

BUILDING STANDARDS COMMISSION

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



January 8, 2014

Michael J. Jorgensen
Building Official
City of San Clemente
910 Calle Negocio, Suite 110
San Clemente, CA 92673

RE: Ordinance #1572 and 1573

Dear Mr. Jorgensen:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on December 5, 2013.

Our review finds the submittal to contain two ordinances modifying provisions of the 2013 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code §§17958.7 and 18941.5. The code modifications are accepted for filing and are enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the Commission. The Commission is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code 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.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code §13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than this Commission. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code §25402.1(h)(2).

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Enrique M. Rodriguez".

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings



City of San Clemente Building Division

Michael J. Jorgensen, Building Official

Phone: (949) 361-6170 Fax: (949) 361-8281

JorgensenM@San-Clemente.org

RECEIVED
CITY OF SAN CLEMENTE
BUILDING DIVISION
COMMISSIONERS COMMISSION

December 2, 2013

Mr. Jim McGowan
Executive Director
California Building Standards Commission
2525 Natomas Park Dr., Suite 130
Sacramento, CA 95833-2936

Subject: Local Amendments to 2013 State Codes

Dear Mr. McGowan:

The City of San Clemente has adopted the current Building, Residential, Fire, Plumbing, Mechanical, Electrical, CalGreen, and the Existing Building Codes of the State of California.

The City of San Clemente has adopted changes and modifications to the Codes and have advised that certain said changes and modifications to the 2013 Editions of the California Building, Residential, Electrical, Mechanical, Plumbing, CalGreen and Fire Codes are reasonably necessary due to local climatic, geological or topographical conditions in the City of San Clemente and have 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 Code or are reasonably necessary to safeguard life and property within the City of San Clemente.

City Ordinances indicating the local amendments and Resolutions providing the related express findings for each amendment are enclosed for your files.

If additional information is desired please contact this office at (949) 361-6170.

Sincerely,


Michael J. Jorgensen, P.E., C.B.O.
Building Official

Attachments: Building Code Ordinance No. 1572 and Findings Resolution No. 13-44
Fire Code Ordinance No. 1573 and Findings Resolution No. 13-45

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ORDINANCE NO. 1572

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE, CALIFORNIA, AMENDING CHAPTERS 15.08, 15.12, 15.16, 15.20, 15.21, AND 15.22 OF TITLE 15 OF THE SAN CLEMENTE MUNICIPAL CODE ADOPTING BUILDING REGULATIONS

THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE HEREBY ORDAINS AS FOLLOWS:

Section 1. Chapter 15.08 of the San Clemente Municipal Code is hereby amended to read in its entirety as follows:

Chapter 15.08 BUILDING CODE

- 15.08.010 Building Code Adopted – Where filed.
- 15.08.020 Division II of Chapter 1 amended — administration.
- 15.08.025 Chapter 2 amended — Definitions.
- 15.08.030 Chapter 4 amended — Special Detailed Requirements Based on Use and Occupancy.
- 15.08.035 Chapter 7A amended — Materials and Construction Methods for Exterior Wildfire Exposure.
- 15.08.040 Chapter 9 amended — Fire Protection Systems.
- 15.08.050 Chapter 15 amended — Roof Assemblies and Rooftop Structures.
- 15.08.060 Chapter 18 amended — Soils and Foundations.
- 15.08.070 Chapter 31 amended — Special Construction.
- 15.08.080 Chapter 34 amended — Existing Structures.
- 15.08.090 Chapter 35 amended — Referenced Standards (NFPA 13, NFPA 13R, NFPA 13D, NFPA 14, NFPA 24).
- 15.08.100 Construction of Off-Street Parking Lots.

Section 15.08.010 Building Code Adopted – Where filed.

For the purpose of prescribing regulations for erection, construction, enlargement, alteration, replacement, repair, improvement, removal, movement, conversion, demolition, use and occupancy, equipment, height, location, maintenance, and areas of every building or structure or any appurtenances connected or attached to such building or structure in the City, the following construction codes, subject to the modifications set forth in this Chapter, are hereby adopted: California Building Code (CBC), 2013

Edition, based on the 2012 International Building Code as published by the International Code Council, including Appendix I; California Administrative Code, 2013 Edition; California Energy Code, 2013 Edition; California Historical Building Code, 2013 Edition; California Existing Building Code, 2013 Edition; and California Referenced Standards Code, 2013 Edition. The provisions of these codes, as modified in this Chapter, shall constitute the building regulations of the City. A copy of these codes is on file for public examination in the City's Building Division office.

15.08.020 Division II of Chapter 1 amended — Administration.

Division II of Chapter 1 of CBC is hereby amended as follows:

- A. Subsection 101.1 is hereby amended to read in its entirety as follows:

101.1 Title. These regulations shall be known as the California Building Code of the State of California, hereinafter referred to as "this code."

- B. Subsection 101.2 is hereby amended to read in its entirety as follows:

101.2 Scope. The provisions of this code shall apply to the construction, alteration, movement, enlargement, 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.

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the California Residential Code.

The provisions of these codes shall apply to and affect all of the territory of the City of San Clemente, 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 except as exempted by these codes.

- C. Subsection 101.4. is hereby amended to read in its entirety as follows:

101.4 Referenced codes. The other codes listed in Sections 101.4.1 through 101.4.8 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

- D. A new Subsection 101.4.7 is hereby added to Section 101 to read in its entirety as follows:

101.4.7 Electrical. The provisions of the California Electrical Code shall apply to the installation, alteration, repair and replacement of electrical wiring, connections, fixtures and other devices and systems.

- E. A new Subsection 101.4.8 is hereby added to Section 101 to read in its entirety as follows:

101.4.8 Green Code. The provisions of the California Green Building Standards Code shall apply to design and construction of buildings for sustainability.

- F. Subsection 105.2 is hereby amended by deleting items 1 through 13 under the heading "Building" and replacing them with the following:

Building:

1. One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses and structures such as portable shade cloth structures, provided the floor area does not exceed 120 square feet (11 m²). Such structures must comply with the setback and height requirements of the City Zoning Ordinance and the Fire Code.

2. Fences not over 6 feet high.
3. Oil derricks.
4. Retaining walls that are not over 4 feet in height measured from the bottom of footing to the top of wall unless supporting a surcharge or impounding Class I, II or IIIA liquids.
5. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
6. Detached decks, platforms or similar structures not exceeding 200 square feet in area, walkways, sidewalks and driveways that are not more than 30 inches (762mm) above adjacent grade, and not over any basement or story below, and are not part of a required exit means of egress, and are not part of an accessible route.
7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work that does not involve electrical, mechanical or plumbing work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.
10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
11. Swings and other playground equipment accessory to detached one- and two-family dwellings.
12. Window awnings supported by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support of Group R-3 and U occupancies.

13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.

14. Radio and television antenna, and flagpoles not over twelve (12) feet in height measured from grade.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.

G. Subsection 105.3.2 is hereby amended to read in its entirety as follows:

105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 360 days after the date of filing, unless such application has been pursued in good faith or permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated. The total period of application extensions granted shall not exceed an additional 18 months. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan check fee.

H. Subsection 105.5 is hereby amended to read in its entirety as follows:

105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work commenced.

Any permittee holding an unexpired permit may apply for an extension of the time within which work may commence under that permit when the permittee is unable to commence work within the time required. The extension shall be requested in writing prior to the permit expiring and show justifiable cause

demonstrating that circumstances beyond the control of the permittee have prevented action from being taken. Pursuant to this paragraph, the Building Official or his/her designee is authorized to grant, in writing, one extension of time, for a period not more than 180 days. The completion of construction shall not extend beyond the timeframes mandated in Section 105.8 of this code even with such extension.

Before such work can be recommenced after a permit expires, a new permit shall first be obtained, and a fee therefore shall be one half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work, and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after this one year time period, the permittee shall pay a new full permit fee.

- I. A new Subsection 105.8 is hereby added to Section 105 to read in its entirety as follows:

105.8 Completion of construction. Notwithstanding subsection 105.5 above, all construction shall be completed by the owner, owner's agent, or the permittee and approved by the City within the following time frame:

- a. New residential buildings construction . . . 24 months
- b. Residential room additions and remodels . . . 12 months
- c. Tenant improvements . . . 12 months
- d. Pools/spas . . . 12 months
- e. Patio covers and similar structures . . . 6 months
- f. Fences and/or retaining walls . . . 6 months
- g. Water heaters, water softeners, and air conditioners . . . 6 months
- h. All other minor alterations . . . 6 months

Upon written request of the owner or permittee, the Building Official and/or his/her designated representative may extend the period for completion of construction 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 in the required construction period; (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. Any extension beyond one hundred eighty (180) days must be approved by the City Manager.

The requirement of this subsection shall apply to all construction projects undertaken prior to the effective date of this subsection except that the construction period set forth shall run from the effective date of this subsection rather than from the date construction was commenced or a building permit was issued for the project.

- J. A new Subsection 105.9 is hereby added to Section 105 to read in its entirety as follows.

105.9 Maintenance of property during construction. During construction, all property shall be maintained in a reasonably 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. A waiver of this requirement may be obtained from the Building Official or his/her 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.

- K. A new Subsection 107.2.6 is hereby added to Section 107 to read in its entirety as follows:

107.2.6 Soil report. A Soil report shall be submitted with all permit applications for new construction and additions. Soil Reports shall be prepared by a professional engineer licensed by the State to prepare such reports. The Building Official may waive this requirement if he/she finds that the scope of work applied for does not necessitate a soil report.

- L. Subsection 107.3 is hereby amended to add a second paragraph that reads as follows:

When submittal documents are required by 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 are separate fees from the permit fees specified in Section 109.2 and are in addition to the permit fees. Said plan review fee shall be as set forth in the City Council Fee Resolution.

- M. Subsection 107.5 is hereby amended to add a second paragraph that reads as follows:

The approved plans, permit application, inspection card and other construction documents required by the Building Official shall be imaged after the final inspection and will be a permanent record in the City. The applicant shall pay the cost of imaging at the time of permit.

- N. Subsection 109.2 is hereby amended by adding a sentence at the end to read as follows:

The fee for each permit shall be as set forth in the City Council Fee Resolution unless otherwise specified by the code.

- O. Subsection 109.3 is hereby amended to add a second paragraph that reads as follows:

The Building Official shall make the determination of value or valuation under any provisions of this code. The valuation shall be determined by using rational methods established by the Building Official that reasonably establish the construction value or the contract price of the actual construction cost. The value of work to be used in computing the Building Permit and Building Plan Review fees shall be the total value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment.

- P. Subsection 109.4 is hereby amended to add a second paragraph that reads as follows:

An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law.

- Q. Subsection 109.6 is hereby amended to read in its entirety as follows:

109.6 Refunds. The building official is authorized to establish a refund policy. The building official may authorize refunding of any fee paid hereunder which was erroneously paid or collected as provided below.

The building official may authorize refunding of 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 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 has been paid is withdrawn or canceled before any plan reviewing is done.

The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of payment.

- R. A new Subsection 109.7 is hereby added to Section 109 to read in its entirety as follows:

109.7 Deposit. The Building Official may require a deposit from the applicant for a certain project or work in order to secure the request of final inspection approvals from the applicant or the repairing of damaged City properties during the period of construction. The deposit money will be refunded to the applicant when the final inspections are approved or the damages are repaired to the satisfaction of the City. The deposit amount shall not be more than twice the permit fee.

- S. A new Subsection 110.7 is hereby added to Section 110 to read in its entirety as follows:

110.7 Reinspections. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which an inspection is requested is not complete or when previous corrections are not corrected.

This subsection is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with requirements of this Code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the inspection record card is not posted or otherwise made available on the work site, or when the approved plans are not readily available to the inspector, or for failure to provide access on the date for which inspection is requested.

To obtain a reinspection, the applicant shall pay the reinspection fee as established by the City Council Fee Resolution. In instances where reinspection fees have been assessed, no additional inspection of work will be performed until the required reinspection fees have been paid.

15.08.025 Chapter 2 amended — Definitions.

Chapter 2 of CBC is hereby amended as follows:

- A. The Definition of "High-rise structure" in Subsection 202 is hereby amended to read as follows:

HIGH-RISE STRUCTURE. Every building of any type of construction or occupancy having floors used for human occupancy located more than 55 above the lowest floor level having building access (see Section 403), except buildings used as hospitals as defined in the Health and Safety Code Section 1250.

- B. The Definition of "Swimming Pool" in Subsection 202 is hereby amended to read as follows:

SWIMMING POOL. Any structure intended for swimming, recreational bathing or wading that contains water over 18 inches deep. This includes in-ground, above-ground and on-ground pools; hot tubs; spas and fixed-in-place wading pools.

- C. Subsection 202 is hereby 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 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.

15.08.030 Chapter 4 amended — Special Detailed Requirements Based on Use and Occupancy.

Chapter 4 of CBC is hereby amended as follows:

- A. The title of Section 403 is hereby amended to read as follows:

**SECTION 403
HIGH-RISE BUILDINGS AND GROUP I-2
OCCUPANCIES HAVING OCCUPIED FLOORS
LOCATED MORE THAN 55 FEET ABOVE THE
LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE
ACCESS**

- B. The first paragraph of Subsection 403.1 is hereby amended to read as follows:

403.1 Applicability. New high-rise buildings and Group I-2 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 55 feet above the lowest level of fire department vehicle access shall comply with Sections 403.2 through 403.6. *(Balance of the subsection to remain unchanged)*

- C. The first paragraph of Subsection 406.3.3 is hereby amended to read as follows:

406.3.3 Garages and carports. Carports shall be open on at least two sides. Garage and carport floor surfaces shall be of approved noncombustible material. Carports not open on at least two sides shall be considered a garage and shall comply with the provisions of this section for garages. *(Balance of the section to remain unchanged)*

- D. Subsection 406.4.5 is hereby amended by deleting exception no. 1 and amending the second paragraph to read as follows:

The area of floor used for parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway with an approved oil separator or trap discharging to sewers in accordance with the California Plumbing Code.

- E. Subsection 412.7 is hereby amended by adding Sections 412.7.6 through 412.7.6.13 as follows:

412.7.6. Emergency Helicopter Landing Facility. Emergency Helicopter Landing Facility (EHLF) shall be constructed as specified in Section 412.7.6.1 through 412.7.6.13.

412.7.6.1 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 use by fire, police, and emergency medical helicopters only.

412.7.6.2 Rooftop Landing Pad. The landing pad shall be 50 ft. x 50 ft. or a 50 ft. 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.

412.7.6.3 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 eight feet horizontal distance for every one foot of vertical height.

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

412.7.6.5 Safety Net. If the rooftop landing pad is elevated more than 30 in. (2'-6") above the adjoining surfaces, a 6 ft in 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 in. but less than 18 in.) 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.

412.7.6.6 Take-off and Landing Area. The takeoff and landing area shall be free of obstructions and 100 ft x 100 ft. or 100 ft. diameter.

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

412.7.6.8 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 412.7.6.8.

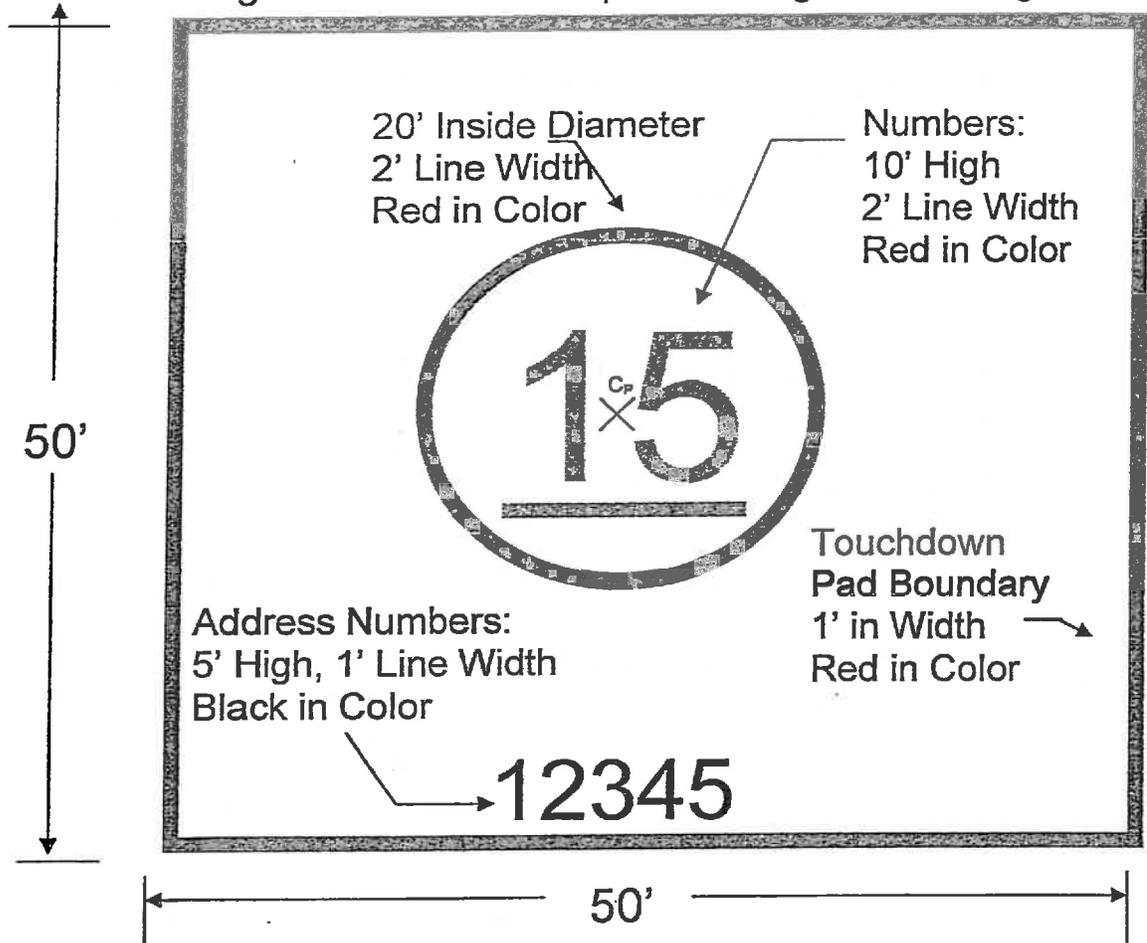
412.7.6.9 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with Section 1009.7.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

412.7.6.10 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.

