Proposed Revisions to:

- **Sections 5-1,5-1.1, and 5-1.3 of Title 5(Building Codes)**
- **Sections 7-14, 7-15, and 7-19 of Title 7 (Fire Codes)**

Sec. 5-1. Construction Codes Adopted.

For the purpose of prescribing regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment use, height, and area of buildings and structures, the following construction codes subject to the modifications set forth in this Chapter, are hereby adopted: the California Building Code, 2016 ~~2013~~ Edition, based on the 2015 ~~2012~~ International Building Code as published by the International Code Council; including Chapter 1, Division II ~~Chapter 1, Division II~~ ; the California Residential Code, 2016 ~~2013~~ Edition, based on the 2015 ~~2012~~ International Residential Code as published by the International Code Council; Chapter 1, Division II ~~Chapter 1, Division II~~; the California Green Building Standards Code, 2016 ~~2013~~ Edition; the California Plumbing Code, 2016 ~~2013~~ Edition, based on the 2015 ~~2012~~ Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials; the California Mechanical Code, 2016 ~~2013~~ Edition, based on the 2015 ~~2012~~ Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials; the California Electrical Code, 2016 ~~2013~~ Edition, based on the 2014 ~~2011~~ National Electrical Code as published by the National Fire Protection Association; the International Property Maintenance Code, 2015 ~~2012~~ Edition, as published by the International Code Council. For the purpose of prescribing regulations for grading and excavations, the 1993 Orange County Grading and Excavation Code is hereby adopted. The provisions of these Construction Codes as amended by this chapter shall constitute the Building Regulations of the City of Costa Mesa. Where the California Code of Regulations and State Building Standards Code of Regulations differ from any sections of the Construction Codes, State regulations shall prevail over the Construction Codes.

One (1) copy of all the above codes and standards therefore are on file in the office of the building official pursuant to Health and Safety Code Section 18942 (d) (1) and are made available for public inspection.

Notwithstanding the provisions of the above-referenced construction codes, all fees for services provided pursuant to the construction codes shall not take effect until a resolution for such fees is adopted by the City Council pursuant to California Government Code Sections 66016 and 66020."

Sec. 5-1.1 Amendments to the ~~2013~~ 2016 California Building Code.

a) Amend item number 2 under "Building" in Section 105.2, Work exempt from permit, as follows:

2. Wood, steel, vinyl, or iron fences not over 6 feet high. Stucco, concrete, brick, masonry, block fences not over 3 feet high.

~~b) The definition for "High-rise structure" in section 202 is revised to read as follow: Revise definition 2 under High-Rise Building of section 403.1.1 to read as follows:~~

~~2. "High-rise structure" means every High -rise structure 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 (see Section 403.1.2), except buildings used as hospitals as defined by the Health and Safety Code Section 1250.~~

~~c) Section 403~~

~~High-rise building having occupied floors located more than 55 Feet above the lowest level of Fire department vehicle access and group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of Fire department access~~

~~d) Revise the first paragraph of section 403.1 to read as follows:~~

~~**403.1 Applicability**. New high-rise buildings having occupied floors located more than 55 feet above the lowest level of fire department vehicle access and new Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access shall comply with Sections 403.2 through 403.6.~~

~~a) Revise the first paragraph of section 403.1 to read as flows:~~

~~b) 403.4.7.2 Standby power loads. The following are classified as standby or 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.~~

~~c) 403,3,8.1 Emergency Power loads. The flowing 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. Electronically powered fire pumps; and~~

~~7. Ventilation and automatic fire detection equipment for smokeproof enclosures.~~

b) **Add Section 903.0 Automatic Sprinkler Systems**

Automatic Fire sprinkler systems shall comply with this chapter and Chapters 9 and 80 of the amended Fire Code. Where conflicts occur the amended fire code shall govern,

c) **TABLE 1505.1[a]**

MINIMUM ROOF COVERING CLASSIFICATIONS

TYPES OF CONSTRUCTIONIA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
B	B	B	B	B	B	B	B	B

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2.

a. Unless otherwise required in accordance with Chapter 7A.

