ORDINANCE NO. 1040


WHEREAS, the California Building Standards Commission ("Commission") recently adopted new amendments to the California Building Standards Codes; and

WHEREAS, California Health & Safety Code Sections 17958 et seq., and 18941.5 authorize cities and counties to modify the California Building Standards Codes by adopting more restrictive standards and modifications if such standards and modifications are accompanied by express findings that they are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, based upon the recommendations of the Fire Marshal and the Building Official, the City Council finds that the proposed amendments to the 2016 California Building Standards Code set forth in this Ordinance are more restrictive than the standards adopted by the California Building Standards Commission, would decrease the number of potential incidence of property damage, injury and death due to fires and earthquakes, and are reasonable and necessary to mitigate local climatic, geological or topographical conditions.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN JUAN CAPISTRANO DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. Adoption of the California Building Standards Codes.

Section 8-2.01 of Chapter 2, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2013 California Building Code is hereby amended to read as follows:

"Section 8-2.01 Adoption of the 2016 California Building Codes.

For the purpose of prescribing regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment use, height, and area of buildings and structures, the following construction codes subject to the modifications set forth in this Chapter, are hereby adopted: the California Building Code, 2016 Edition, based on the 2015 International Building Code as published by the International Code Council; the California Residential Code, 2016

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

Moreover, pursuant to Section 1004 of Title 25 of the California Code of Regulations, the City has assumed responsibility for enforcing Health and Safety Code, Parts 2.1 and 2.3 of Division 13, and Title 25, California Code of Regulations, Division 1, Chapters 2 and 2.2. The City shall enforce these regulations as set forth in Section 1004 and applicable law.


Section 8-2.02 of Chapter 2, Title 8, of the San Juan Capistrano Municipal Code entitled "Amendments to the 2013 California Building Code including Appendix Chapter 1 is hereby amended to read as follows:

"Section 8-2.02 Amendments to 2016 California Building Code.

Section 100 "Division II Scope and Administration" is hereby amended to read as follows:

1. Subsection 101.2 "Scope" is hereby amended to add a second paragraph and amend the exception that reads:

"The provisions of these codes shall apply to and affect all of the territory of the City of San Juan Capistrano, 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."

2. Subsection 105.2 "Work exempt from permit" is hereby amended to read as follows:
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. Such structures must comply with the setback and height requirements of the City Zoning Ordinance and the Fire Code.

2. Masonry or concrete fences not over 36 inches in height measured from the top of footing to top of wall.

3. Oil derricks.

4. Retaining walls that are not over 48 inches in height measured from the bottom of footing to top of wall unless supporting a surcharge, impounding Class I, II or II-A liquids or located at the top or bottom of a slope.

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. Decks, platforms or similar structures, walkways, sidewalks and driveways not more than 30 inches above adjacent grade, and not over any basement or story below and are not part of an accessible route. Note: All parking lot re-stripping, re-sealing and/or re-paving require permits and approval to verify compliance with disabled access requirements and City zoning regulations.

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

14. Radio and television antenna, 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."

3. Subsection 105.3.2 “Time limitation of application” is hereby amended to read 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 180 days after the date of filing, unless a permit has been issued. The building official is authorized to grant, in writing, one extension of time, for a period not more than 180 days."

4. Subsection 105.5 “Expiration” 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. Before such work can be recommenced after a permit expires, a new permit shall first be obtained to do so, 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 expiration, the permittee shall pay a new full permit fee.

The building official is authorized to grant, in writing, one extension of time, for a period not more than 180 days. 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. No permit shall be extended more than once."

5. Subsection 107.1 “General” is hereby amended to add a second paragraph that reads:
“Subsection 107.1. General. Soil report, prepared by an Engineer licensed by the State to practice by such, shall be submitted at the time of permit application. Soil report is required for all new construction and additions. The Building Official may waive the requirement of soil report if it is found that the scope of work applied for is not necessary to have a soil report.”

6. Subsection 107.3 “Examination of documents” is hereby amended to add a second paragraph that reads:

“Subsection 107.3. Examination of Documents. When submittal documents are required by Section 107.1, a plan review fee shall be paid at the time of submitting the 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.”

7. Subsection 107.5 “Retention of construction documents”, is hereby amended to add a second paragraph that reads:

“The approved plan, permit application and 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.”

8. Subsection 109.2 “Schedule of permit fees” is hereby amended to add a sentence at the end of the paragraph that reads:

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

9. Subsection 109.3 “Building Permit Valuations” is hereby amended to add a second paragraph that reads:

“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.

10. Section 109.4 “Work commencing before permit issuance” is hereby amended to add a second paragraph that reads:

“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.”
11. **Subsection 109.6 “Refunds”** is hereby amended to read in its entirety:

“109.6 Refunds.