412.7.6.11 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 California Fire Code Section 906.

412.7.6.13 EHLF. Fueling, maintenance, repairs, or storage of helicopters shall not be permitted.

Figure 412.7.6.8 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).

15.08.035 Chapter 7A amended — Materials and Construction Methods for Exterior Wildfire Exposure.

Chapter 7A of CBC is hereby amended as follows:

- A. Subsection 710A.3.2 is hereby amended to read in its entirety as follows:

710A.3.2 Detached accessory structures within 50 feet of an applicable building shall comply with the requirements of this section.

- B. Subsection 710A.4 is hereby amended to read in its entirety as follows:

710A.4 Requirements. Accessory structures shall be constructed of non-combustible or ignition-resistant materials.

15.08.040 Chapter 9 amended — Fire Protection Systems.

Chapter 9 of CBC is hereby amended as follows:

- A. Subsection 903.2 is hereby amended to read in its entirety as follows:

903.2 Where required. Approved automatic sprinkler systems in buildings and structures shall be provided in the locations described in this section and in Section 903.2 of the California Fire Code as amended by the City of San Clemente when one of the following conditions exists:

1. **New buildings:** In addition to the requirements of section 903.2.1 through 903.2.19, approved automatic sprinkler systems in new buildings and structures shall be provided as follows (Exception: Group R Detached one- two-family dwellings and townhouses as required by section 903.2.8):
 - i) Throughout all Groups A, I, E, and H Occupancies
 - ii) Throughout all Group B, F, M, and S Occupancies exceeding 1,000 square feet
 - iii) Throughout all Group U-1 Occupancies exceeding 6,000 square feet

For the purposes of this section, fire walls shall not define separate buildings.

2. **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.
3. **Addition:** Sprinkler protection shall be provided throughout the entire building when:
 1. Existing unsprinklered building less than 5,000 ft²: where 20% or more is added and the gross floor areas exceed 5,000 square feet.
 2. Existing unsprinklered building equal or greater than 5,000 ft²: where more than 1,000 ft² is added.
 3. Fire sprinklers shall be provided in additions to an existing building that has fire sprinklers installed.

- B. Subsection 903.2.8 is hereby amended to read in its entirety as follows:

903.2.8 Group R. An automatic sprinkler system installed in accordance with Subsection 903.3 of Section 903 of this code and Subsection 903.3 of Section 903 of the California Fire Code as amended by the City of San Clemente shall be provided throughout all buildings with a Group R fire area as follows:

1. All new Group R occupancies, including the attached garages
2. All existing Group R occupancies and U-1 garages when the total floor area is increase by 50% of the existing area over a 2-year period
3. All existing Group R occupancies and U-1 garages when the total area is increased by 750 square feet or more over a 2-year period
4. All existing Group R occupancies and U-1 garages when an additional story is added to the structure regardless of the area involved
5. An automatic sprinkler system shall be installed throughout any existing Group R Occupancy building when the floor area of the Alteration or Combination of an Addition and Alteration, within any two year period, is 50% or more of area of

the existing structure and where the scope of the work exposes building framing and facilitates sprinkler installation and is such that the Building/Fire Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

6. Any addition to existing building that has fire sprinklers installed.

Exceptions:

1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies not housing bedridden clients, not housing nonambulatory clients above the first floor and not housing clients above the second floor.
2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with CBC Section 425.8.3.3.
3. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
4. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

When not used in accordance with Section 504.2 or 506.3, an automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be allowed in Group R-2.1 occupancies.

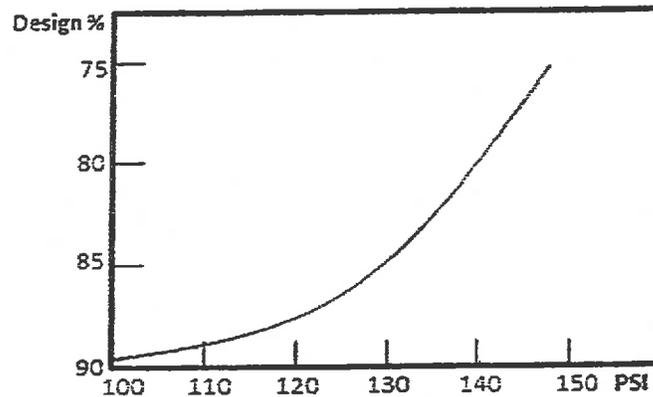
An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-2.1 or R-4 occupancies.

C. A new Subsection 903.3.5.3 is hereby added to Section 903 to read in its entirety as follows:

903.3.5.3 Hydraulically calculated systems. The design of hydraulically calculated fire sprinkler systems shall not exceed 90% of the water supply capacity

Exception: When static pressure exceeds 100 psi, and required by the Fire Code Official, the fire sprinkler system shall not exceed water supply capacity specified by Table 903.3.5.3

**TABLE 903.3.5.3
Hydraulically Calculated Systems**



D. Subsection 903.4 is hereby amended to read in its entirety as follows:

903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

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.
- E. Subsection 905.4 is hereby amended by adding location no. 7 as follows:
7. The centerline of the 2.5 inches (64 mm) outlet shall be no less than 18 inches (457 mm) above and no more than 24 inches (610 mm) above the finished floor.
- F. Subsection 907.2.13 is hereby amended to read in its entirety as follows:

907.2.13 High-rise buildings and Group I-2 occupancies having floors located more than 55 feet above the lowest level fire department vehicle access. High-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of 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 907.5.2.2

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 406.5 of the California Building Code.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.6 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

- G. Subsection 907.3.1 is hereby amended to read in its entirety as follows:

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.

- H. Subsection 907.5.2.2 is hereby amended to read in its entirety as follows.

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 of California Fire Code. In high-rise buildings and Group I-2 occupancies having occupied floors

located more than 55 feet above the lowest level of 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-2 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.

- I. Subsection 907.6.3.2 is hereby amended to read in its entirety as follows:

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

- J. Subsection 907.6.5 is hereby amended to read as follows:

907.6.5 Monitoring. Fire alarm systems required by this chapter or by the California Fire Code shall be monitored by an approved supervising station in accordance with NFPA 72, this section, and per Orange County Fire Authority Guideline "New and Existing Fire Alarm & Signaling Systems". *(Balance of the subsection to remain unchanged)*

15.08.050 Chapter 15 amended — Roof Assemblies and Rooftop Structures.

Chapter 15 of CBC is hereby amended as follows:

- A. Subsection 1503.4 is hereby amended by adding a second paragraph to read as follows:

Water that accumulates on a roof shall be effectively drained and conveyed from the roof to a storm drain, street gutter, or other locations approved by the Building Official. Such water shall be conveyed through gutters, leaders, associated piping or other non-erodible surface drainage devices as approved by the Building Official. For any minor or small roofs, the Building Official may exempt this requirement.

- B. Table 1505.1 in Subsection 1505.1 is hereby amended to read as follows:

**TABLE 1505.1^a
MINIMUM ROOF COVERING CLASSIFICATION
FOR TYPES OF CONSTRUCTION**

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A	A	A	A	A	A	A	A	A

a. Unless otherwise required in accordance with Chapter 7A

- C. Subsections 1505.1.1, 1505.1.2, 1505.1.3 are hereby deleted and replaced with a new Subsection 1505.1.1 to read in its entirety as follows:

1505.1.1 Roof Coverings. The roof covering or roofing assembly on any new structure regulated by this code shall be Class A fire retardant roof minimum as classified in CBC Section 1505.2. Non-combustible roof covering may be applied in accordance with the manufacturer's requirements in lieu of a fire retardant roofing assembly. Wood roofing materials are prohibited unless pressure treated and approved for fire retardant of Class A minimum. For existing structure when ten percent (10%) or more of the total roof area is re-roofed within any one-year period, shall have a Class A fire retardant roof covering for entire roof area. For existing structure when less than ten percent (10%) of the total roof area is re-roofed within any one-year period, shall have a fire retardant roof covering class

equal to or greater than the existing roof covering and not less than Class B.

15.08.060 Chapter 18 amended — Soils and Foundations.

Chapter 18 of CBC is hereby amended as follows:

- A. Subsection 1807.1.6 is hereby amended to read in its entirety as follows:

1807.1.6 Prescriptive design of concrete and masonry foundation walls. Concrete and masonry foundation walls that are laterally supported at the top and bottom shall be permitted to be designed and constructed in accordance with this section. Prescriptive design of foundation walls shall not be used for structures assigned to Seismic Design Category D, E or F.

15.08.070 Chapter 31 amended — Special Construction.

Chapter 31 of CBC is hereby amended as follows:

- A. The first sentence of Subsection 3109.3 is hereby amended to read as follows:

3109.3 Public swimming pools. Public swimming pools shall be completely enclosed by a fence at least 5 feet in height or a screen enclosure. *(Balance of the section to remain unchanged.)*

- B. The first sentence of Subsection 3109.4.1 is hereby amended to read as follows:

3109.4.1 Barrier height and clearances. The top of the barrier shall be at least 60 inches above grade measured on the side of the barrier that faces away from the swimming pool. *(Balance of the section to remain unchanged)*

- C. Subsection 3109.4.4.1 is hereby amended by adding the following definition:

PRIVATE POOL means 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.

- D. The first sentence of Subsection 3109.4.4.3 is hereby amended to read as follows:

3109.4.4.3 Enclosure; required characteristics. An enclosure shall have all of the following characteristics and shall comply with provisions contained in 3109.4:

(Balance of the section to remain unchanged)

- E. A new Subsection 3109.7 is hereby added to Section 3109 to read as follows:

3109.7 Sound Attenuation. Filters, heating systems, and pumps installed to serve pool, spa, hot tub, waterfall or any body of water, shall be enclosed and soundproofed. An acoustical report prepared by a licensed or approved acoustical professional can be used to substitute for sound wall enclosures as long as the report demonstrates the compliance of the requirements specified in Chapter 8.48 of the San Clemente Municipal Code.

15.08.080 Chapter 34 amended — Existing Structures.

Chapter 34 of CBC is hereby amended as follows:

- A. New Subsections 3410.2 and 3410.3 are hereby added to Section 3410 to read as follows:

3410.2 Requirements. It shall be unlawful for any person to move any house, building or structure of any kind or description, except fabricated structures approved by the Building Official, from any point outside of the City limits of the City, onto any property or lot within the City limits of the City of San Clemente. No building or structure shall be moved or relocated until such building or structure is approved by the Planning Commission under a Conditional Use Permit. A permit to relocate the building or structure, issued by the Building Official to the owner of the premises to which the particular building or structure is proposed to be moved, is also required.

3410.3 Relocation Permit Fee. Before any application for a Relocation Permit is accepted for filing, a fee as set forth in the City Council Fee Resolution shall be paid by the applicant to the City of San Clemente to cover City's cost for the investigation of the condition of the building to be moved and the inspection of the proposed new location. The application fee herein provided for shall be in addition to the building permit fee required by this code and any other fee or charge required by law or ordinance where a main building and building accessory thereto are to be moved.

15.08.090 Chapter 35 amended — Referenced Standards (NFPA 13, NFPA 13R, NFPA 13D, NFPA 14, NFPA 24).

The Referenced Standards in Chapter 35 of CBC are hereby amended as follows:

A. NFPA 13, 2013 Edition, Installation of Sprinkler Systems is hereby amended as follows:

1. Section 6.8.3 is hereby revised to read in its entirety as follows:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of inlets shall be approved by the fire code official. 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 ½" inlets shall be provided.

2. Section 8.3.3.1 is hereby revised to read in its entirety 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 fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:

- a) Quick-response type as defined in 3.6.4.7.
- b) Residential sprinklers in accordance with the requirements of 8.4.5.
- c) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers.
- d) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems.

3. Section 8.17.1.1.1 is hereby added as follows:

8.17.1.1.1 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. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each unit. 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, whichever is greater. 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.

4. 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 sprinkler plan is submitted. 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.

5. 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 multiply 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 an approved third party licensed in the State of California

6. Section 23.2.1.1 is hereby revised to read in its entirety as follows:

23.2.1.1 Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 6 months prior to

working plan submittal unless otherwise approved by the authority having jurisdiction.

B. NFPA 13R 2013 Edition Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

1. Section 6.16.1 is hereby revised to read in its entirety as follows:

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 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. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each dwelling unit. 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, whichever is greater. 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.

C. NFPA 13D 2013 Edition Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

1. Section 7.1.2 is hereby revised to read in its entirety 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.

2. 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 is subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces. 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, whichever is greater. 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 907.2.11 are used to sound an alarm upon waterflow switch activation.

3. Section 12.3.6 is hereby added as follows:

12.3.6 Stock of Spare Sprinklers.

4. Section 12.3.6.1 is hereby added as follows:

12.3.6.1 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.

- 5. Section 12.3.6.2 is hereby added as follows:

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

- 6. Section 12.3.6.3 is hereby added as follows:

12.3.6.3 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).

- 7. Section 12.3.6.4 is hereby added as follows:

12.3.6.4 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.

D. NFPA 14, 2013 Edition, Installation of Standpipe and Hose Systems is hereby amended as follows:

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

7.3.1.1 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.

E. NFPA 24, 2013 Edition, Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

- 1. 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 red.

2. Section 6.2.11 (5) is hereby deleted without replacement and (6) and (7) renumbered as follows:

(5) Control Valves installed in a fire-rated room accessible from the exterior.

(6) Control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the authority having jurisdiction.

3. Section 6.3.3 is hereby added as follows:

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

4. 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: 304 or 316 Stainless Steel pipe and fittings

5. Section 10.3.6.2 is hereby revised to read in its entirety as follows:

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

Exception: Bolted joint accessories made from 304 or 316 stainless steel.

6. Section 10.3.6.3 is hereby added as follows:
10.3.6.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.
7. Section 10.6.3.1 is hereby revised to read in its entirety 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 24 inches, as measured from the interior face of the exterior wall to the center of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with 10.6.2.
8. Section 10.6.4 is hereby revised to read in its entirety as follows:
10.6.4 Pipe joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints.

15.08.100 Construction of Off-Street Parking Lots.

- A. Paving. All off-street parking lots shall be paved according to the City specifications, with an all-weather surface of asphalt or concrete paving.
- B. Preparation of Specifications. The City Engineer shall prepare such specifications for use by the owner or builder of such off-street parking space.
- C. Construction Permit Required. No off-street parking lot may be constructed without there being issued a permit therefor by the Building and Safety Superintendent of the City.
- D. Application for Construction Permit. Application for such permit shall be accompanied by a plot plan showing the size of the proposed parking lot, method of ingress and egress, layout of stalls, bumper guard locations and such other pertinent facts as may be required by the Building and Safety Superintendent to

determine whether such application meets the requirements and regulations of the City.

Section 2. Chapter 15.12 of the San Clemente Municipal Code is hereby amended to read in its entirety as follows:

Chapter 15.12 ELECTRICAL CODE

- 15.12.010 Electrical Code Adopted – Where filed.
- 15.12.020 Amendments, additions and deletions

15.12.010 Electrical Code Adopted – Where filed.

The City Council of the City of San Clemente hereby adopts by reference California Code of Regulations Title 24, Part 3, known and designated as the California Electrical Code, 2013 Edition based on the National Electrical Code (NEC), 2011 Edition, as published by the National Fire Protection Association with the modifications set forth below for the purpose of prescribing regulations for the installation, arrangement, alteration, repairing, replacement, remodeling, or use and other operation of electrical wiring, connections, fixtures and other electrical appliances on premises within the City. The provisions of this code shall constitute the electrical code regulations of the City. The California Electrical Code is on file for public examination in the City's Building Division office.

15.12.020 Amendments, additions and deletions.

- A. A new Section 90.0 of Article 90 of the California Electrical Code is hereby added to read in its entirety as follows:

90.0 Administration and Fees.

Administrative provisions contained in Division II of Chapter 1 of the California Building Code and California Residential Code, as amended by the City of San Clemente, shall apply to the California Electrical Code, as adopted and amended by the City of San Clemente.