1505.1.3 Roof coverings within 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 at least Class B.

d) Section 1505.5 is amended, by the deletion of the entire section.

e) Section 1505.7 is amended, by the deletion of the entire section.

f) Amend Section 3109.4.4.1 by adding the following definition:

PRIVATE POOL, is any constructed pool, permanent or portable, and over 18 inches deep which is intended for non-commercial use as swimming pool by not more than three owner families and their guests.

e) Section 3109.4.4.2 is modified by deleting the first paragraph in its entirety and a new paragraph is substituted to read as follows:

3109.4.4.2 Construction permit; safety features required. Commencing January 1, 2007, except as provided in Section 3109.4.4.5, whenever a construction permit is issued for construction of a new private pool at a residence, it shall have an enclosure complying with 3109.4.4.3 and, it shall be equipped with at least one of the following safety features:

Section 3

Sections 5-1.3 of Chapter 1, of the Costa Mesa Municipal Code is hereby added to read as follows:

Sec. 5-1.3 Amendments to the ~~2013~~ 2016 California Residential Code

a) Amend item number 2 under "Building" in Section 105.2, Work exempt from permit, as follows:

2. Wood, steel, vinyl, or iron fences not over 6 feet high. Stucco, concrete, brick, masonry, block fences not over 3 feet high.

~~a) **R105.5 Expiration**. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one extension of time, for periods not more than 180 days. The extension shall be requested in writing and justifiable cause demonstrated~~

b) R110.1 Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefore as provide herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Certificate presuming to give authority to violate or cancel the provision of this code or other ordinances of jurisdiction shall not be valid.

Exceptions:

1. Certificates of occupancy are not required for work exempt from permits under Section R105.2.

2. Accessory buildings or structures.

3. Group R-3 and Group U Occupancies as defined in the California Building Code.

C)

TABLE R301.2(1)

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY [f]	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP [e]	ICE BARRIER UNDERLAYMENT REQUIRED [h]	FLOOD HAZARDS [g]	AIR FREEZING INDEX [i]	MEAN ANNUAL TEMP [j]
	Speed [d] (mph)	Topographic effects [k]		Weathering [a]	Frost line Depth [b]	Termite [c]					
Zero	85	No	D_2	Negligible	12-24"	Very Heavy	43	No	See Footnote g	0	60

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R30l.2(4)].Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
e. Temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
(a) Date of initial ordinance, December 15, 1980. (b) initial NFIP map date, May 17, 1974; initial FIRM date, September 30, 1982; most recent FIRM panel date, December 3. 2009. (c) panels number 254, 258, 259, 262, 264, 266, 267, 268, 269, 278, 286.

h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the l00-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at www.ncdc.noaa.gov/fpsf.htrnl.
j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at www.ncdc.noaa.gov/fpsf.html.
k. In accordance with Section R30 1.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
l.

d) **Add Section 313.0 Automatic Fire Sprinkler Systems:**

Fire sprinklers shall comply as required in this code and Chapters 9 and 80 of the amended Fire Code. Where conflicts occur the amended fire code shall govern.

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

Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
3. Class A roof assemblies include minimum 16 oz/ft^2 copper sheets installed over combustible decks.

f) **R902.1.3 Roof coverings within 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 at least Class B.

g) **R902.2 Fire-retardant-treated shingles and shakes**. Fire-retardant-treated wood shakes and shingles are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 for use on Class A or B roofs.

Fire-retardant-treated wood shakes and shingles shall comply with ICC-ES EG107 and with the weathering requirements contained in Health and Safety Code Section 13132.7(j). Each bundle shall bear labels from an ICBO accredited quality control agency identifying their roof-covering classification and indicating their compliance with ICC-ES EG107 and with the weathering requirements contained in Health and Safety Code Section 13132.7(j).

Health and Safety Code Section 13132.7 (j) No wood roof covering materials shall be sold or applied in this state unless both of the following conditions are met:

(1) The materials have been approved and listed by the State Fire Marshal as complying with the requirements of this section.