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.”

12. **Section 109 “Fees”** is hereby amended by adding a new Subsection 109.7 as follows:

“109.7 Fees/Deposit. The Building Official may require a deposit from the applicant for a certain project or work in order to secure the request for 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.”

13. **Section 110 “Inspections”** is hereby amended by adding a new Subsection 110.7 as follows:

“110.7 Re-inspections. A re-inspection fee may be assessed for each inspection or re-inspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

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

Re-inspection fees may be assessed when the inspection record card is not posted or otherwise made available on site; the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the Building Official.
To obtain a re-inspection, the applicant shall pay the re-inspection fee as established by the City Council Fee Resolution.

In instances where re-inspection fees have been assessed, no additional inspections will be performed until the required fees have been paid.”

14. **Subsection 111.1 “Use and occupancy”** is hereby amended to read as follow:

“No building or structure shall be used or occupied, and no change in the existing occupancy classification of any building or structure or portion thereof shall be made until the Building Official has issued a certificate of occupancy for said building or structure in accordance with the provisions of section 111.2. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the City. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the City shall not be valid.”

15. **Subsection 111.2 “Certificate issued”** is hereby amended to read as follows and section 111.3 “Temporary Occupancy” is deleted in its entirety:

“(a) The Building Official shall not issue a certificate of occupancy for any building or structure subject to this code when the Building Official has found violation(s) of any municipal code, county code or applicable state law provision related to any form of building or grading activity occurring on the subject property.

(b) If the Building Official determines that a certificate of occupancy may be issued as in conformance with the requirements of this Code, the certificate shall contain the following:

1. The building permit number;
2. The address of the building;
3. The name and address of the owner;
4. A description of that portion of the building for which the C of O is issued;
5. A statement that the described portion of the building has been inspected for Compliance with the requirements of this code for the group and division of Occupancy and the use; and
6. The name of the Building Official.

(c) Exception: A certificate of occupancy may be issued by the Building Official in those instances where the Building Official finds and determines that the building or structure is otherwise completed but not all zoning conditions of approval have been satisfied and: i) occupancy will not otherwise constitute a threat to the public health and safety; ii) remaining work constitutes a very minor portion of the project; iii) the remaining work is secured by the posting of appropriate surety performance bonding as approved by the Building Official; iv) the applicant shall pay a required fee to process the exception application. This exception is not
applicable where the work on the structure or building has not satisfied all requirements of this Building Code."

16. **Subsection 111.4 “Revocation”** is hereby amended to read as follows:

"The Building Official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portions thereof is in violation of any City ordinance or regulation or any of the provisions of this code."

**Note:** Many of the following changes are made to various fire safety regulations set forth in the following sections of the 2016 California Building Code:

**Sections 202 General Definitions** is hereby revised by adding “Spark Arrester” as follows:

**202 General Definitions**

**SPARK ARRESTER:** A listed device constructed of noncombustible material specifically for the purpose of meeting one of the following conditions:

1. Removing and retaining carbon and other flammable particles/debris from the exhaust flow of an internal combustion engine in accordance with California Vehicle Code Section 38366.
2. Fireplaces that burn solid fuel in accordance with California Building Code Chapter 28."

**Adopt Chapter 7A Materials and Construction Methods for Exterior Wildfire Exposure** in its entirety with the following amendments:

**Section 701A.3 Application** is hereby revised to read as follows:

"701A.3 Application. New buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date, and additions to and remodel of buildings constructed before 2012 located in areas currently designated as such, shall comply with the provisions of this chapter. The provisions shall also apply to additions, remodels, and accessory structures located within 100 feet of a fuel modification zone, vegetation management area, or similar area containing hazardous combustible vegetation, regardless of whether the property is currently located in a designated Fire Hazard Severity Zone or Wildland-Urban Interface Fire Area, when materials and/or construction methods for exterior wildfire exposure were previously required at the property by the Building or Fire Code Official."
Exceptions:
1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from the applicable building.
2. Buildings of an accessory character classified as a Group U occupancy of any size located least 50 feet from an applicable building.
3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C – Group U Agricultural Buildings), when located at least 50 feet from an applicable building.

Section 710A.3.2 is hereby revised to read as follows:

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

Section 710A.4 Requirements is hereby revised to read as follows:

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

17. Adopt Chapter 9 Fire Protection Systems is adopted in its entirety with the following amendments:

Section 903.2 Where required is hereby revised to read as follows:

“903.2 Where required. Approved automatic sprinkler systems in buildings and structures shall be provided when one of the following conditions exists:

1. New buildings: Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.19, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area exceeds 5,000 square feet as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.