- B. A new Subdivision (L) is hereby added to Section 300.5 of Article 300 of Chapter 3 of the California Electrical Code to read in its entirety as follows:

(L) Underground utilities required. Overhead wiring shall not be installed outside on private property. The building official, as a condition precedent to the issuance of a building permit, shall require all utility services located within any lot to be installed underground if:

- (a) The property is to be developed with a new or relocated main building

For purposes of this section, "main building" shall mean a building in which is conducted the principal use of the lot or building site on which such building is located.

The owner or developer of the property shall be responsible for complying with the requirements of this section and shall provide all the necessary facilities on the property to receive such services from the supplying utilities. If the building official determines that application of this requirement causes extraordinary hardship, the building official may modify or delay the imposition of the undergrounding requirement upon approval of property owner's application therefore. If the building official determines to delay the installation of the requirement, he may require a recorded agreement guaranteeing the future performance of the work, together with adequate performance security in the form of a cash, surety bond, or letter of credit.

For purposes of this section, appurtenances and associated equipment, such as, but not limited to, surface-mounted transformers, pedestal-mounted terminal boxes and meter cabinets, and concealed ducts in an underground system may be placed above ground.

- C. Subdivision (B) of Section 310.106 of Article 310 of Chapter 3 of the California Electrical Code is hereby amended to read in its entirety as follows:

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

Copper wire shall be the material used when plans or installations require No. 6 or smaller wiring.

Aluminum wire may only be permitted on an individual case-by-case basis by the Building Official. Any such approval shall be based upon findings showing that all of the following conditions exist:

- (a) Wire size shall not be less than No. 6
- (b) Continuous inspection of each connection by a qualified inspector approved by the Building Official in advance.
- (c) Installation of antioxidant compound/material at each connection.
- (d) Use of electrical equipment listed for aluminum wiring.
- (e) The installer shall notify the building owner in writing that aluminum wiring was used. The notification shall specify exact locations of wire and its purposes. Certificate of Occupancy will not be issued until a copy of the notification letter is submitted to the Building Official for a review and approval.

Solid aluminum conductors 8, 10, and 12 AWG shall be made of an AA-8000 series electrical grade aluminum alloy conductor material. Stranded aluminum conductors 8 AWG through 1000 kcmil marked as Type RHH, RHW, XHHW, THW, THHW, THWN, THHN, service-entrance Type SE Style U and SE Style R shall be made of an AA-8000 series electrical grade aluminum alloy conductor material

- D. Table No. 310.106(A) of Section 310.106 of Article 310 of Chapter 3 of the California Electrical Code is hereby amended by adding a note at the bottom to read as follows:

****Note.** Use of aluminum conductors requires prior approval from Building Official. See Section 310.106(B), Conductor Material.

Section 3. Chapter 15.16 of the San Clemente Municipal Code is hereby amended to read in its entirety as follows:

Chapter 15.16 MECHANICAL CODE

- 15.16.010 Mechanical Code Adopted – Where filed.
15.16.020 Amendments, additions and deletions

15.16.010 Mechanical Code Adopted – Where filed.

The City Council of the City of San Clemente hereby adopts by reference California Code of Regulations Title 24, Part 4, known and designated as the California Mechanical Code, 2013 Edition based on the 2012 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials with the modifications set forth below for the purpose of prescribing regulations for the design, construction, installation, quality of materials, location, operation and maintenance or use of heating, ventilating, cooling, refrigeration systems, incinerators and other heat-producing appliances in the City including Appendices B, C, D and F. The provisions of this code shall constitute the mechanical code regulations of the City. The California Mechanical Code is on file for public examination in the City's Building Division office.

15.16.020 Amendments, additions and deletions.

- A. Sections 113.4 and 114.0 of Division II of Chapter 1 of the California Mechanical Code are hereby deleted and replaced by the following:

114.0 Administration and Fees. Administrative and fee provisions contained in Division II of Chapter 1 of the California Building Code and California Residential Code, as amended by the City of San Clemente, shall apply to the California Mechanical Code, as adopted and amended by the City of San Clemente.

- B. The first paragraph of Subsection 504.2 of the Section 504 of the California Mechanical Code is hereby amended to read as follows:

504.2 Domestic Range Hoods and Vents. Kitchen range hoods shall be installed for cooking facilities

with an approved forced-draft system of ventilation vented to the outside of the building. Ducts used for domestic kitchen range ventilation shall be of metal, or other approved material, and shall have smooth interior surfaces. Ducts for domestic range hoods shall only serve cooking appliances. *(Balance of the subsection to remain unchanged.)*

- C. Subsection 1308.5 of Section 1308 of California Mechanical Code is hereby amended by adding the following sentences to the end of the paragraph:

Approved PE pipe and fittings shall be used in exterior buried gas piping systems. Ferrous gas piping is not permitted to be installed underground unless a soils analysis is provided to show that soil conditions will not be damaging to the piping material.

Section 4. Chapter 15.20 of the San Clemente Municipal Code is hereby amended to read in its entirety as follows:

Chapter 15.20 PLUMBING CODE

- 15.20.010 Plumbing Code Adopted – Where filed.
- 15.20.020 Amendments, additions and deletions

15.20.010 Plumbing Code Adopted – Where filed.

The City Council of the City of San Clemente hereby adopts by reference California Code of Regulations Title 24, Part 5, known and designated as the California Plumbing Code, 2013 Edition based on the 2012 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials with the modifications set forth below for the purpose of prescribing regulations for the design, quality of materials, erection, installation, alteration, repair, relocation, replacement, addition to, use or maintenance of plumbing systems in the City including Appendices A, B, C, D, H, and I. The provisions of this code shall constitute the plumbing code regulations of the City. The California Plumbing Code is on file for public examination in the City’s Building Division office.

15.20.020 Amendments, additions and deletion.

- A. Sections 103.3 and 103.4 of Division II of Chapter 1 of the California Plumbing Code are hereby deleted and replaced by the following:

103.3 Administration and Fees. Administrative provisions contained in Division II of Chapter 1 of the California Building Code and California Residential Code, as amended by the City of San Clemente, shall apply to the California Plumbing Code, adopted and amended by the City of San Clemente.

- B. Subsection 604.1 of Section 604.0 of the California Plumbing Code is hereby amended by adding a sentence to end of the third paragraph to read as follows:

Ferrous materials are prohibited for water pipe and fittings when installed in the ground unless a soils analysis is provided to show that soil conditions will not be damaging to the piping material. *(Balance of the section to remain unchanged)*

- C. Subsection 604.2 of Section 604.0 of the California Plumbing Code is hereby amended to read in its entirety as follows:

604.2 Copper tube for water piping shall have a weight of not less than Type K.

Exception. Type L copper tubing may be used for water piping when piping is underground and not within the footprint of the building foundation and Type M copper tubing may be used for water piping when piping is aboveground in, or on, a building.

- D. Item no. (2) in Subsection 609.3 of Section 609.0 of the California Plumbing Code is hereby amended to read in its entirety as follows:

(2) Copper water piping installed under concrete floor slabs within a building or structure shall be copper tube Type "K" and shall be installed without joints where possible. Where joints are

permitted, they shall be brazed and fitting shall be wrought copper. Such copper tubing shall be placed in a sand bed a minimum of three inches (3") in depth, and properly protected penetrates concrete and similar materials.

(Balance of the section to remain unchanged)

- E. Subsection 610.8 of Section 610.0 of the California Plumbing Code is hereby amended by deleting the last paragraph and replacing it with the following:

No building supply pipe shall be less than one inch (1") in diameter unless a design or calculations are submitted and approved by Administrative Authority. Each main building shall have a minimum of two three-quarter-inch (3/4") hose bibs; one located readily accessible to the front yard and one to the back yard.

- F. A new item no. (7) is hereby added to Section 701.1 of the California Plumbing Code to read as follows:

(7) Cast iron shall not be used for drainage and waste piping when installed in the ground unless a soils analysis is provided to show that soil conditions will not be damaging to the piping material.

- G. Subsection 1208.5 of Section 1208 of California Plumbing Code is hereby amended by adding the following sentences to the end of the paragraph:

Approved PE pipe and fittings shall be used in exterior buried gas piping systems. Ferrous gas piping is not permitted to be installed underground unless a soils analysis is provided to show that soil conditions will not be damaging to the piping material.

Section 5. Chapter 15.21 of the San Clemente Municipal Code is hereby amended to read in its entirety as follows:

Chapter 15.21 GREEN BUILDING STANDARDS CODE

15.21.010 Green Building Standards Code Adopted –
Where filed.

15.21.020 Amendments, additions and deletions

**15.21.010 Green Building Standards Code Adopted –
Where filed.**

For the purpose of prescribing regulations for the planning, design, operation, construction, use and occupancy of newly constructed buildings and structures in the City to reduce the negative environmental impacts, subject to the modifications set forth in this Chapter, the City Council of the City of San Clemente hereby adopts by reference California Code of Regulations Title 24, Part 11, known and designated as the California Green Building Standards Code, 2013 Edition (CGBSC)), as published by the International Code Council. A copy of the California Green Building Standards Code is on file for public examination in the City's Building Division office.

15.21.020 Amendments, additions and deletions.

- A. Section 202 of the CGBSC is hereby amended by adding the following definition:

SUSTAINABILITY. Consideration of present development and construction impacts on the community, the economy, and the environment without compromising the needs of the future.

- B. Subsection 4.304.1 of Section 4.304 of the CGBSC is amended to read in its entirety as follows:

4.304.1 Irrigation controllers. Automatic irrigation system controllers for landscaping provided and installed at the time of final inspection and shall comply with the following:

1. Controllers shall be weather- or soil moisture-based irrigation controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

Section 6. Chapter 15.22 of the San Clemente Municipal Code is hereby amended to read in its entirety as follows:

Chapter 15.22 RESIDENTIAL CODE

- 15.22.010 Residential Code Adopted – Where filed.
- 15.22.020 Division II of Chapter 1 amended — Administration.
- 15.22.025 Chapter 2 amended — Definitions.
- 15.22.030 Chapter 3 amended — Building Planning.
- 15.22.040 Chapter 4 amended — Foundations.
- 15.22.050 Chapter 6 amended — Wall Construction.
- 15.22.060 Chapter 9 amended — Roof Assemblies.
- 15.22.070 Chapter 44 amended — Referenced Standards (NFPA 13, NFPA 13R, NFPA 13D).

15.22.010 Residential Code Adopted – Where filed.

For the purpose of prescribing regulations for erection, construction, enlargement, alteration, replacement, repair, improvement, removal, movement, conversion, demolition, use and occupancy, equipment, height, location, maintenance, and areas of detached one-and two-family residential dwellings, townhomes and structures accessory thereto in the City, subject to the modifications set forth in this Chapter, the City Council of the City of San Clemente hereby adopts by reference California Code of Regulations Title 24, Part 2.5, known and designated as the California Residential Code (CRC), 2013 Edition, based on the 2012 International Residential Code as published by the International Code Council including Appendix H. A copy of this code is on file for public examination in the City’s Building Division office.

15.22.020 Division II of Chapter 1 amended — Administration.

Division II of Chapter 1 of CRC is hereby amended as follows:

- A. Subsection R101.1 is hereby amended to read in its entirety as follows:

R101.1 Title. These regulations shall be known as the California Residential Code, and may be cited as such and will be referred to herein as “this code”.

- B. Subsection R101.2 is hereby amended by adding a second paragraph to read as follows:

The provisions of this code shall apply to and affect all of the territory of the City of San Clemente, 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 except as exempted by these codes.

- C. Subsection R105.2 is hereby amended by deleting items 1 through 10 under the heading "Building" and replacing them with the following:

Building:

1. One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses and structures such as portable shade cloth structures, provided the floor area does not exceed 120 square feet (11 m²). Such structures must comply with the setback and height requirements of the City Zoning Ordinance and the Fire Code.
2. Fences not over 6 feet high.
3. Retaining walls that are not over 4 feet in height measured from the bottom of footing to the top of wall unless supporting a surcharge or impounding Class I, II or IIIA liquids.
4. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
5. Sidewalks and driveways.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work that does not involve electrical, mechanical or plumbing work.

7. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.
8. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
9. Swings and other playground equipment accessory to detached one- and two-family dwellings.
10. Window awnings supported by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support of Group R-3 and U occupancies.
11. Detached decks, platforms or similar structures not exceeding 200 square feet in area, walkways that are not more than 30 inches (762mm) above adjacent grade, and not over any basement or story below and do not serve the exit door required by Section R311.4.
12. Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.
13. Radio and television antenna, and flagpoles not over twelve (12) feet in height measured from grade.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.

- D. Subsection R105.3.2 is hereby amended to read in its entirety as follows:

R105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 360 days after the date of filing, unless such application has been pursued in good faith or permit has been issued; except that the building official is authorized to grant

one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated. The total period of application extensions granted shall not exceed an additional 18 months. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan check fee.

- E. Subsection R105.5 is hereby amended to read in its entirety as follows:

R105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work commenced.

Any permittee holding an unexpired permit may apply for an extension of the time within which work may commence under that permit when the permittee is unable to commence work within the time required. The extension shall be requested in writing prior to the permit expiring and show justifiable cause demonstrating that circumstances beyond the control of the permittee have prevented action from being taken. Pursuant to this paragraph, the Building Official or his/her designee is authorized to grant, in writing, one extension of time, for a period not more than 180 days. The completion of construction shall not extend beyond the timeframes mandated in Section R105.10 of this code even with such extension.

Before such work can be recommenced after a permit expires, a new permit shall first be obtained, and a fee therefore shall be one half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work, and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after this one year time period, the permittee shall pay a new full permit fee.

- F. A new Subsection R105.10 is hereby added to Section R105 to read in its entirety as follows.

R105.10 Completion of construction.

Notwithstanding subsection R105.5 above, all construction shall be completed by the owner, owner's agent, or the permittee and approved by the City within the following time frame:

- a. New residential buildings construction . . . 24 months
- b. Residential room additions and remodels . . . 12 months
- c. Pools/spas . . . 12 months
- d. Patio covers and similar structures . . . 6 months
- e. Fences and/or retaining walls . . . 6 months
- f. Water heaters, water softeners and air conditioners . . . 6 months
- g. All other minor alterations . . . 6 months

Upon written request of the owner or permittee, the Building Official and/or his/her designated representative may extend the period for completion of construction 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 in the required construction period; (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. Any extension beyond one hundred eighty (180) days must be approved by the City Manager.

The requirement of this subsection shall apply to all construction projects undertaken prior to the effective date of this subsection except that the construction period set forth shall run from the effective date of this subsection rather than from the date construction was commenced or a building permit was issued for the project.

- G. A new Subsection R105.11 is hereby added to Section R105 to read in its entirety as follows.

R105.11 Maintenance of property during construction. During construction, all property shall be maintained in a reasonably 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. A waiver of this requirement may be obtained from the Building Official or his/her 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.

- H. A new Subsection R106.1.4 is hereby added to Section R106 to read in its entirety as follows:

R106.1.4 Soil report. A Soil report shall be submitted with all permit applications for new construction and additions. Soil Reports shall be prepared by a professional engineer licensed by the State to prepare such reports. The Building Official may waive this requirement if he/she finds that the scope of work applied for does not necessitate a soil report.

- I. Subsection R106.3 is hereby amended to add a second paragraph that reads as follows:

When submittal documents are required by Section R106.1, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. Said plan review fees are separate fees from the permit fees specified in Section R108 and are in addition to the permit fees. Said plan review fee shall be as set forth in the City Council Fee Resolution.

- J. Subsection R106.5 is hereby amended to add a second paragraph that reads as follows:

The approved plans, permit application, inspection card and other construction documents required by

the Building Official shall be imaged after the final inspection and will be a permanent record in the City. The applicant shall pay the cost of imaging at the time of permit.

- K. Subsection R108.2 is hereby amended by adding a sentence at the end to read as follows:

The fee for each permit shall be as set forth in the City Council Fee Resolution unless otherwise specified by the code.

- L. Subsection R108.3 is hereby amended to add a second paragraph that reads as follows:

The Building Official shall make the determination of value or valuation under any provisions of this code. The valuation shall be determined by using rational methods established by the Building Official that reasonably establish the construction value or the contract price of the actual construction cost. The value of work to be used in computing the Building Permit and Building Plan Review fees shall be the total value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment.

- M. Subsection R108.5 is hereby amended to read in its entirety as follows:

R108.5 Refunds. The building official is authorized to establish a refund policy. The building official may authorize refunding of any fee paid hereunder which was erroneously paid or collected as provided below.

The building official may authorize refunding of 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 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 has been paid is withdrawn or canceled before any plan reviewing is done.

The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of payment.

- N. Subsection R108.6 is hereby amended to add a second paragraph that reads as follows:

An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law.

- O. A new Subsection R108.7 is hereby added to Section R108 to read in its entirety as follows:

R108.7 Deposit. The Building Official may require a deposit from the applicant for a certain project or work in order to secure the request of final inspection approvals from the applicant or the repairing of damaged City properties during the period of construction. The deposit money will be refunded to the applicant when the final inspections are approved or the damages are repaired to the satisfaction of the City. The deposit amount shall not be more than twice the permit fee.

- P. A new Subsection R109.5 is hereby added to Section R109 to read in its entirety as follows:

R109.5 Reinspections. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which an inspection is requested is not complete or when previous corrections are not corrected.

This subsection is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with requirements of this Code, but

as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the inspection record card is not posted or otherwise made available on the work site, or when the approved plans are not readily available to the inspector, or for failure to provide access on the date for which inspection is requested.