(2) The materials have passed at least five years of the 10-year natural weathering test. The 10-year natural weathering test required by this subdivision shall be conducted in accordance with Standard 15-2 of the 1994 edition of the Uniform Building Code at a testing facility recognized by the State Fire Marshal."

Section 7-14 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby amended to read as follows:

Chapter II. – FIRE PREVENTION

Sec. 7-14. Adoption of the California Fire Code.

~~There is hereby adopted by the city council of the City of Costa Mesa, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire, hazardous materials or explosion, that certain code known as the California Fire Code, 2013 Edition, based on the 2012 International Fire Code as published by the International Code Council; including Chapter 1, excluding section 105.6.11 and section 105.6.23; including Chapter 3; including Chapter 4 sections 401, 401.3.4, 401.9, 402, 403, 404.6-404.7.6, 407, 408.3.1-408.3.2, and 408.12-408.12.3; including Appendixes Chapter 4, B, BB, C, CC, and H, of which not less than one (1) copy is filed in the office of the fire marshal and the same is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this chapter shall take~~

~~effect, the provisions thereof shall be controlling within the limits of the City of Costa Mesa.~~

California Fire Code Adopted with Modifications. The California Fire Code, 2016 Edition, is hereby adopted with modifications. The adoption of the Fire Code includes all of the inclusions and exclusions set forth in each chapter's matrix provided that the following provisions excluded are hereby included: Chapter 1, Division 2 except that Section 103.2 is excluded; and sections 305, 307, 308, 503, 510.3 are included. Other modifications are made as hereinafter set forth in this Title of the Costa Mesa Municipal Code and appropriate findings have been made and filed where required. The California Fire Code, which is based on the International Fire Code, is adopted as noted above and a copy is on file in the office of the City Clerk. This document shall be known and referred to hereafter as the "Fire Code" for the City of Costa Mesa.

Section 5.

Section 7-15 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby amended to read as follows:

Sec. 7-15 Amendments to the ~~2013~~ 2016 California Fire Code

~~(a)~~

~~*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 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.~~

~~*Exceptions:*~~

~~1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the California Building Code.~~

~~2. Open parking garages in accordance with Section 406.3 of the California Building Code.~~

~~3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the California Building Code.~~

~~4. Low-hazard special occupancies in accordance with Section 503.1.1 of the California Building Code.~~

~~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.~~

~~b)~~

~~*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 occupied 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 water-flow devices.~~

~~3. Manual fire alarm boxes.~~

~~4. Other approved types of automatic detection devices or suppression systems.~~

Chapter 1
Scope and Administration

Chapter 1 Scope and Administration is adopted in its entirety with the following amendment:

109.4 Violation penalties. Persons who violate a provision of this code or fail to comply with any of the requirements thereof or who 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 a ~~[SPECIFY OFFENSE]~~ misdemeanor, ~~punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment.~~ punishable as provided in Section 1-33 of the Costa Mesa Municipal Code. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Chapter 5
Fire Service Features

Chapter 5 Fire Service Features is adopted in its entirety with the following amendment:

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and Costa Mesa Fire & Rescue Department Plan Submittal Checklist Specifications.

Chapter 9
Fire Protection Systems

Chapter 9 Fire Protection Systems is adopted in its entirety with the following additions:

901.11 False Alarms. False alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

(a) The owner and any person in possession of any building shall be assessed a fee to be set by resolution whenever the Fire Department is required to respond to more than two false alarms during a one-year period consisting of January 1- December 31 of any given year. Continued false alarms generated from the same location within the same one-year period shall also be assessed a fee set by resolution for each successive false alarm.
(b) Notwithstanding Subsection (a), whenever the Fire Department is required to respond to a false alarm while the system is being repaired or otherwise modified, and the person performing the work has failed to notify the Fire Department in advance that such work was being done, the persons performing the work shall also be assessed a fee set by resolution for each such occurrence.
(c) For purposes of this Section, "false alarm" shall mean the activation of any local or central station alarm because of malfunction, including, but not limited to, mechanical or electrical defects, water surges, or because of improper installation, operation testing or maintenance of such system. Whenever the Fire Department responds to the location of a false alarm and finds that there is no evidence of a fire or of external causes beyond the control of the owner or person in possession that may have caused the alarm, the activation shall be presumed to be a false alarm. Not included as a false alarm will be those activations caused by earthquakes or other phenomena beyond the control of the owner or person in possession.
(d) Whenever an owner, person in possession or alarm system workman is notified of such assessment and believes that he should be excused from paying because any occurrences did not constitute a false alarm, as defined above, he or she shall have the right to appeal said assessment to the Fire Chief within ten (10) calendar days of his receipt of the notice of assessment. The Fire Chief is authorized to excuse the assessment if he determines that a false alarm as defined, did not occur.
(e) Any person, firm or corporation who receives notification of penalties due and fails to pay such penalties within the specified amount of time, no less than 30 days, a 10 percent per month late fee will be assessed until penalties have been paid.

Chapter 56
Explosives and Fireworks

Chapter 56 Explosives and Fireworks is adopted in its entirety with the following amendments and additions:

5609.1 General. Where the temporary storage of consumer fireworks, I.4G is allowed by Section 5601.1.3,

Exception 4, such storage shall comply with the applicable requirements of NFPA 1124. In addition to the requirements of NFPA 1124, all temporary stands for the display and sale of fireworks shall be located, maintained and operated subject to the following provisions:

5609.2. No fireworks display or stand shall be erected within one hundred (100) feet of any gasoline dispensing device or room in which vehicles containing gasoline are repaired or within thirty-five (35) feet of any other structure. Minimum setback from a public sidewalk shall be five (5) feet; setback from street curbing shall be not less than ten (10) feet where no sidewalk exists.

5609.3. There shall be maintained in each premises or stand within which fireworks are sold or offered for sale, a fire extinguisher with a minimum rating of 2A, 10BC located adjacent to each exit.

5609.4. No person shall light or cause or permit to be lighted any open flame, match, lighter, or any other article or material within any such stand or within fifty (50) feet thereof.

5609.5. No smoking shall be allowed in any structure used for the sale and display of fireworks or within fifty (50) feet of said structure. "No smoking" signs shall be displayed prominently and in a number prescribed by the fire chief.

5609.6. All such temporary stands shall be constructed to existing city requirements and specifications.

5609.7. All such temporary stands for the display and sale of fireworks shall obtain an electrical permit from the City of Costa Mesa prior to performance of any electrical work. An electrical permit shall be required for the use of a portable generator or other temporary power source.

5609.8. All power and lighting shall be GFCI protected. Battery-powered equipment, electrical equipment, and electrical cords that are used in conjunction with a CFRS facility area shall be listed and shall be used in accordance with their listing.

5609.9. Where temporary electrical conductors are placed on top of an outdoor surface to connect the permanent power source to the temporary CFRS facility's temporary electrical system, the conductors shall be provided with physical protection against damage caused by pedestrian or vehicular traffic.

5609.10. Reserved.

5609.11. The permittee shall strictly comply with all of the provisions of the State Fireworks Law, Sections 12500 et seq. of the Health and Safety Code of the State of California.

5609.12. Fireworks shall be stored and kept only in the permittee's sale booth. It shall be unlawful to store any fireworks intended for sale in any building, residence, garage, home or automobile within the City of Costa Mesa.

5609.13. There shall be at least one (1) adult in attendance during any open or sale hours of the fireworks stand. No person under the age of eighteen (18) years, and no person who is physically or mentally unable to move himself shall be permitted within a fireworks stand.

5609.14. The permittee shall provide an adult night watchman to act and serve during the hours of storage. Under no circumstances shall any night watchman sleep within any fireworks stand.

5609.15. No alcoholic beverages shall be allowed on the premises.

5609.16. All fireworks fuses shall be taped.

5609.17. All permits must be posted in a conspicuous place.

Chapter 57
Flammable and Combustible Liquids

Chapter 57 Flammable and Combustible Liquids is adopted in its entirety with the following amendments and additions.

