleted and amended to read:

    8. All entrances to private park pools/spas shall have signage indicating it is private property and no trespassing allowed.

4. Items C. 9 is deleted and amended as follows:

    9. Address numbers, when assigned, shall be visible from inside and outside the pool, and the numerals shall be at least 4 inches in height using Sans Serif font with a stroke weight of regular to medium, or an approved equivalent font which is clearly legible.

5. Item E is added as follows:

    E. Park identification signs shall be provided at all public and private parks as follows:

        1. Parks and private recreation facilities shall have a park identification sign, with address number, street name, park name, and the word "Private" if it is a private park. The sign copy size shall be a minimum height of 2 inches for the park title and a minimum of 4 inches for the address number and street name. The sign copy shall be of a color contrasting to the background to which they are affixed. Signs shall be highly visible and placed within 100 feet of the centerline of the addressed street. Sign copy shall be at least 30 inches from ground level. Public Park identification signs also must meet the design criteria adopted in the City's Park/Public Facility Design Standards.

        2. Landscaping in front of the park signage shall be of a variety which grows to no more than 2 feet in height at full maturity.

6. Item F is added as follows:

    F. Trail and park connections to neighborhoods shall be identified as follows:

        1. Pedestrian connections from trails, parks, and open space areas into adjacent neighborhood public or private sidewalks and streets, shall have a City street sign or other approved sign identifying the street where the connection occurs.

2. Trails crossing public or private streets shall have a City street sign at the intersection of the trail and street identifying the street and trail names.

3. Named City trails shall have markers placed on concrete or asphalt surfaces every one-tenth of a mile and shall meet the design and application criteria as established by the Irvine Community Services Department.

SECTION 6. Chapter 6 of Section 5 of Division 9 of the Irvine Municipal Code is hereby amended as follows:

Section 5-9-606. Exemptions. This chapter shall not apply to the following:

1. Existing buildings or structures.
2. Elevators.
3. Structures that are three stories or less without subterranean storage or parking and that do not exceed 50,000 square feet on any single story.
4. Wood-constructed residential structures four stories or less without subterranean storage or parking which are not built integral to an above ground multi-story parking structure.

Should construction that is three stories or less which does not exceed 50,000 square feet on any single story include subterranean storage or parking, then this ordinance shall apply only to the subterranean areas.

SECTION 7. Chapter 9 of Section 6 of Division 7 of the Irvine Municipal Code is hereby amended as follows:

Section 6-7-903. Thresholds for Covered Projects.

A. "Covered Project" shall mean any of the following projects:

1. All projects involving new or existing residential development, except for renovations of a single residential unit;
2. All projects involving new non-residential development;
3. All projects involving non-residential demolition and/or renovation of 10,000 square feet or greater of project area.

SECTION 8. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have adopted this Ordinance and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections,

subsection, subdivision, sentence, clause, phrase, or portions thereof be declared invalid or unconstitutional.

PASSED AND ADOPTED by the City Council of the City of Irvine at an adjourned regular meeting held on the 14th day of December 2010.

MAYOR OF THE CITY OF IRVINE

ATTEST:

CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF IRVINE)

I, SHARIE APODACA, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Ordinance was introduced for first reading on the 23rd day of November 2010, and duly adopted at an adjourned regular meeting of the City Council of the City of Irvine held on the 14th day of December 2010, by the following vote:

AYES:	5	COUNCILMEMBERS:	Agran, Choi, Krom, Lalloway and Kang
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	0	COUNCILMEMBERS:	None

CITY CLERK OF THE CITY OF IRVINE