To obtain a reinspection, the applicant shall pay the reinspection fee as established by the City Council Fee Resolution. In instances where reinspection fees have been assessed, no additional inspection of work will be performed until the required reinspection fees have been paid.

15.22.025 Chapter 2 amended — Definitions.

Chapter 2 of CRC is hereby amended as follows:

- A. Subsection R202 is hereby amended by adding the following definition:

HAZARDOUS FIRE AREA. Includes all areas identified within California Fire Code Section 4906.2 and other areas as determined by the Fire Code Official as presenting a fire hazard due to the presence of combustible vegetation, or the proximity of the property to an area that contains combustible vegetation.

15.22.030 Chapter 3 amended — Building Planning.

Chapter 3 of CRC is hereby amended as follows:

- A. Table R301.2(1) in Section R301 is hereby amended to read in its entirety as follows:

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 ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	Speed ^a (mph)	Topographic effects		Weathering ^a	Frost line Depth ^b	Termite ^c					
Zero	85	No	D ₁ or D ₂	Negligible	12"	Very Heavy	43	No	Footnote "g" Below	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 R301.2(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. Flood Hazard Maps
FEMA - National Flood Insurance Program (NFIP)

Community Name	Community Number	FIRM Panel Number	Initial NFIP Map Date	Initial FIRM Date	Most Recent FIRM Panel
San Clemente	060230	06059C0507J	06 / 14 / 1974	12 / 04 / 1979	12 / 03 / 2009
		06059C0508J			
		06059C0509J			
		06059C0517J			
		06059C0526J			
		06059C0528J			
		06059C0536J			
		06059C0538J			

FEMA – Federal Emergency Management Agency
NFIP – National Flood Insurance Program
FIRM – Flood Insurance Rate Map

Also see – San Clemente Municipal Code Chapter 15.76 – Flood Damage Prevention

- 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 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at www.ncdc.noaa.gov/fpsf.html.
- 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.

- B. A new Subsection R301.9 is hereby added to Section R301 to read in its entirety as follows:

R301.9 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.

- C. A new Subsection R301.10 is hereby added to Section R301 to read in its entirety as follows:

R301.10 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in areas with or adjacent to land having hazardous combustible vegetation shall comply with the requirements in the edition of OCFA Vegetation Management Guidelines currently in use at the time.

- D. Table R302.1(2) in Section R302 is hereby amended by deleting footnote "a" (*balance of the Table to remain unchanged*).

- E. Subsection R313.1 is hereby amended to read in its entirety as follows:

R313.1 Townhouse automatic fire sprinklers systems. An automatic residential fire sprinkler system installed in Townhouses as follows:

New buildings: An automatic sprinkler system shall be installed throughout all new townhouse buildings, including the attached garages.

Existing buildings: An automatic sprinkler system shall be installed throughout existing buildings,

including the attached garages, when one of the following conditions exists:

1. All existing Group R occupancies and U-1 garages when the total floor area is increase by 50% of the existing area over a 2-year period
2. All existing Group R occupancies and U-1 garages when the total area is increased by 750 square feet or more over a 2-year period
3. All existing Group R occupancies and U-1 garages when an additional story is added to the structure regardless of the area involved
4. An automatic sprinkler system shall be installed throughout any existing Group R Occupancy building when the floor area of the Alteration or Combination of an Addition and Alteration, within any two year period, is 50% or more of area of the existing structure and where the scope of the work exposes building framing and facilitates sprinkler installation and is such that the Building/Fire Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.
5. Any addition to existing building that has fire sprinklers installed.

Exceptions:

1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies not housing bedridden clients, not housing nonambulatory clients above the first floor and not housing clients above the second floor.
2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with CBC Section 425.8.3.3.
3. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.

4. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

- F. Subsection R313.2 is hereby amended to read in its entirety as follows:

R313.2 One- and two-family dwellings automatic fire sprinklers systems. An automatic residential fire sprinkler system installed in one- and two-family dwellings as follows:

New buildings: An automatic sprinkler system shall be installed throughout all new one- and two-family dwellings, including the attached garages.

Existing buildings: An automatic sprinkler system shall be installed throughout existing buildings, including the attached garages, when one of the following conditions exists:

1. All existing Group R occupancies and U-1 garages when the total floor area is increase by 50% of the existing area over a 2-year period
2. All existing Group R occupancies and U-1 garages when the total area is increased by 750 square feet or more over a 2-year period
3. All existing Group R occupancies and U-1 garages when an additional story is added to the structure regardless of the area involved
4. An automatic sprinkler system shall be installed throughout any existing Group R Occupancy building when the floor area of the Alteration or Combination of an Addition and Alteration, within any two year period, is 50% or more of area of the existing structure and where the scope of the work exposes building framing and facilitates sprinkler installation and is such that the Building/Fire Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.
5. Any addition to existing building that has fire sprinklers installed.

Exceptions:

1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies not housing bedridden clients, not housing nonambulatory clients above the first floor and not housing clients above the second floor.
2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with CBC Section 425.8.3.3.
3. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
4. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

- G. The first paragraph of subsection R313.3.6.2.2 is hereby deleted and replaced to read as follows:

R313.3.6.2.2 Calculation procedure. Determination of the required size for water distribution piping shall be in accordance with the following procedure and California Fire Code Section 903.3.5.3.

- H. Subsection R319.1 is hereby amended to read in its entirety as follows:

R319.1 Site Address. New and existing 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. Where required by the fire code official, address numbers shall be

provided in additional approved locations to facilitate emergency response. 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). Where access is by means of 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. Address numbers shall be maintained.

- I. Subsection R322.1 is hereby amended to read as follows:

R322.1 General. Buildings and structures constructed in whole or in part in flood hazard areas (including A or V Zones) as established in Table R301.2(1) shall be designed and constructed in accordance with the provisions contained in this section and in accordance with Chapter 15.76 of the San Clemente Municipal Code.

Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24 and in accordance with Chapter 15.76 of the San Clemente Municipal Code.

- J. A new Subsection R327.1.6 is hereby added to read in its entirety as follows:

R327.1.6 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.

- 2.1 The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.
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 from the fire code official.

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.

15.22.040 Chapter 4 amended — Foundations.

Chapter 4 of CRC is hereby amended as follows:

- A. Subsection R403.1.3 is hereby amended by deleting the exception (*balance of subsection to remain unchanged*).
- B. Subsection R405.1 is hereby amended by deleting the exception (*balance of subsection to remain unchanged*).

15.22.050 Chapter 6 amended — Wall Construction.

Chapter 6 of CRC is hereby amended as follows:

- A. Table R602.10.3(3) is amended to read as follows:

TABLE R602.10.3(3)
BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

<ul style="list-style-type: none"> • SOIL CLASS D^b • WALL HEIGHT = 10 FEET • 10 PSF FLOOR DEAD LOAD • 15 PSF ROOF/CEILING DEAD LOAD • BRACED WALL LINE SPACING ≤ 25 FEET 			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE ^c				
Seismic Design Category	Story Location	Braced Wall Line Length (feet)	Method LIB ^c	Method GB ^a	Methods DWB, SFB, PBS, PCP, HPS, CS-SFB ^{a, d}	Method WSP	Methods CS-WSP, CS-G
C (townhouses only)		10	2.5	2.5	2.5	1.6	1.4
		20	5.0	5.0	5.0	3.2	2.7
		30	7.5	7.5	7.5	4.8	4.1
		40	10.0	10.0	10.0	6.4	5.4
		50	12.5	12.5	12.5	8.0	6.8
		10	NP	4.5	4.5	3.0	2.6
		20	NP	9.0	9.0	6.0	5.1
		30	NP	13.5	13.5	9.0	7.7
		40	NP	18.0	18.0	12.0	10.2
		50	NP	22.5	22.5	15.0	12.8
		10	NP	6.0	6.0	4.5	3.8
		20	NP	12.0	12.0	9.0	7.7
		30	NP	18.0	18.0	13.5	11.5
		40	NP	24.0	24.0	18.0	15.3
		50	NP	30.0	30.0	22.5	19.1
D ₀		10	NP	2.8 5.6	2.8 5.6	1.8	1.6
		20	NP	5.5 11.0	5.5 11.0	3.6	3.1
		30	NP	8.3 16.6	8.3 16.6	5.4	4.6
		40	NP	11.0 22.0	11.0 22.0	7.2	6.1
		50	NP	13.8 27.6	13.8 27.6	9.0	7.7
		10	NP	5.3 NP	5.3 NP	3.8	3.2
		20	NP	10.5 NP	10.5 NP	7.5	6.4
		30	NP	15.8 NP	15.8 NP	11.3	9.6
		40	NP	21.0 NP	21.0 NP	15.0	12.8
		50	NP	26.3 NP	26.3 NP	18.8	16.0
		10	NP	7.3 NP	7.3 NP	5.3	4.5
		20	NP	14.5 NP	14.5 NP	10.5	9.0
		30	NP	21.8 NP	21.8 NP	15.8	13.4
		40	NP	29.0 NP	29.0 NP	21.0	17.9
		50	NP	36.3 NP	36.3 NP	26.3	22.3

(continued)

TABLE R602.10.3(3)—continued
BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

<ul style="list-style-type: none"> • SOIL CLASS D^a • WALL HEIGHT = 10 FEET • 10 PSF FLOOR DEAD LOAD • 15 PSF ROOF/CEILING DEAD LOAD • BRACED WALL LINE SPACING ≤ 25 FEET 			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE ^b					
Seismic Design Category	Story Location	Braced Wall Line Length (feet)	Method LIB ^c	Method GB ^d	Methods DWB, SFB, PBS, PCP, HPS, CS-SFB ^e	Method WSP	Methods CS-WSP, CS-G	
D ₁		10	NP	3.0 6.0	3.0 6.0	2.0	1.7	
		20	NP	6.0 12.0	6.0 12.0	4.0	3.4	
		30	NP	9.0 18.0	9.0 18.0	6.0	5.1	
		40	NP	12.0 24.0	12.0 24.0	8.0	6.8	
		50	NP	15.0 30.0	15.0 30.0	10.0	8.5	
		10	NP	6.0 NP	6.0 NP	4.5	3.8	
		20	NP	12.0 NP	12.0 NP	9.0	7.7	
		30	NP	18.0 NP	18.0 NP	13.5	11.5	
		40	NP	24.0 NP	24.0 NP	18.0	15.3	
		50	NP	30.0 NP	30.0 NP	22.5	19.1	
		10	NP	8.5 NP	8.5 NP	6.0	5.1	
		20	NP	17.0 NP	17.0 NP	12.0	10.2	
		30	NP	25.5 NP	25.5 NP	18.0	15.3	
		40	NP	34.0 NP	34.0 NP	24.0	20.4	
		50	NP	42.5 NP	42.5 NP	30.0	25.5	
D ₂		10	NP	4.0 8.0	4.0 8.0	2.5	2.1	
		20	NP	8.0 16.0	8.0 16.0	5.0	4.3	
		30	NP	12.0 24.0	12.0 24.0	7.5	6.4	
		40	NP	16.0 32.0	16.0 32.0	10.0	8.5	
		50	NP	20.0 40.0	20.0 40.0	12.5	10.6	
		10	NP	7.5 NP	7.5 NP	5.5	4.7	
		20	NP	15.0 NP	15.0 NP	11.0	9.4	
		30	NP	22.5 NP	22.5 NP	16.5	14.0	
		40	NP	30.0 NP	30.0 NP	22.0	18.7	
		50	NP	37.5 NP	37.5 NP	27.5	23.4	
		10	NP	NP	NP	NP	NP	
		20	NP	NP	NP	NP	NP	
		30	NP	NP	NP	NP	NP	
		40	NP	NP	NP	NP	NP	
		50	NP	NP	NP	NP	NP	
	Cripple wall below one- or two-story dwelling	10	NP	NP	NP	NP	7.5	6.4
		20	NP	NP	NP	NP	15.0	12.8
		30	NP	NP	NP	NP	22.5	19.1
		40	NP	NP	NP	NP	30.0	25.5
50		NP	NP	NP	NP	37.5	31.9	

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 pound per square foot = 0.0479 kPa.

- a. Linear interpolation shall be permitted.
- b. Wall bracing lengths are based on a soil site class "D." Interpolation of bracing length between the S_w values associated with the Seismic Design Categories shall be permitted when a site-specific S_w value is determined in accordance with Section 1613.3 of the *International Building Code*.
- c. Method LIB shall have gypsum board fastened to at least one side with nails or screws per Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches.
- d. Method CS-SFB applies in SDC C only.
- e. Methods GB and PCP braced wall panel hAw ratio shall not exceed 1:1 in SDC D0, D1 or D2. Methods DWB, SFB, PBS, and HPS are not permitted in SDC D0, D1, or D2.

15.22.060 Chapter 9 amended — Roof Assemblies.

Chapter 9 of CRC is hereby amended as follows:

- A. First paragraph of subsection R902.1 is amended to read in its entirety as follows:

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 and/or B roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108. *(balance of subsection to remain unchanged).*

- B. Subsections R902.1.1, R902.1.2, R902.1.3 are hereby deleted and replaced with a new Subsection R902.1.1 to read in its entirety as follows:

R902.1.1 Roof Coverings. The roof covering or roofing assembly on any new structure regulated by this code shall be Class A fire retardant roof minimum as classified in CBC Section 1505.2. Non-combustible roof covering may be applied in accordance with the manufacturer's requirements in lieu of a fire retardant roofing assembly. Wood roofing materials are prohibited unless pressure treated and approved for fire retardant of Class A minimum. For existing structure when ten percent (10%) or more of the total roof area is re-roofed within any one-year period, shall have a Class A fire retardant roof covering for entire roof area. For existing structure when less than ten percent (10%) of the total roof area is re-roofed within any one-year period, shall have a fire retardant roof covering class equal to or greater than the existing roof covering and not less than Class B.

- C. The first paragraph of Subsection R902.2 is hereby amended to read as follows:

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. *(balance of subsection to remain unchanged).*

- D. Subsection R903.4 is hereby amended by adding a second paragraph to read as follows:

Water that accumulates on a roof shall be effectively drained and conveyed from the roof to a storm drain, street gutter, or other locations approved by the Building Official. Such water shall be conveyed through gutters, leaders, associated piping or other non-erodible surface drainage devices as approved by the Building Official. For any minor or small roofs, the Building Official may exempt this requirement.

15.22.070 Chapter 44 amended — Referenced Standards (NFPA 13, NFPA 13R, NFPA 13D).

The Referenced Standards in Chapter 44 of CRC are hereby amended as follows:

- A. **NFPA 13, 2013 Edition, Installation of Sprinkler Systems** is hereby amended as follows:

1. Section 6.8.3 is hereby revised to read in its entirety as follows:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of inlets shall be approved by the fire code official. 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 ½" inlets shall be provided.

2. Section 8.3.3.1 is hereby revised to read in its entirety 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 fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:

- e) Quick-response type as defined in 3.6.4.7.
 - f) Residential sprinklers in accordance with the requirements of 8.4.5.
 - g) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers.
 - h) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems.
3. Section 8.17.1.1.1 is hereby added as follows:

8.17.1.1.1 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. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each unit. 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, whichever is greater. 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.

4. 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 sprinkler plan is submitted. 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.

5. 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:

- 4) Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;
- 5) Use a maximum of 40 psi, if available;
- 6) Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or an approved third party licensed in the State of California

6. Section 23.2.1.1 is hereby revised to read in its entirety as follows:

23.2.1.1 Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 6 months prior to

working plan submittal unless otherwise approved by the authority having jurisdiction.

B. NFPA 13R 2013 Edition Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

1. Section 6.16.1 is hereby revised to read in its entirety as follows:

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 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. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each dwelling unit. 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, whichever is greater. 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.

C. NFPA 13D 2013 Edition Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

1. Section 7.1.2 is hereby revised to read in its entirety 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.

2. 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 is subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces. 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, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exceptions:

3. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
 4. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.
3. Section 12.3.6 is hereby added as follows:
12.3.6 Stock of Spare Sprinklers.
 4. Section 12.3.6.1 is hereby added as follows:
12.3.6.1 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.

5. Section 12.3.6.2 is hereby added as follows:
12.3.6.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.
6. Section 12.3.6.3 is hereby added as follows:
12.3.6.3 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).
7. Section 12.3.6.4 is hereby added as follows:
12.3.6.4 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. The amendments to the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Green Building Standards Code, and California Residential Code herein have been adopted pursuant to Public Resources Code Section 4117 and Health and Safety Code Section 18941.5 and have been justified by the local conditions prevalent in the City of San Clemente as more particularly described in City Council Resolution No. _____ incorporate herein by this reference as if set forth in full.

Section 8. If any portion of this Ordinance, or the application of any such provision to any person or circumstance, shall be held invalid, the remainder of this Ordinance to the extent it can be given effect, of the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby, and to this extent the provisions of this Ordinance are severable.

Section 9. This Ordinance shall become effective January 1, 2014.

Section 10. The City Clerk shall certify to the passage of this Ordinance and cause the same to be published as required by law and the same shall take effect as provided by law.