5704.2.9.6.1 ~~Locations where above-ground are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Legislation for Adoption of the California Fire Code on page xxv).~~

Geographic limits in which the storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited:

INDIVIDUAL TANK CAPACITY Gallons (liters)	MINIMUM DISTANCE FROM PROPERTY LINE WHICH IS OR CAN BE BUILT UPON, INCLUDING THE OPPOSITE SIDE OF A PUBLIC WAY feet	MINIMUM DISTANCE FROM THE NEAREST SIDE OF ANY PUBLIC WAY OR FROM THE NEAREST IMPORTANT BUILDING ON THE SAME PROPERTY feet	MINIMUM DISTANCE BETWEEN TANKS feet
Less than or equal to 6,000	25	25	3
Greater than 6,000	50	50	3

Primary tanks shall not exceed a 6,000-gallon individual or 12,000-gallon aggregate capacity.

5704.2.14.1 Fence required. Subsection (7) – Added.

(7) A minimum of a five-foot fence or other means of protection as approved by the Chief shall be provided around any open excavation from which an underground tank has been removed when the cavity is left unprotected overnight.

Chapter 80 Referenced Standards

Chapter 80 Referenced Standards is adopted in its entirety with the following amendments:

NFPA 13, 2016 Edition, Standard for the Installation of Sprinkler Systems is hereby amended as follows:

Section 6.7.3 - Amended. Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public or private hydrant. If the FDC serves a standpipe system, it shall be no more than 100 feet from a hydrant. The size of piping and the number of inlets shall be approved by the Fire code official. If approved by the Water Department providing service, 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 1/2" inlets shall be provided.

Section 8.17.1.1.1 Residential Waterflow Alarms - Added. Local water-flow alarms shall be provided for all sprinkler systems and shall 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 at least one approved interior alarm device in each unit, or interconnection to the unit smoke alarm system. 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 (GFI), serving normally

operated appliances in the residence.

Section 8.17.2.4.6 - Amended. Fire department connections shall be located at the nearest point of fire department apparatus accessibility or at a location approved by the authority having jurisdiction. They shall be installed immediately adjacent to the approved fire department access road and such 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.

Section 23.1.3 (43) - Amended. 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. Water supply certification shall be not more than six months prior to the plan submittal to the authority having jurisdiction.

NFPA 13D 2016 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

Section 4.7 Stock of Spare Sprinklers - Added.

Section 4.7.1- Added. 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.

Section 4.7.2 - Added. The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

Section 4.7.3 - Added. 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).

Section 4.7.4 - Added. 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 - Amended. The sprinkler system piping shall not have a separate control valve installed unless supervised by one of the following methods:

(1) Central station, proprietary or remote station alarm service.
(2) ~~Local alarm service that causes the sounding of an audible signal at a constantly attended location~~ Reserved.
(3) ~~Valves that are locked open~~ Reserved.

Section 7.3 Pressure Gauges - Amended.

Section 7.3.1. ~~Where a dry system is installed, a pressure gauge shall be installed to indicate system pressure~~. At least one water pressure gauge shall be installed on the riser assembly.

Section 7. 6 Alarms - Amended. ~~Local waterflow alarms shall be provided on all sprinkler systems in homes not equipped with smoke alarms or smoke detectors in accordance with *NFPA 72*.~~ Exterior water flow alarm indicating devices 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 by the CBC or CRC are used to sound an interior alarm upon water flow switch activation.
Section 8.3.4 – Amended. Sprinklers shall not be required in ~~garages,~~ open attached porches, carports, and similar structures.