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF SAN CLEMENTE)

I, JOANNE BAADE, City Clerk of the City of San Clemente, California, hereby certify that Ordinance No. 1572 having been regularly introduced at the meeting of November 5, 2013, was again introduced, the reading in full thereof unanimously waived and duly passed and adopted at a regular meeting of the City Council held on the 19th day of November, 2013 and said ordinance was adopted by the following vote:

AYES: BROWN, DONCHAK, EVERT, HAMM, MAYOR BAKER

NOES: NONE

ABSENT: NONE

IN WITNESS WHERE OF, I have hereunto set my hand and affixed the official seal of the City of San Clemente, California, this 19th day of Nov., 2013.


CITY CLERK of the City of
San Clemente, California

APPROVED AS TO FORM:

/s/ Jeff Goldfarb
City Attorney

APPROVED AND ADOPTED this 19th day of November, 2013.

ATTEST


CITY CLERK of the City of
San Clemente, California


Mayor of the City of
San Clemente, California

I, RITA MUELLER, RECORDS COORDINATOR FOR THE CITY CLERK DEPARTMENT OF THE CITY OF SAN CLEMENTE, STATE OF CALIFORNIA, HEREBY CERTIFY UNDER PENALTY OF PERJURY THE FOREGOING INSTRUMENT TO BE A FULL, TRUE AND CORRECT COPY OF THE ORIGINAL NOW ON FILE IN MY DEPARTMENT.

DATE:

11-26-13
RITA MUELLER
RECORDS COORDINATOR

BY: 

RESOLUTION NO. 13-44

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE, CALIFORNIA, SETTING FORTH FINDINGS WITH RESPECT TO LOCAL CONDITIONS WITHIN THE CITY OF SAN CLEMENTE WHICH MAKE CERTAIN MODIFICATIONS AND CHANGES TO THE CALIFORNIA BUILDING CODE, THE CALIFORNIA PLUMBING CODE, THE CALIFORNIA MECHANICAL CODE, THE CALIFORNIA ELECTRICAL CODE, THE CALIFORNIA RESIDENTIAL CODE, AND THE CALIFORNIA GREEN BUILDING STANDARDS CODE REASONABLY NECESSARY FOR VARIOUS OCCUPANCIES

WHEREAS, Health & Safety Code Section 17958 mandates that the City of San Clemente adopt ordinances or regulations imposing the requirements of certain uniform industry codes adopted by the State pursuant to Health & Safety Code Section 17922; and

WHEREAS, the State of California is mandated by Health & Safety Code Section 17922 to impose the same requirements as are contained in the most recent edition of the California Building Code (CBC), the California Plumbing Code (CPC), the California Mechanical Code (CMC), the California Electrical Code (CEC), the California Residential Code (CRC) and the California Green Building Standards Code (CGBSC) (hereinafter referred to collectively as "Codes"); and

WHEREAS, Health & Safety Code Section 17958.5 permits the City to make such changes or modifications to the Codes as are reasonably necessary because of local conditions; and

WHEREAS, the Building Official and Director of Community Development 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 Code, 2013 Edition; the California Plumbing Code, 2013 Edition; the California Mechanical Code, 2013 Edition; the California Electrical Code, 2013 Edition; the California Residential Code, 2013 Edition; and the California Green Building Standards Code, 2013 Edition, are reasonably necessary due to local conditions in the City of San Clemente and have 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 Code or are reasonably necessary to safeguard life and property within the City of San Clemente.

NOW, THEREFORE, BE IT RESOLVED by the City Council for the City of San Clemente as follows:

SECTION 1. The Council finds and determines there is a need to adopt the changes or modifications to the Codes because of general local climatic, topographical, geological and related geographic conditions as follows:

I. Climatic Conditions

- A. The jurisdiction of San Clemente 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 also disrupt utility services throughout the area.
- B. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the local fire authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the City.
- C. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and, although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage capacities and consumption and a limited amount of rainfall, future water allocation is not fully dependable. This necessitates the need for additional on-site fire protection features. The shortage of water would also leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to upper floors in a fire.
- D. These dry climatic conditions and winds contribute to the rapid spread of even small fires originating in high-density housing or vegetation. These fires spread very quickly and create a need for increased levels of fire protection. The added protection of fire sprinkler systems and other fire protection features will supplement normal fire department response by providing immediate protection for the building occupants and by containing and controlling the fire spread to the area of origin. Fire sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent.

II. Topographical conditions:

- A. Natural slopes of 15 percent or greater generally occur throughout the the City. The elevation change caused by the hills creates the geological foundation on which communities within the City are built and will continue to built. With much of the populated flatlands already built upon, future growth will occur on steeper slopes and greater constraints in terrain.
- B. Traffic and circulation congestion is an artificially created, obstructive topographical condition, which is common throughout the City.
- C. These topographical conditions combine to create a situation, which places fire department response time to fire occurrences at risk, and makes it

necessary to provide automatic on-site fire-extinguishing systems and other protection measures to protect occupants and property.

III. Geological conditions:

- A. The City is a densely populated area that has buildings constructed over and/or near a vast and complex network of faults that are believed to be capable of producing future earthquakes similar or greater in size than the 1994 Northridge and the 1971 Sylmar earthquakes. Earthquake faults run along the northeast and southwest boundaries of Orange County. The Newport-Inglewood Fault, located within Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude) which took 120 lives and damaged buildings in an area that ran from Laguna Beach to Marina del Rey to Whittier. In December 1989, another earthquake occurred in the City of Irvine at an unknown fault line. Regional planning for reoccurrence of earthquakes is recommended by the State of California, Department of Conservation.
- B. Previous earthquakes have been accompanied by disruption of traffic flow and fires. 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 sections above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors of buildings. The October 17, 1989, Santa Cruz earthquake resulted in one major fire in the Marina District (San Francisco). When combined with the 34 other fires locally and over 500 responses, the department was taxed to its fullest capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. This situation creates the need for both additional fire protection and automatic on-site fire protection for building occupants. The State Department of Conservation noted, in their 1988 report (Planning Scenario on a Major Earthquake on the Newport Inglewood Fault Zone, page 59), "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe."
- C. Road circulation features located throughout the City also make amendments reasonably necessary. There are major roadways, highways and flood control channels that create barriers and slow response times. Hills, slopes, street and storm drain design accompanied by occasional heavy rainfall, cause roadway flooding and landslides and at times may make an emergency access route impassable.
- D. Soils throughout the City possess corrosive properties that reduce the expected usable life of water services when metallic pipes come in contact with these soils.
- E. Expansive soils throughout the City combined with predominant hillside conditions, groundwater and occasional flooding raise the potential for ground slippage, ground erosion, slope failure and building damage.

SECTION 2. In addition to the general findings in Section 1, above, specific changes and modifications to the **2013 Edition of the California Building Code**, as recommended by the Building Official and Director of Community Development, are hereby found to be reasonably necessary as follows:

- A. Subsection 107.2.6 is added to require soils reports for projects due to general finding numbers IIA, IIIA, IIIE in Section 1, above.
- B. Section 403 and Subsection 403.1 of Section 403, relating to high-rise buildings, are amended to coordinate with Fire Code provisions due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.
- C. Subsections 406.3.3 and 406.4.5 of Section 406 are amended to prohibit the use of asphaltic paving for covered parking area because asphaltic paving cannot be reinforced to prevent cracking and settlement due to general finding numbers IIA, IIIA, IIIB, and IIIE in Section 1, above.
- D. Subsection 412.7.6 of Section 412, relating to Emergency Helicopter Landing Facilities are amended to coordinate with Fire Code due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.
- E. Subsections 710A.3.2 and 710A.4 of Section 710A, relating to construction of accessory structures in Very High Fire Hazard Severity Zones are amended due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.
- F. Subsections 903.2, 903.2.8, 903.3.5.3, and 903.4 of Section 903 are amended to require automatic fire sprinkler systems in certain occupancies and to coordinate with Fire Code provisions due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.
- G. Subsection 905.4 of Section 905 and Subsections 907.2.13, 907.3.1, 907.5.2.2, 907.6.3.2 and 907.6.5 of Section 907 amend automatic fire sprinkler systems and fire detection systems in certain occupancies and coordinate with Fire Code provisions due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.
- H. Subsection 1503.4 of Section 1503 has been amended to require drainage devices on roofs to be effectively drained and conveyed to the street or other approved locations to minimize water absorption into typical expansive soils due to general finding numbers IIA and IIIE in Section 1, above.
- I. Table 1505.1 and Subsections 1505.1.1, 1505.1.2 and 1505.1.3 of Section 1505 are amended to prohibit use of untreated non-fire retardant wood materials for roofing due to general finding numbers IA, IB, IC, ID, IIA, IIB, and IIC in Section 1, above, and the fact that untreated wood roofs cause or contribute to the serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds common to the City. Pieces of burning wooden roofs become flying brands and are carried by the wind to other locations and thereby spread fire rapidly. Flying brands only occur with wood roofs and not with other commonly used roofing materials.

- J. Subsection 1807.1.6 of Section 1807 is amended to prohibit the use of prescriptive design approach for foundation walls in seismic design categories D, E, and F due to general finding numbers IIIA IIIB and IIIE in Section 1, above, and with the higher seismic demand placed on buildings and structures in this region, it is deemed necessary to take precautionary steps to reduce or eliminate potential problems that may result by following prescriptive design provisions that does not take into consideration the surrounding environment. In addition, no substantiating data has been provided to show that under-reinforced foundation walls are effective in resisting seismic loads and may potentially lead to a higher risk of failure. It is important that the benefit and expertise of a registered design professional be obtained to properly analyze the structure and take these issues into consideration.
- K. Subsections 3109.3, 3109.4.1, 3109.4.4.1, and 3109.4.4.3 of Section 3109 relating to pool enclosure barriers have been amended due to the high number of swimming pools within close proximity to small children as a result of the local climatic conditions which make pool ownership desirable.
- L. Subsection 3109.7 of Section 3109 relating to pool equipment has been added due to topographical conditions in the City where slopes and hilly streets enhance the potential for pool equipment to create a noise nuisance to the neighbors. Furthermore, climatic conditions in the City, including coastal marine layers, create conditions where noises are intensified.
- M. Subsections 3410.2 and 3410.3 of Section 3408 are amended to add special requirements and a permit process for moved structures to make sure the safety of the occupants is maintained due to general finding numbers IIA, IIIA, IIIB, and IIIE in Section 1, above.
- N. NFPA Standards (NFPA 13, NFPA 13D, NFPA 13R, NFPA 14, NFPA 24) referenced in Chapter 45 amend automatic fire sprinkler systems and fire detection systems in certain occupancies and coordinate with Fire Code provisions due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.

SECTION 3. In addition to the general findings in Section 1, above, specific changes and modifications to the **2013 Edition of the California Plumbing Code**, as recommended by the Building Official and Director of Community Development, are hereby found to be reasonably necessary as follows:

- A. Subsection 604.1 of Section 604 has been amended to restrict the use of ferrous metal water piping when used in the ground due to general finding number IIID in Section 1, above. The type of soil prevalent in the City of San Clemente is extraordinarily high in sulfates and acid content. The sulfate content causes corrosion of the prohibited material and the acid content promotes electrolysis which similarly caused the prohibited materials to corrode at an accelerated rate.

- B. Subsections 604.2 of Section 604 and Subsection 609.3(2) of Section 609 are amended to require the use of thicker walled copper water piping when installed in the ground due to general finding number IIID in Section 1, above. The type of soil prevalent in the City of San Clemente is extraordinarily high in sulfates and acid content. The sulfate content causes corrosion of the prohibited material and the acid content promotes electrolysis which similarly caused the prohibited materials to corrode at an accelerated rate.
- C. Subsection 610.8 of Section 610 is amended to require larger water pipe supply lines to residences due to general finding numbers IA, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above. These modifications are to insure enough water supply is provided to accommodate efficient operation of the emergency fire sprinkler system.
- D. Subsection 701.1(7) is amended to restrict the use of cast iron drainage and waste piping when used in the ground due to general finding number IIID in Section 1, above. The type of soil prevalent in the City of San Clemente is extraordinarily high in sulfates and acid content. The sulfate content causes corrosion of the prohibited material and the acid content promotes electrolysis which similarly caused the prohibited materials to corrode at an accelerated rate.
- E. Subsection 1208.5 of Section 1208 is amended to restrict the use of ferrous gas piping for underground condition due to general finding number IIID in Section 1, above. The type of soil prevalent in the City of San Clemente is extraordinarily high in sulfates and acid content. The sulfate content causes corrosion of the prohibited material and the acid content promotes electrolysis which similarly caused the prohibited materials to corrode at an accelerated rate.

SECTION 4. In addition to the general findings in Section 1, above, specific changes and modifications to the **2013 Edition of the California Mechanical Code**, as recommended by the Building Official and Director of Community Development, are hereby found to be reasonably necessary as follows:

- A. Subsection 504.2 of Section 504 is amended to require a ventilation system for domestic cooking equipment in the kitchen due to climatic conditions in the City where hot, dry and calm air conditions during certain times of the year can create poor ventilation. This requirement will enhance the safety and living condition for occupants.
- B. Subsection 1308.5 of Section 1308 is amended to restrict the use of ferrous gas piping for underground condition due to general finding number IIID in Section 1, above. The type of soil prevalent in the City of San Clemente is extraordinarily high in sulfates and acid content. The sulfate content causes corrosion of the prohibited material and the acid content promotes electrolysis

which similarly caused the prohibited materials to corrode at an accelerated rate.

SECTION 5. In addition to the general findings in Section 1, above, specific changes and modifications to the **2013 Edition of the California Electrical Code**, as recommended by the Building Official and Director of Community Development, are hereby found to be reasonably necessary as follows:

- A. Subsection 300.5(L) of Article 300 is amended to limit outside overhead wiring due to general finding numbers IIA, IIB, IIIA, IIIB, and IIIC in Section 1, above.
- B. Subsection 310.106(B) of Article 310 is amended to restrict the use of aluminum wiring due to general findings IA, IIIA, IIIB, and IIIE in Section 1, above. Stricter standards for electrical wiring will reduce the risk of fires and enhance the safety of building occupants.
- C. Table 310.106(A) is amended to restrict the use of aluminum wiring due to general finding numbers IA, IIIA, IIIB, and IIIE in Section 1, above. Stricter standards for electrical wiring will reduce the risk of fires and enhance the safety of building occupants.

SECTION 6. In addition to the general findings in Section 1, above, specific changes and modifications to the **2013 Edition of the California Residential Code**, as recommended by the Building Official and Director of Community Development, are hereby found to be reasonably necessary as follows:

- A. Subsection R106.1.4 of Section R106 is added to require soils reports for projects due to general finding numbers IIA, IIIA, IIIE in Section 1, above.
- B. Subsection R301.9 of Section R301 is amended to require special studies due to special geotechnical and topographical conditions associated with development on or near land containing or emitting toxic, combustible or flammable liquids, gases or vapors.
- C. Subsection R301.10 of Section R301 is amended to require fuel modification due to general finding numbers IA, IB, IC, ID, IIA, IIB, and IIC in Section 1, above, and the fact that hazardous combustible vegetation cause or contribute to the serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds common to the City.
- D. Table R302.1(2) is amended eliminating the special allowance of reduced fire separation for zero lot line subdivisions due to general finding numbers IA, IB, IC, ID, IIA, IIB, and IIC in Section 1, above and the fact that the lack of adequate building setbacks cause or contribute to the serious fire hazard and to the rapid spread of fires.

- E. Subsections R313.1, R313.2, and R313.3.6.2.2 of Section R313 are amended to require automatic fire sprinkler systems in certain occupancies and to coordinate with Fire Code provisions due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, and IIIA, IIIB, IIIC in Section 1, above.
- F. Subsection R319.1 of Section R319 is amended to require approved building address numbers and to coordinate with Fire Code provisions due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, and IIIA, IIIB, IIIC in Section 1, above.
- G. Subsection R327.1.6 is amended to require fuel modification due to general finding numbers IA, IB, IC, ID, IIA, IIB, and IIC in Section 1, above, and the fact that hazardous combustible vegetation cause or contribute to the serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds common to the City.
- H. Subsection R403.1.3 of Section R403 is amended to require minimum reinforcement for concrete footings due topography and geologic conditions related to general finding numbers IIIA and IIIB in Section 1, above that create conditions where geological conditions such as expansive soils, groundwater condition may create structural damages to the building and endanger the safety of the occupants.
- I. Subsection R405.1 of Section R405 is amended to eliminate exception to foundation drainage due topography and geologic conditions related to general finding numbers IIIA and IIIB in Section 1, above that create conditions where geological conditions such as expansive soils, groundwater condition may create structural damages to the building and endanger the safety of the occupants.
- J. Table R602.10.3(3) is amended to increase the length and limits the location where shear walls sheathed with lath, plaster or gypsum board are used in multi-level buildings due to general finding numbers IIIA IIIB and IIIE in Section 1, above. In addition, shear walls sheathed with other materials are prohibited in Seismic Design Category D₀, D₁ and D₂ to be consistent with the design limitation for similar shear walls found in the California Building Code. The poor performance of such shear walls in the 1994 Northridge Earthquake was investigated by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Task Force and formed the basis for this proposed amendment. Considering that shear walls sheathed with lath, plaster or gypsum board are less ductile than steel moment frames or wood structural panel shear walls, the cities and county of the Los Angeles region has taken the necessary measures to limit the potential structural damage that may be caused by the use of such walls at the lower level of multi-level building that are subject to higher levels of seismic loads.
- K. Subsections R902.1, R902.1.1 and R902.2 of Section R902 are amended to prohibit use of untreated non-fire retardant wood materials for roofing due to

general finding numbers IA, IB, IC, ID, IIA, IIB, and IIC in Section 1, above, and the fact that untreated wood roofs cause or contribute to the serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds common to the City. Pieces of burning wooden roofs become flying brands and are carried by the wind to other locations and thereby spread fire rapidly. Flying brands only occur with wood roofs and not with other commonly used roofing materials.

- L. Subsection R903.4 of Section R903 has been amended to require drainage devices on roofs to be effectively drained and conveyed to the street or other approved locations to minimize water absorption into typical expansive soils due to general finding numbers IIA and IIIE in Section 1, above.
- M. NFPA Standards (NFPA 13, NFPA 13D, NFPA 13R) referenced in Chapter 44 amend automatic fire sprinkler systems and fire detection systems in certain occupancies and coordinate with Fire Code provisions due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.

SECTION 7. In addition to the general findings in Section 1, above, specific changes and modifications to the **2013 Edition of the California Green Building Standards Code**, as recommended by the Building Official and Director of Community Development, are hereby found to be reasonably necessary as follows:

- A. Subsection 4.304.1 of Section 4.304 is amended to ensure that all new irrigation controllers installed meet the minimum standards and minimize landscape water usage due to limited water and general finding number IC in Section 1, above.

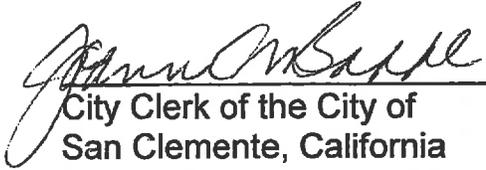
SECTION 8. Additional amendments are found to be either administrative or procedural in nature or to concern themselves with subjects not covered in the Codes. The changes made include provisions making each of said Codes compatible with other codes enforced by the City and fee schedules.

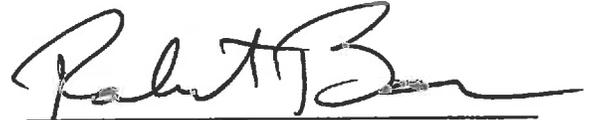
SECTION 9. A copy of this Resolution together with the Ordinance adopting the California Building Code, 2013 Edition as amended; the California Plumbing Code, 2013 Edition, as amended; the California Mechanical Code, 2013 Edition, as amended; the California Electrical Code, 2013 Edition, as amended; the California Residential Code, 2013 Edition, as amended; and the California Green Building Standards Code, 2013 Edition, as amended shall be filed with the California Department of Housing and Community Development and the California Building Standard Commission by the City Clerk of the City of San Clemente.

Section 10. The City Clerk shall certify to the passage and adoption of this resolution and enter it into the book of original resolutions.

PASSED AND ADOPTED this 5th day of November, 2013.

ATTEST:


City Clerk of the City of
San Clemente, California


Mayor of the City of San
Clemente, California

STATE OF CALIFORNIA)
COUNTY OF ORANGE) §
CITY OF SAN CLEMENTE)

I, JOANNE BAADE, City Clerk of the City of San Clemente, California, do hereby certify that Resolution No. 13-44 was adopted at a regular meeting of the City Council of the City of San Clemente held on the 5th day of November, 2013, by the following vote:

AYES: BROWN, DONCHAK, EVERT, HAMM, MAYOR BAKER

NOES: NONE

ABSENT: NONE

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Clemente, California, this 10TH day of NOV., 2013.


CITY CLERK of the City of
San Clemente, California

Approved as to form:

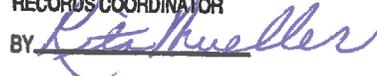
/s/ Jeff Goldfarb

City Attorney

I, RITA MUELLER, RECORDS COORDINATOR FOR THE CITY CLERK DEPARTMENT OF THE CITY OF SAN CLEMENTE, STATE OF CALIFORNIA, HEREBY CERTIFY UNDER PENALTY OF PERJURY THE FOREGOING INSTRUMENT TO BE A FULL, TRUE AND CORRECT COPY OF THE ORIGINAL NOW ON FILE IN MY DEPARTMENT.

DATE:

11-26-13
RITA MUELLER
RECORDS COORDINATOR

BY: 

AN ORDINANCE OF THE CITY COUNCIL OF SAN CLEMENTE
AMENDING CHAPTER 8.16 OF THE SAN CLEMENTE MUNICIPAL
CODE AND ADOPTING FIRE CODE REGULATIONS FOR THE
CITY OF SAN CLEMENTE

THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE DOES HEREBY ORDAIN AS
FOLLOWS:

Section 1. Chapter 8.16 of the San Clemente Municipal Code is hereby amended
to read in its entirety as follows:

Chapter 8.16 FIRE CODE

- 8.16.010 Fire Code Adopted.
- 8.16.020 Enforcement and Inspections.
- 8.16.030 Division II of Chapter 1 amended —
Administration.
- 8.16.040 Chapter 2 amended — Definitions.
- 8.16.050 Chapter 3 amended — General Requirements.
- 8.16.060 Chapter 4 amended — Emergency Planning and
Preparedness.
- 8.16.070 Chapter 5 amended — Fire Service Features.
- 8.16.080 Chapter 6 amended — Building Services and
Systems.
- 8.16.090 Chapter 9 amended — Fire Protection Systems.
- 8.16.100 Chapter 11 amended — Construction
Requirements for Existing Buildings.
- 8.16.110 Chapter 20 amended — Aviation Facilities.
- 8.16.120 Chapter 28 amended — Lumber Yards and
Woodworking Facilities.
- 8.16.130 Chapter 49 amended — Requirements for
Wildland-Urban Interface Fire Areas
- 8.16.140 Chapter 50 amended — Hazardous Materials —
General Provisions.
- 8.16.150 Chapter 55 amended — Cryogenic Fluids.
- 8.16.160 Chapter 56 amended — Explosives and
Fireworks.
- 8.16.170 Chapter 57 amended — Flammable and
Combustible Liquids.
- 8.16.180 Chapter 60 amended — Highly Toxic and Toxic
Materials.
- 8.16.190 Chapter 80 amended — Referenced Standards
(NFPA 13, NFPA 13R, NFPA 13D, NFPA 14,
NFPA 24)

8.16.010 Fire Code Adopted

The 2013 California Fire Code, based on the International Fire Code, 2012 Edition, with errata, published by International Code Council (ICC), and the whole thereof, including Appendices A, B, BB, C and CC is hereby adopted by the City of San Clemente for the purpose of prescribing regulations governing conditions hazardous to the life and property from fire or explosion, save and except such portions as are hereinafter added, deleted, modified or amended. A copy of this code is on file in the City's Building Division office for public inspection and is adopted with the same force and effect as through set out herein in full.

8.16.020 Enforcement and Inspections

The California Fire Code and the International Fire Code with amendments 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 detail such members of the fire authority as inspectors as shall be necessary from time to time.

8.16.030 Division II of Chapter 1 amended — Administration

Division II of Chapter 1– Administration is hereby amended as follows:

- A. Subsection 101.1 is hereby amended to read in its entirety as follows:

101.1 Title. These regulations shall be known as the Fire Code of the City of San Clemente, hereinafter referred to as "this code".

- B. Subsection 109.4 is hereby amended to read in its entirety as follows:

109.4 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 109.4.2 and 109.4.3 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.

- C. A new Subsection 109.4.2 is hereby added to Section 109 to read in its entirety as follows:

109.4.2 Infraction. Except as provided in Section 109.4.3, 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.

- D. A new Subsection 109.4.3 is hereby added to Section 109 to read in its entirety as follows:

109.4.3 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 the following sections of this code, shall be guilty of a misdemeanor:

- 104.11.2 Obstructing operations
- 104.11.3 Systems and Devices
- 107.5 Overcrowding
- 109.3.2 Compliance with Orders and Notices
- 111.4 Failure to comply
- 305.4 Deliberate or negligent burning
- 308.1.2 Throwing or placing sources of ignition
- 310.7 Burning Objects
- 3104.7 Open or exposed flames

- E. Subsection 111.4 is hereby amended to read in its entirety as follows:

111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than specified in the city of San Clemente Municipal Code and/or by Fee Resolution.

8.16.040 Chapter 2 amended – Definitions

Chapter 2 – Definitions, is hereby amended as follows:

- A. Section 202 is hereby amended by adding "Approach-Departure Path," "Emergency Helicopter Landing Facility (EHLF)," "Flow-line," "Hazardous Fire Area," "Safety Area," "Sky Lantern", and "Takeoff and Landing Area" and revising "High-Rise Building" as follows:

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, police, or medical helicopters engaged in emergency operations.

FLOW-LINE. The lowest continuous elevation on a curb defined by the path traced by a particle in a moving body of water at the bottom of the rolled curb.

HAZARDOUS FIRE AREA. Includes all areas identified within Section 4906.2 and other areas as determined by the Fire Code Official as presenting a fire hazard due to the presence of combustible vegetation, or the proximity of the property to an area that contains combustible vegetation.

HIGH-RISE BUILDING. In other than Group I-2 occupancies, "high-rise buildings" as used in this Code:

Existing high-rise structure. A high-rise structure, the construction of which is commenced or completed prior to July 1, 1974.

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, except buildings used as

hospitals as defined in Health and Safety Code Section 1250.

New high-rise building. A high-rise structure, the construction of which is commenced on or after July 1, 1974. For the purpose of this section, construction shall be deemed to have commenced when plans and specifications are more than 50 percent complete and have been presented to the local jurisdiction prior to July 1, 1974. Unless all provisions of this section have been met, the construction of such buildings shall commence on or before January 1, 1976.

New high-rise structure. means a high-rise structure, the construction of which commenced on or after July 1, 1974.

SAFETY AREA. A defined area surrounding the landing pad that is free of obstructions.

SKY LANTERN. An airborne lantern typically made of paper, Mylar, or other lightweight material with a wood, plastic, or metal frame containing a candle, fuel cell, or other heat source that provides buoyancy.

TAKEOFF AND LANDING AREA. The combination of the landing pad centered within the surrounding safety area.

8.16.050 Chapter 3 amended -- General Requirements

Chapter 3 – General Requirements is hereby amended as follows:

A. Subsection 304.1.2 is hereby revised as follows:

304.1.2 Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirement in urban-wildland interface areas shall be in accordance with Chapter 49 and OCFA vegetation management guidelines.
(balance of section to remain unchanged)

- B. A new Subsection 305.5 is hereby added to Section 305 to read in its entirety as follows:

305.5 Chimney spark arrestors. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrestor. Chimneys serving outdoor appliances or fireplaces shall be equipped with a spark arrestor. The spark arrestor shall meet the requirements of Section 2113.9.2 of the California Building Code.

- C. A new Subsection 305.6 is hereby added to Section 305 to read in its entirety as follows:

305.6 Outdoor fires. Outdoor fires shall be in accordance with Sections 305, 307, and 308 and with other applicable sections of this code.

305.6.1 Where prohibited. Outdoor fires shall not be built, ignited or maintained in fuel modification areas, Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ) or Special Fire Protection Areas (SFPA) or other locations where conditions could cause the spread of fire to the WRA, SFPA or FHSZ, except by permit from the fire code official.

Exceptions: A permit is not required for the following:

1. Fires in approved outdoor or portable fireplaces, fire pits, fire rings and similar devices at Group R occupancies that are installed and used in accordance with this code.
2. Outdoor fires at inhabited premises or official organized campsites or parks when located in a permanent or portable barbeque or grill, incinerator, or outdoor fireplace located at least 30 feet from combustible vegetation.
3. Installations or uses approved by the fire code official.

305.6.1.1 Fuel Modification Areas. Outdoor fires using wood or other solid fuel shall not be built, ignited or maintained in a fuel modification area.

305.6.1.2 Supervision. Where a permit is issued or when allowed under the exceptions to Section 305.6.1, such fires shall be supervised by a person 18 years of age or older.

305.6.2 Hazardous conditions. Outdoor fires are not allowed when predicted sustained winds exceed 8 MPH during periods when relative humidity is less than 25%, or a red flag condition has been declared or public announcement is made, when an official sign was caused to be posted by the fire code official, or when such fires present a hazard as determined by the fire code official.

305.6.3 Disposal of rubbish. Rubbish, trash or combustible waste material shall be burned only within an approved incinerator and in accordance with Section 307.2.1.

D. Section 307 is hereby amended to read as follows:

**SECTION 307
OPEN BURNING, RECREATIONAL FIRES, FIRE PITS,
FIRE RINGS, AND OUTDOOR FIREPLACES**

E. A new Subsection 307.6 is hereby added to Section 307 to read in its entirety as follows:

307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies. Outdoor fireplaces, fire pits, fire rings, or similar exterior devices used at Group R shall comply with this section.

Exception: Barbeques, grills, and other portable devices intended for cooking.

307.6.1 Gas-fueled devices. Outdoor fireplaces, fire pits and similar devices fueled by natural gas or liquefied-petroleum gas are allowed when approved by the Building Department and the

device is designed to only burn a gas flame and not wood or other solid fuel. At R-3 occupancies, combustible construction shall not be located within three feet of an atmospheric column that extends vertically from the perimeter of the device. At other R occupancies, the minimum distance shall be ten feet. Where a permanent Building Department approved hood and vent is installed, combustible construction may encroach upon this column between the bottom of the hood and the vent opening. Where chimneys or vents are installed, they shall have a spark arrester in accordance with Section 305.5.

307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas. Fireplaces burning wood or other solid fuel shall be constructed in accordance with the California Building Code and Section 305.5. Fires in a fireplace shall be contained within a firebox with an attached chimney. The opening in the face of the firebox shall have an installed and maintained method of arresting sparks. The burning of wood or other solid fuel in a device is not allowed within 15 feet of combustible structures, unless within a permanent or portable fireplace. Conditions which could cause a fire to spread within 25 feet of a structure or to vegetation shall be eliminated prior to ignition. Fires in devices burning wood or solid fuel shall be managed per Section 307.5.

307.6.2.1 Where prohibited. The burning of wood and other solid fuels shall not be conducted within a fuel modification zone. Wood and other solid fuel burning fires in devices other than permanent fireplaces are not allowed within Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ) and Special Fire Protection Areas (SFPA) or in locations where conditions could cause the spread of fire to the WRA or FHSZ, unless determined by the Fire Code Official that the location or design of the device should reasonably prevent the start of a wildfire.

- F. A new Section 319 is hereby added to Chapter 3 to read in its entirety as follows:

**SECTION 319
DEVELOPMENT ON OR NEAR LAND CONTAINING
OR EMITTING TOXIC, COMBUSTIBLE OR
FLAMMABLE LIQUIDS, GASES OR VAPORS**

319.1 General. 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.

- G. A new Section 320 is hereby added to Chapter 3 to read in its entirety as follows:

**SECTION 320
FUEL MODIFICATION REQUIREMENTS FOR NEW
CONSTRUCTION**

320.1 General. All new buildings to be built or installed in areas with or adjacent to land having hazardous combustible vegetation shall comply with the requirements in the edition of OCFA Vegetation Management Guidelines currently in use at the time of plan submittal.

- H. A new Section 321 is hereby added to Chapter 3 to read in its entirety as follows:

**SECTION 321
CLEARANCE OF BRUSH OR VEGETATION
GROWTH FROM ROADWAYS**

321.1 General. The fire code official is authorized to cause areas within 10 feet (3048 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.

- I. A new Section 322 is hereby added to Chapter 3 to read in its entirety as follows:

SECTION 322 UNUSUAL CIRCUMSTANCES

322.1 General. The fire code official may suspend enforcement of the vegetation management requirements and require reasonable alternative measures designed to advance the purpose 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 undesirable or impractical.

- J. A new Section 323 is hereby added to Chapter 3 to read in its entirety as follows:

SECTION 323 USE OF EQUIPMENT

323.1 General. 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 323.2 maintained in effective working order, or the engine is

constructed, equipped and maintained for the prevention of fire.

Exception:

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

323.2 Spark Arrestors. Spark arrestors shall comply with the following:

1. A spark arrester is a device constructed of nonflammable 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.
 2. Spark arresters affixed to the exhaust system of engines or vehicles subject to Section 323 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.
- K. A new Section 324 is hereby added to Chapter 3 to read in its entirety as follows:

**SECTION 324
RESTRICTED ENTRY**

324.1 General. The fire code 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.

Exception:

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.

- L. A new Section 325 is hereby added to Chapter 3 to read in its entirety as follows:

**SECTION 325
TRESPASSING ON POSTED PROPERTY**

325.1 General. 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.

325.2 Signs. Approved signs prohibiting entry by unauthorized persons and referring to applicable fire code chapters shall be placed on every closed area.

325.3 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.

- M. A new Section 326 is hereby added to Chapter 3 to read in its entirety as follows:

**SECTION 326
SKY LANTERNS OR SIMILAR DEVICES.**

326.1 General. The ignition and/or launching of a Sky Lantern or similar device is prohibited.

Exception: Upon approval of the fire code official, sky lanterns may be used as necessary for religious or cultural ceremonies providing that adequate safeguards have been taken as approved by the fire code official. Sky Lanterns must be tethered in a safe manner to prevent them from leaving the area and must be constantly attended until extinguished.