A.8.3.4 *Although NFPA 13D does not require garages to be sprinkler protected, some authorities having jurisdiction take it upon themselves to add this requirement locally. In such circumstances, residential or quick-response sprinklers with a two sprinkler design in the garage with the same piping used in the rest of the dwelling can be used. It is recognized that residential sprinklers have not been tested specifically for fires in garages, but field experience has shown that the sprinklers help to alert occupants to the fact that there is a fire, to reduce the possibility of flashover, and to improve the chances for occupants to escape.*

Section 8.3.5 – Amended. Sprinklers shall not be required in ~~attics with or without storage,~~ penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated for exclusively to and containing only dwelling unit ventilation equipment, floor/ceiling spaces, elevator shafts, crawl spaces, and other concealed spaces that are not intended for living purposes.

Section 8.3.5.1.1 – Amended. Where the fuel-fired equipment is above all of the occupied areas of the dwelling unit, ~~no~~ sprinkler protection shall be required in the concealed space.

Section 8.3.5.1.2 – Amended. Where fuel-fired equipment ~~is below or on the same level as occupied areas of the dwelling unit, at least one quickresponse intermediate temperature sprinkler shall be installed above the equipment or at the wall separating the space with the fuel-fired equipment from the occupied space.~~ is present, at least one quick-response intermediate temperature sprinkler shall be installed above the equipment.

Section 8.3.5.1.3 Added. All attics shall be protected with an intermediate temperature quick response sprinklers which shall be located to protect attic penetrations created by the access scuttles or mechanical equipment.

NFPA 13R 2016 Edition, Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies is hereby amended as follows:

Section 6.6.6 – Amended. Sprinklers shall not be required in ~~attics,~~ penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated for exclusively to and 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 intended for living purposes or storage and do not contain fuel-fired equipment.

Section 6.16.1-Amended. 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 Chapter 9 of the 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, residential smoke detection 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 7-19 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby deleted in its entirety. This section number shall be reserved for future use.

Sec. 7-19. - Amendments to Chapter 33 of the 2013 California Fire Code, Explosives and Fireworks.

Section 3309 is added as follows:

Sec. 3309. Requirements for fireworks stands.

All temporary stands for the display and sale of fireworks shall be located, maintained and operated subject to the following provisions:

3309.1. No fireworks display or stand shall be erected within one hundred (100) feet of any gasoline dispensing device or room in which vehicles containing gasoline are repaired or within thirty-five (35) feet of any other structure. Minimum setback from a public sidewalk shall be five (5) feet; setback from street curbing shall be not less than ten (10) feet where no sidewalk exists.

3309.2. There shall be maintained in each premises or stand within which fireworks are sold or offered for sale, a fire extinguisher with a minimum rating of 2A, 10BC located adjacent to each exit.

3309.3. No person shall light or cause or permit to be lighted any fireworks, match, lighter, or any other article or material within any such stand or within fifty (50) feet thereof.

3309.4. No smoking shall be allowed in any structure used for the sale and display of fireworks or within fifty (50) feet of said structure. "No smoking" signs shall be displayed prominently and in a number prescribed by the fire chief.

3309.5. All such temporary stands shall be constructed to existing city requirements and specifications.

3309.6. All such temporary stands for the display and sale of fireworks shall obtain an electrical permit from the City of Costa Mesa prior to performance of any electrical work.

3309.7. No arc or kileg light shall be located within seventy-five (75) feet of any temporary stand selling fireworks.

3309.8. Reserved.

3309.9. Reserved.

3309.10. The permittee shall strictly comply with all of the provisions of the State Fireworks Law, Sections 12500 et seq. of the Health and Safety Code of the State of California.

3309.11. Fireworks shall be stored and kept only in the permittee's sale booth. It shall be unlawful to store any fireworks intended for sale in any building, residence, garage, home or automobile within the City of Costa Mesa.

3309.12. There shall be at least one (1) adult in attendance during any open or sale hours of the fireworks stand. No person under the age of eighteen (18) years, and no person who is physically or mentally unable to move himself shall be permitted within a fireworks stand.

3309.13. The permittee shall provide an adult night watchman to act and serve during the hours of storage. Under no circumstances shall any night watchman sleep within any fireworks stand.

3309.14. No alcoholic beverages shall be allowed on the premises.

3309.15. All fireworks fuses shall be taped.

3309.16. All permits must be posted in a conspicuous place.