8.16.060 Chapter 4 amended -- Emergency Planning and Preparedness

Chapter 4 -- Emergency Planning and Preparedness is hereby amended by adopting only the Sections 401, 401.3.4, 401.9, 402, 403, 404.6 through 404.7.6, 407, 408.3.1 through 408.3.2, and 408.12 through 408.12.3. Other sections of Chapter 4 are hereby deleted without replacement.

8.16.070 Chapter 5 amended -- Fire Service Features

Chapter 5 -- Fire Service Features is hereby amended as follows:

- A. Subsection 503.2.1 is hereby amended to read in its entirety as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm). Street widths are to be measured from top face of curb to top face of curb, on streets with curb and gutter, and from flow-line to flow-line on streets with rolled curbs.

- B. A new Subsection 503.2.1.1 is hereby added to Section 503 to read in its entirety as follows:

503.2.1.1 Hazardous Fire Areas. In Hazardous Fire Areas the minimum fire apparatus road width shall be 28 feet (8530 mm). The width shall be maintained to an approved point outside of the Hazardous Fire Area.

Exception: When the road serves no more than three dwelling units and the road does not exceed 150 feet in length, the road width may be 24 feet (7300 mm). This length may be increased to 400 feet where serving no more than three dwelling units and all structures accessed from the roadway are protected by automatic fire sprinklers.

- C. Subsection 505.1 is hereby amended to read in its entirety as follows:

505.1 Address identification. New and existing 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. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. 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 means of 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. Address numbers shall be maintained.

- D. Subsection 510.1 is hereby amended to read in its entirety as follows:

510.1 Emergency responder radio coverage in new buildings. All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems. The Emergency

responder radio coverage system shall comply with one of the following:

1. An emergency radio system installed in accordance with the local authority having jurisdiction's ordinance (S.C.M.C. Chapter 8.80)
2. An emergency radio coverage system installed in accordance with Orange County Fire Authority's Emergency Responder Digital Radio Guideline.

Exceptions:

1. Where it is determined by the fire code official that the radio coverage system is not needed.
 2. In facilities where emergency responder radio coverage is required and such systems, components or equipment could have a negative impact on normal operations of the facility, the fire code official shall have the authority to accept an automatically activated emergency responder radio coverage system.
- E. Subsections 510.2; 510.3; 510.4; 510.5; 510.6 are hereby deleted without replacement.

8.16.080 Chapter 6 amended -- Building Services and Systems

Chapter 6 – Building Services and Systems is hereby amended as follows:

- A. Subsection 608.1 of Section 608 is hereby amended to read in its entirety as follows:

608.1 Scope. 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 and lithium metal polymer, used for facility standby power, emergency power or uninterruptible power supplies shall comply with this section and Table 608.1. Indoor charging systems for electric carts/cars with more than 50 gallons (189 L) aggregate quantity shall comply with Section 608.10.

- B. A new Subsection 608.10 is hereby added to Section 608 to read in its entirety 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:

1. Spill control and neutralization shall be provided and comply with Section 608.5.
2. Room ventilation shall be provided and comply with Section 608.6.1
3. Signage shall be provided and comply with Section 608.7.1
4. Smoke detection shall be provided and comply with Section 907.2

8.16.090 Chapter 9 amended – Fire Protection Systems

Chapter 9 – Fire Protection Systems is hereby amended as follows:

- A. Subsection 903.2 is hereby amended to read in its entirety as follows:

903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section and in Section 903.2 of the California Building Code as amended by the City of San Clemente as follows:

1. **New buildings:** In addition to the requirements of section 903.2.1 through 903.2.19, approved automatic sprinkler systems in new buildings and structures shall be provided as follows (Exception: Group R Detached one- two-family dwellings and townhouses as required by section 903.2.8):
 - i) Throughout all Groups A, I, E, and H Occupancies
 - ii) Throughout all Group B, F, M, and S Occupancies exceeding 1,000 square feet
 - iii) Throughout all Group U-1 Occupancies exceeding 6,000 square feet

For the purposes of this section, fire walls shall not define separate buildings.

2. **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.
3. **Addition:** Sprinkler protection shall be provided throughout the entire building when:
 1. Existing unsprinklered building less than 5,000 ft²: where 20% or more is added and the gross floor areas exceeds 5,000 square feet.
 2. Existing unsprinklered building equal or greater than 5,000 ft²: where more than 1,000 ft² is added.
 3. Fire sprinklers shall be provided in additions to an existing building that has fire sprinklers installed.

- B. Subsection 903.2.8 is hereby amended to read in its entirety as follows:

903.2.8 Group R. An automatic sprinkler system installed in accordance with Subsection 903.3 of Section 903 of this code and Subsection 903.3 of Section 903 of the California Building Code as amended by the City of San Clemente shall be provided throughout all buildings with a Group R fire area as follows:

1. All new Group R occupancies, including the attached garages
2. All existing Group R occupancies and U-1 garages when the total floor area is increase by 50% of the existing area over a 2-year period
3. All existing Group R occupancies and U-1 garages when the total area is increased by 750 square feet or more over a 2-year period
4. All existing Group R occupancies and U-1 garages when an additional story is added to the structure regardless of the area involved
5. An automatic sprinkler system shall be installed throughout any existing Group R Occupancy building when the floor area of the Alteration or Combination of an Addition and Alteration, within any two year period, is 50% or more of area of the existing structure and where the scope of the work exposes building framing and facilitates

sprinkler installation and is such that the Building/Fire Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

- 6. Any addition to existing building that has fire sprinklers installed.

Exceptions:

- 1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies not housing bedridden clients, not housing nonambulatory clients above the first floor and not housing clients above the second floor.
- 2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with Section 425.8.3.3.
- 3. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
- 4. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

When not used in accordance with Section 504.2 or 506.3 an automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be allowed in Group R-2.1 occupancies.

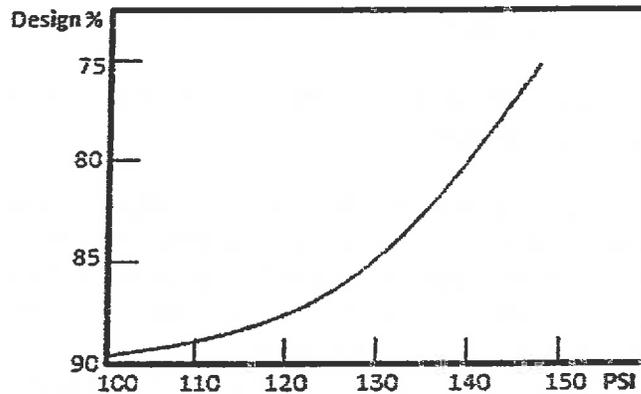
An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-2.1 or R-4 occupancies.

- C. A new Subsection 903.3.5.3 is hereby added to Section 903 to read in its entirety as follows:

903.3.5.3 Hydraulically calculated systems. The design of hydraulically calculated fire sprinkler systems shall not exceed 90% of the water supply capacity

Exception: When static pressure exceeds 100 psi, and required by the Fire Code Official, the fire sprinkler system shall not exceed water supply capacity specified by Table 903.3.5.3

**TABLE 903.3.5.3
Hydraulically Calculated Systems**



- D. Subsection 903.4 is hereby amended to read in its entirety as follows:

903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

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.
- E. Subsection 905.4 is hereby amended by adding item 7 as follows:
7. The centerline of the 2.5 inches (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) and no more than 24 inches (610 mm) above the finished floor.
- F. Subsection 907.2.13 is hereby amended to read in its entirety as follows:

907.2.13 High-rise buildings and Group I-2 occupancies having floors located more than 55 feet above the lowest level fire department vehicle access. High-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of 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 907.5.2.2

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 406.5 of the California Building Code.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.6 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

- G. Subsection 907.3.1 is hereby amended to read in its entirety as follows:

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.

- H. Subsection 907.5.2.2 is hereby amended to read in its entirety as follows.

907.5.2.2 Emergency voice/alarm communication systems. 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 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 and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of 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 Chapter 2.
5. Dwelling units in apartment houses.
6. Hotel guest rooms or suites.

Exception: In Group I-2 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.

- I. Subsection 907.6.3.2 is hereby amended to read in its entirety as follows:

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

- J. Subsection 907.6.5 is hereby amended to read as follows:

907.6.5 Monitoring. Fire alarm systems required by this chapter or by the California Building Code shall be monitored by an approved supervising station in accordance with NFPA 72, this section, and per Orange County Fire Authority Guideline "New and Existing Fire Alarm & Signaling Systems." (*balance of subsection to remain unchanged*)

8.16.100 Chapter 11 amended – Construction Requirements for Existing Buildings

Chapter 11 – Construction Requirements for Existing Buildings is hereby amended by adopting only Sections 1103.7, 1103.7.3, 1103.7.3.1, 1103.7.8 through 1103.7.8.2, 1103.7.9 through 1103.7.9.10, 1103.8 through 1103.8.5.3, and 1106. Other sections of Chapter 11 are hereby deleted without replacement.

8.16.110 Chapter 20 amended – Aviation Facilities

Chapter 20 – Aviation Facilities is hereby amended as follows:

- A. A new Section 2008 is hereby added to Chapter 20 to read in its entirety as follows:

**SECTION 2008
EMERGENCY HELICOPTER LANDING FACILITY
(EHLF)**

2008.1 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 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.

2008.1.1 Rooftop Landing Pad. The landing pad shall be 50 ft. x 50 ft. or a 50 ft. 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.

2008.1.2 Approach-Departure Path. The emergency helicopter landing facility shall have two approach-departure paths separated 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 rises outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.

2008.1.3 Safety Area. The safety area is a horizontal plane level with the landing pad surface and shall extend 25 ft in all directions from the edge of the landing pad. No objects shall penetrate above the plane of the safety area.

2008.1.4 Safety Net. If the rooftop landing pad is elevated more than 30 in. (2'-6") above the adjoining surfaces, a 6 ft in wide horizontal safety net capable of supporting 25 lbs/sf 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 in. but less than 18 in.) 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.

2008.1.5 Take-off and Landing Area. The takeoff and landing area shall be free of obstructions and 100 ft x 100 ft. or 100 ft. diameter.

2008.1.6 Wind Indicating Device. An approved wind indicating device shall be provided but shall not extend into the safety area or the approach-departure paths.

2008.1.7 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 2008.1.7.

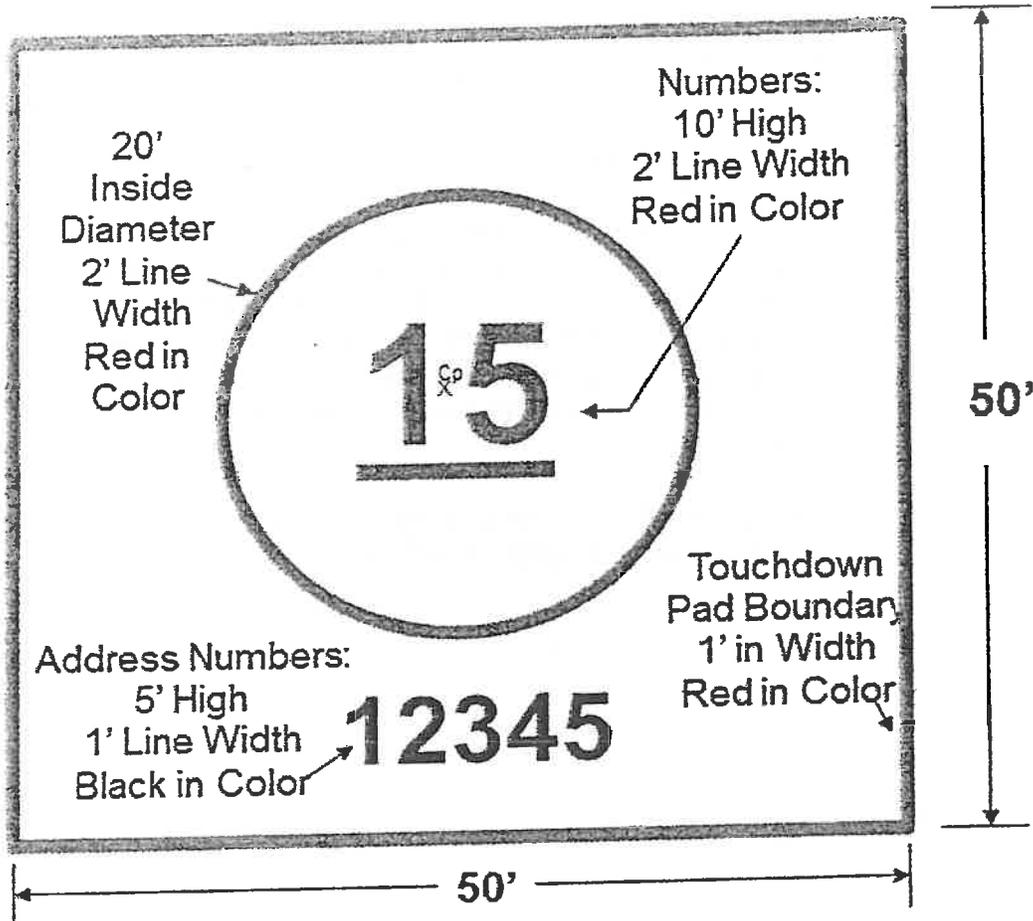
2008.1.8 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with Section 1009.7.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

2008.1.9 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.

2008.1.10 Fire extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairway 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.

2008.1.11 EHLF. Fueling, maintenance, repairs, or storage of helicopters is prohibited.

Figure 2008.1.7 Helicopter Landing Pad Markings



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

8.16.120 Chapter 28 amended -- Lumber Yards and Woodworking Facilities

Chapter 28 – Lumber Yards and Woodworking Facilities is hereby amended as follows:

- A. Subsection 2801.2 is hereby amended to read in its entirety as follows:

2801.2 Permit. Permits shall be required as set forth in Section 105.6. For Miscellaneous Combustible Storage Permit, see Section 105.6.29.

- B. Subsection 2808.2 is hereby amended to read in its entirety as follows:

2808.2 Storage site. Storage sites shall be level and on solid ground or other all-weather surface. Sites shall be thoroughly cleaned and approval from the fire code official obtained before transferring products to the site.

- C. The first sentence of Subsection 2808.3 is hereby amended as follows:

2808.3 Size of piles. Piles shall not exceed 15 feet (4572 mm) in height, 50 feet (15 240 mm) in width and 100 feet (30 480 mm) in length. *(Balance of the section to remain unchanged)*

- D. Subsection 2808.7 is hereby amended to read in its entirety as follows:

2808.7 Pile fire protection. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system. Oscillating sprinklers with a sufficient projectile reach are required to maintain a 40% to 60% moisture content and wet down burning/smoldering areas.

- E. Subsection 2808.9 is hereby amended to read in its entirety as follows:

2808.9 Material-handling equipment. All material handling equipment operated by an internal combustion engine shall be provided and maintained with an approved spark arrester. Approved material-handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations.

- F. A new subsection 2808.11 is hereby added to read in its entirety as follows:

2808.11 Temperature control. The temperature shall be monitored and maintained as specified in Sections 2808.11.1 and 2808.11.2.

- G. A new subsection 2808.11.1 is hereby added to read in its entirety as follows:

2808.11.1 Pile temperature control. Piles shall be rotated when the internal temperature readings are in excess of 165 degrees Fahrenheit.

- H. A new subsection 2808.11.2 is hereby added to read in its entirety as follows:

2808.11.2 New material temperature control. New loads delivered to the facility shall be inspected and tested at the facility entry prior to taking delivery. Material with temperature exceeding 165 degrees Fahrenheit shall not be accepted on the site. New loads shall be monitored to verify that the temperature remains stable.

8.16.130 Chapter 49 amended – Requirements For Wildland-Urban Interface Fire Areas

Chapter 49 – Requirements For Wildland-Urban Interface Fire Areas is hereby amended as follows:

- A. Subsection 4906.3 is hereby amended by adding item no. 5 to the end of section as follows:

5. OCFA Vegetation Management Guideline.

- B. A new Section 4908 is hereby added to read in its entirety as follows:

**SECTION 4908
FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION**

4908.1 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.
 - 2.1 The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.
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 from 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.

8.16.140 Chapter 50 amended – Hazardous Materials – General Provisions

Chapter 50 – Hazardous Materials – General Provisions is hereby amended as follows:

- A. The first paragraph of Subsection 5001.5.2 is hereby amended to read in its entirety as following:

5001.5.2 Hazardous Materials Inventory Statement (HMIS). Where 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 Chemical Classification Packet shall include the following information:

1. Product Name
2. Component
3. Chemical Abstract Service (CAS) number
4. Location where stored or used.
5. Container size
6. Hazard classification

- 7. Amount in storage
 - 8. Amount in use-closed systems
 - 9. Amount in use-open systems.
- (Balance of the section to remain unchanged)*

- B. Table 5003.1.1(1) is hereby amended by deleting Footnote k. without replacement.
- C. A new Subsection 5003.1.1.1 is hereby added to Section 5003 to read in its entirety as follows:

5003.1.1.1 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 residential zoned or any residentially developed property.

- D. Subsection 5003.5 is hereby amended to read in its entirety as follows:

5003.5 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.
(Balance of the section to remain unchanged)

8.16.150 Chapter 55 amended -- Cryogenic Fluids

Chapter 55 --Cryogenic Fluids is hereby amended as follows:

- A. Subsection 5503.4.1 is hereby amended to read in its entirety as follows:

5503.4.1 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.

8.16.160 Chapter 56 amended -- Explosives and Fireworks

Chapter 56 Explosives and Fireworks is hereby amended as follows:

- A. A new Subsection 5601.2 is hereby added to Section 5601 to read in its entirety as follows:

5601.2 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.

- B. A new Subsection 5601.3 is hereby added to Section 5601 to read in its entirety as follows:

5601.3 Seizure of Fireworks. The fire code official shall have the authority to seize, take, 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.

- C. A new subsection 5602 is hereby added to read in its entirety as follows:

5602 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.

- D. Subsection 5608.1 is hereby amended to read in its entirety as follows:

5608.1 General. Outdoor fireworks displays, use of pyrotechnics before a proximate 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.

- E. A new Subsection 5608.2 is hereby added to Section 5608 to read in its entirety as follows:

5608.2 Firing. All fireworks displays shall be electrically fired.

8.16.170 Chapter 57 amended -- Flammable and Combustible Liquids

Chapter 57 – Flammable and Combustible Liquids is hereby amended as follows:

- A. Subsection 5704.2.3.2 is hereby amended to read in its entirety as follows:

5704.2.3.2 Label or placard. Tanks more than 100 gallons (379 L) 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.

Exceptions:

1. Tanks of 300-gallon (1136 L) capacity or less located on private property and used for heating and cooking fuels in single family dwellings.
2. Tanks located underground.

8.16.180 Chapter 60 amended -- Highly Toxic and Toxic Materials

Chapter 60 – Highly Toxic and Toxic Materials is hereby amended as follows:

- A. The Exceptions in Subsection 6004.2.2.7 are hereby amended to read in its entirety as follows:

Exception:

1. 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, a listed and 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 6004.2.2.10.

8.16.190 Chapter 80 amended -- Referenced Standards

The Referenced Standards in Chapter 80 are hereby amended as follows:

- A. **NFPA 13, 2013 Edition, Installation of Sprinkler Systems** is hereby amended as follows:
 1. Section 6.8.3 is hereby revised to read in its entirety as follows:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of inlets shall be approved by the fire code official. 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 ½" inlets shall be provided.

2. Section 8.3.3.1 is hereby revised to read in its entirety 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 fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:

- a) Quick-response type as defined in 3.6.4.7.
- b) Residential sprinklers in accordance with the requirements of 8.4.5.
- c) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers.
- d) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems.

3. Section 8.17.1.1.1 is hereby added as follows:

8.17.1.1.1 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. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each unit.

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, whichever is greater. 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.

4. 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 sprinkler plan is submitted. 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.

5. 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 multiply 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 an approved third party licensed in the State of California

6. Section 23.2.1.1 is hereby revised to read in its entirety as follows:

23.2.1.1 Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 6 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction.

- B. **NFPA 13R 2013 Edition Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height** is hereby amended as follows:

1. Section 6.16.1 is hereby revised to read in its entirety as follows:

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 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. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each dwelling unit. 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, whichever is greater. 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.

- C. **NFPA 13D 2013 Edition Installation of Sprinkler Systems in One and Two-Family Dwellings and**

Manufactured Homes is hereby amended as follows:

1. Section 7.1.2 is hereby revised to read in its entirety 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.

2. 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 is subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces. 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, whichever is greater. 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 907.2.11 are used to sound an alarm upon waterflow switch activation.
3. Section 12.3.6 is hereby added as follows:
12.3.6 Stock of Spare Sprinklers.
 4. Section 12.3.6.1 is hereby added as follows:

12.3.6.1 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.

5. Section 12.3.6.2 is hereby added as follows:

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

6. Section 12.3.6.3 is hereby added as follows:

12.3.6.3 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).

7. Section 12.3.6.4 is hereby added as follows:

12.3.6.4 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.

- D. **NFPA 14, 2013 Edition, Installation of Standpipe and Hose Systems** is hereby amended as follows:

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

7.3.1.1 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.

- E. **NFPA 24, 2013 Edition, Installation of Private Fire Service Mains and Their Appurtenances** is hereby amended as follows:

1. 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 red.

2. Section 6.2.11 (5) is hereby deleted without replacement and (6) and (7) renumbered as follows:

(5) Control Valves installed in a fire-rated room accessible from the exterior.

(6) Control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the authority having jurisdiction.

3. Section 6.3.3 is hereby added as follows:

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

4. 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: 304 or 316 Stainless Steel pipe and fittings

5. Section 10.3.6.2 is hereby revised to read in its entirety as follows:

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

Exception: Bolted joint accessories made from 304 or 316 stainless steel.

6. Section 10.3.6.3 is hereby added as follows:

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

7. Section 10.6.3.1 is hereby revised to read in its entirety 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 24 inches, as measured from the interior face of the exterior wall to the center of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with 10.6.2.

8. Section 10.6.4 is hereby revised to read in its entirety as follows:

10.6.4 Pipe joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints.

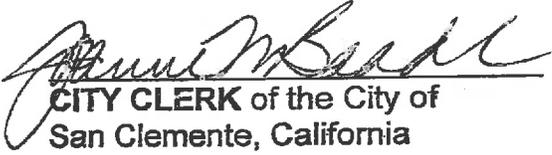
Section 2. The amendments to the California Fire Code listed herein have been adopted pursuant to Public Resources Code Section 4117 and Health and Safety Code Section 18941.5 and have been justified by the local conditions prevalent in the City of San Clemente as more particularly described in City Council Resolution No. _____, incorporated herein by this reference as if set forth in full.

Section 3. If any portion of this Ordinance, or the application of any such provision to any person or circumstance, shall be held invalid, the remainder of this Ordinance to the extent it can be given effect, of the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby, and to this extent the provisions of this Ordinance are severable.

Section 4. The City Clerk shall certify to the passage of this Ordinance and cause the same to be published as required by law and the same shall take effect as provided by law.

APPROVED AND ADOPTED this 19th day of November, 2013.

ATTEST


CITY CLERK of the City of
San Clemente, California


Mayor of the City of
San Clemente, California

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[Faint, illegible text, likely a stamp or bleed-through]

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF SAN CLEMENTE)

I, JOANNE BAADE, City Clerk of the City of San Clemente, California, hereby certify that Ordinance No. 1573 having been regularly introduced at the meeting of November 5, 2013, was again introduced, the reading in full thereof unanimously waived and duly passed and adopted at a regular meeting of the City Council held on the 19th day of November, 2013 and said ordinance was adopted by the following vote:

AYES: BROWN, DONCHAK, EVERT, HAMM, MAYOR BAKER

NOES: NONE

ABSENT: NONE

IN WITNESS WHERE OF, I have hereunto set my hand and affixed the official seal of the City of San Clemente, California, this 15th day of Nov., 2013.


CITY CLERK of the City of
San Clemente, California

APPROVED AS TO FORM:

/s/ Jeff Goldfarb
City Attorney

I, RITA MUELLER, RECORDS COORDINATOR FOR THE CITY CLERK DEPARTMENT OF THE CITY OF SAN CLEMENTE, STATE OF CALIFORNIA, HEREBY CERTIFY UNDER PENALTY OF PERJURY THE FOREGOING INSTRUMENT TO BE A FULL, TRUE AND CORRECT COPY OF THE ORIGINAL NOW ON FILE IN MY DEPARTMENT.

DATE: 11-26-13

RITA MUELLER
RECORDS COORDINATOR

BY: 

RESOLUTION NO. 13-45

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE, CALIFORNIA, SETTING FORTH FINDINGS WITH RESPECT TO LOCAL CONDITIONS WITHIN THE CITY OF SAN CLEMENTE WHICH MAKE CERTAIN MODIFICATIONS AND CHANGES TO THE CALIFORNIA FIRE CODE NECESSARY FOR VARIOUS OCCUPANCIES.

WHEREAS, Public Resources Code Section 4117 independently authorizes cities to enact local fire protection ordinances, including fire sprinkler requirements, which "may be more restrictive than state statutes in order to meet local fire hazard conditions."

WHEREAS, Health and Safety Code Section 18941.5 provides that cities retain the police power under the California Constitution to enact more stringent building standards, including fire sprinkler requirements, which cities find reasonably necessary due to local conditions.

WHEREAS, Health and Safety Code Section 17958.5 authorizes cities to make changes in the California Building Standards Code, including changes to the fire sprinkler requirements, which cities find reasonably necessary due to local conditions.

WHEREAS, the Building Official and Fire Marshal have recommended that changes and modifications be made to the 2013 California Fire Code, and have advised that certain of said changes and modifications to the California Fire Code, 2013 Edition are reasonably necessary due to local conditions within the City of San Clemente, and have further advised that the remainder of the said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes, or are reasonably necessary to safeguard life and property within the City of San Clemente.

NOW, THEREFORE, BE IT RESOLVED by the City Council for the City of San Clemente as follows:

SECTION 1. Changes and modifications to the 2013 Edition of the California Fire Code are recommended by the Building Official and Fire Marshal are hereby found to be reasonably necessary due to the following local conditions.

General Findings

- I. Climatic Conditions
 - A. The jurisdiction of San Clemente 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 City. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles, and the requirement to climb 75 feet vertically up flights of stairs 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.

- B. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the local fire authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the City.
- C. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage capacities and consumption, and a limited amount of rainfall future water allocation is not fully dependable. This necessitates the need for additional on-site fire protection features. It would also leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to floors in a fire.
- D. These dry climatic conditions and winds contribute to the rapid spread of even small fires originating in high-density housing or vegetation. These fires spread very quickly and create a need for increased levels of fire protection. The added protection of fire sprinkler systems and other fire protection features will supplement normal fire department response by providing immediate protection for the building occupants and by containing and controlling the fire spread to the area of origin. Fire sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent.

II. Topographical conditions

- A. Natural slopes of 15 percent or greater generally occur throughout the City. Elevation change caused by the hills creates the geological foundation on which communities within the City are built and will

continue to built. With much of the populated flatlands already built upon, future growth will occur steeper slopes and greater constraints in terrain.

- B. Traffic and circulation congestion is an artificially created, obstructive topographical condition, which is common throughout the City.
- C. These topographical conditions combine to create a situation, which places fire department response time to fire occurrences at risk, and makes it necessary to provide automatic on-site fire-extinguishing systems and other protection measures to protect occupants and property.

III. Geological Conditions

- A. The City is a densely populated area that has buildings constructed over and/or near a vast and complex network of faults that are believed to be capable of producing future earthquakes similar or greater in size than the 1994 Northridge and the 1971 Sylmar earthquakes. Earthquake faults run along the northeast and southwest boundaries of Orange County. The Newport-Inglewood Fault, located within Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude) which took 120 lives and damaged buildings in an area from Laguna Beach to Marina Del Rey to Whittier. In December 1989, another earthquake occurred in the jurisdiction of Irvine at an unknown fault line. Regional planning for reoccurrence of earthquakes is recommended by the state of California, Department of Conservation.
- B. Previous earthquakes have been accompanied by disruption of traffic flow and fires. 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 of buildings. The October 17, 1989, Santa Cruz earthquake resulted in one major fire in the Marina District (San Francisco). When combined with the 34 other fires locally and over 500 responses, the department was taxed to its fullest capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. This situation creates the need for both additional fire protection and automatic on-site fire protection for building occupants. State Department of Conservation noted in their 1988 report (Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, page 59), "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe."

- C. Road circulation features located throughout the City also make amendments reasonably necessary. Located through the City are major roadways, highways and flood control channels that create barriers and slow response times. Hills, slopes, street and storm drain design accompanies with occasional heavy rainfall, causes roadway flooding and landslides and at times may make an emergency access route impassable. There are areas in Orange County that naturally have extended emergency response times that exceed the 5 minute goal.
- D. Soils throughout the City possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.
- E. Portions so of Orange County contain active or former oil production fields. These areas contain a variety of naturally occurring gasses, liquids and vapors. These compounds present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary implement appropriate mitigation.

Due to the topographical conditions of sprawling development separated by waterways and narrow and congested streets and the expected infrastructure damage inherent in seismic zone described above, it is prudent to rely on automatic fire sprinkler systems to mitigate extended fire department response time and keep fires manageable with reduced fire flow (water) requirements for a given structures. Additional fire protection is also justified to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.

Specific Findings

- A. Section 202 is amended to revise various definitions due to general finding numbers IA, 1B, 1C, ID, IIA, IIB, IIC, and IIIC, in Section 1, above and to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.
- B. Subsection 304.1.2 is amended to require Orange County Fire Authority vegetation management guideline to assist in managing vegetation around developed areas due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC in Section 1, above.
- C. Subsection 305.5 is amended to require that all chimneys attached to any appliance or fireplace that burns solid fuel be equipped with an approved spark arrestor due to general finding number IA, IB, IC, ID in Section 1, above.

- D. Subsections 305.6 and 307.6 are added to Chapter 3 to regulate outdoor fires due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC in Section 1, above.
- E. Section 319 is added to Chapter 3 to allow the fire code official to 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 due to general finding numbers IIIE in Section 1, above.
- F. Sections 320 through 326 have been added to address fuel modification requirements and special situations in hazardous fire areas due to general finding numbers IA, IB, IC, ID, IIA, IIB, and IIC in Section 1, above.
- G. Subsections 503.2.1, 503.2.1.1, and 505.1, relating to fire services access roads for firefighting equipment and personnel and visible building addresses, are amended due to general finding numbers IIA, IIB and IIC in Section 1, above.
- H. Subsections 510.1 and 510.2 related to Public Safety Radio System coverage, are amended due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.
- I. Subsections 608.1 and 608.10 are amended to clarify the requirements for Stationary storage battery systems having an electrolyte capacity of more than 50 gallons and indoor charging of electric carts/cars due to general finding numbers IIIA and IIIB in Section 1, above.
- J. Subsections 903.2, 903.2.8, and 903.4 are amended to require automatic fire sprinkler systems in certain occupancies and Subsection 903.3.5.3 is added to coordinate with Building Code provisions due to general finding numbers IIA, IIB, IIC, and IIIC in Section 1, above.
- K. Subsections 905.4(7), 907.2.13, 907.3.1, 907.5.2.2, 907.6.3.2, and 907.6.5, relating to automatic fire sprinkler systems and fire detection systems in certain occupancies are amended to coordinate with Fire Code provisions due to general finding numbers IIA, IIB, IIC, IIIA and IIIB in Section 1, above.
- L. Section 2008 is added to Chapter 20 to provide standards for the emergency helicopter landing facility due to general finding numbers IIA, IIB, IIC, IIIA and IIIB in Section 1, above and are justified to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.
- M. Subsections 2801.2, 2808.2, 2808.3, 2808.7, 2808.9 are amended and Subsections 2808.11, 2808.11.1, and 2808.11.2 are added due to general finding in Section 1, above and are justified to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.

- N. Subsections 4906.3, and 4908 are amended to address special fire hazards associated with Wildland Urban Interface Fire Areas in the City due to general finding numbers IA, IC, ID, IIA, IIB, IIC in Section 1, above.

- O. Subsections 5001.5.2, Table 5003.1.1(1), 5003.1.1.1, 5003.5, 5503.4.1, 5601.2, 5601.3, 5602, 5608.1, 5608.2, 5704.2.3.2, 6004.2.2.7 are amended to address conditions related to hazardous materials and fireworks due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC, above, and to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.

- P. NFPA Standards (NFPA 13, NFPA 13D, NFPA 13R, NFPA 14, and NFPA 24) referenced in Chapter 80 relating to automatic fire sprinkler systems and fire detection systems in certain occupancies are amended to coordinate with Fire Code provisions due to general finding numbers IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.

SECTION 2. Additional amendments are found to be either administrative or procedural in nature and therefore are not required under applicable law to be supported by findings.

SECTION 3. A copy of this Resolution together with Ordinance No. 1573 shall be filed with the California Building Standards Commission and the State Fire Marshal by the City Clerk of the City of San Clemente.

PASSED AND ADOPTED this 5th day of November, 2013.

ATTEST:

Joanne Baade
City Clerk of the City of
San Clemente, California

Robert Baker
Mayor of the City of San
Clemente, California

STATE OF CALIFORNIA)
COUNTY OF ORANGE) §
CITY OF SAN CLEMENTE)

I, JOANNE BAADE, City Clerk of the City of San Clemente, California, do hereby certify that Resolution No. 13-45 was adopted at a regular meeting of the City Council of the City of San Clemente held on the 5th day of November, 2013, by the following vote:

AYES: BROWN, DONCHAK, EVERT, HAMM, MAYOR BAKER

NOES: NONE

ABSENT: NONE

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Clemente, California, this 20th day of NOV., 2013.

Joanne Baade
CITY CLERK of the City of
San Clemente, California

Approved as to form:

/s/ Jeff Goldfarb
City Attorney

I, RITA MUELLER, RECORDS COORDINATOR FOR THE CITY CLERK DEPARTMENT OF THE CITY OF SAN CLEMENTE, STATE OF CALIFORNIA, HEREBY CERTIFY UNDER PENALTY OF PERJURY THE FOREGOING INSTRUMENT TO BE A FULL, TRUE AND CORRECT COPY OF THE ORIGINAL NOW ON FILE IN MY DEPARTMENT.

DATE: 11-26-13
RITA MUELLER
RECORDS COORDINATOR
BY: *Rita Mueller*