Exception: Subject to approval by the Fire Code Official, open parking garages in accordance with Section 406.5 of the California Building Code.

2. Existing Buildings: Notwithstanding any applicable provisions of this code, an automatic sprinkler system shall be provided in an existing building when an addition occurs and one of the following conditions exists:
   a. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5000 square feet
   b. When an addition exceeds 2000 square feet and the resulting building area exceeds 5000 square feet.
   c. An additional story is added above the second floor regardless of fire areas or allowable area.
Exception: Additions to Group R-3 occupancies shall comply with Section 903.2.8 (2).”

Section 903.2.8 Group R is hereby revised to read as follows:

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

1. **New Buildings:** An automatic sprinkler system shall be installed throughout all new buildings.

2. **Existing R-3 Buildings:** An automatic sprinkler system shall be installed throughout when one of the following conditions exists:
   a. The total floor area increases by 50% of the existing area over a two-year period; or,
   b. The total area increases by 750 square feet or more over a 2-year period; or,
   c. An additional story is added to the structure regardless of the area involved; or,
   d. 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; or,
   e. Any addition to an existing building that has fire sprinklers installed.

Exceptions:
1. Pursuant to Health and Safety Code, Section 13113, occupancies housing ambulatory children only, none of whom are mentally ill children or children with intellectual disabilities, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and building or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
2. 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 of the California Building Code, 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."

Section 903.3.5.3 Hydraulically calculated systems is hereby added 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 when required by the fire code official, the fire sprinkler system shall not exceed the water supply capacity specified by Table 903.3.5.3."

<table>
<thead>
<tr>
<th>TABLE 903.3.5.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulically Calculated Systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design %</th>
<th>75</th>
<th>80</th>
<th>85</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSI</td>
<td>100</td>
<td>110</td>
<td>120</td>
<td>130</td>
</tr>
</tbody>
</table>

18. Chapter 15 Roof Assemblies and Rooftop Structures

Table 1505.1 is hereby amended to read as follows:

"TABLE 1505.1a
MINIMUM ROOF COVERING CLASSIFICATIONS
TYPES OF CONSTRUCTION

<table>
<thead>
<tr>
<th>IA</th>
<th>IB</th>
<th>II A</th>
<th>II B</th>
<th>III A</th>
<th>III B</th>
<th>IV</th>
<th>VA</th>
<th>VB</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m².
a. Unless otherwise required in accordance with Chapter 7A."

Section 1505.1.3 is amended to read as follows:

"1505.1.3 Roof coverings within all other areas. The entire roof covering of every existing structure where more than 10 percent (10%) of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of
the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A."

Section 1505.5 Non-classified roofing is amended, by the deletion of the entire section.

Section 1505.7 Special purpose roof is amended, by the deletion of the entire section.

19. Chapter 31 Special Construction

3109.4.1 Barrier height and clearances. Section 3109.4.1 is amended by deleting 48 inches and replacing with 60 inches.

Section 3109.4.4.1 is amended by adding the following definition:

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

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

"3109.4.4.2 Construction permit; safety features required. New pools or spas: Commencing January 1, 2007, except as provided in Section 3109.4.4.5, whenever a building permit is issued for construction of a new swimming pool or spa, or any building permit is issued for remodeling of an existing pool or spa, at a private, single-family home, it shall have an enclosure complying with 3109.4.4.3 and, it shall be equipped with at least one of the following seven drowning prevention safety features.

Chapter 35
Referenced Standards

Chapter 35 Referenced Standards is adopted in its entirety with the following amendments:

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

Section 6.7.3 is hereby revised to read as follows:

"6.7.3 Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public 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 2½” 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 or as approved. When the fire sprinkler density design requires more than 500 gpm (including inside hose stream demand), or a standpipe system is included, four 2½" inlets shall be provided."

Section 8.3.3.1 is hereby revised to read 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:

1. Quick-response type as defined in 3.6.4.8
2. Residential sprinklers in accordance with the requirements of 8.4.5
3. Quick response CMSA sprinklers
4. ESFR sprinklers
5. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
6. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems"

Section 11.1.1.1 is hereby added as follows:

"11.1.1.1 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 use or 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 use or occupancy."

Section 11.2.3.1.1.1 is hereby added as follows:

"11.2.3.1.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the fire code official:

1) Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;
2) Use a maximum of 40 psi, if available;
3) Utilize the OCFA 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."
NFPA 13D 2016 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

Section 7.1.2 is hereby revised to read as follows:

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

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

Section 7.3.1.1 is hereby revised to read 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."

NFPA 24, 2016 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

Section 6.2.8.1 is hereby added as follows:

"6.2.8.1 All indicating valves controlling fire suppression water supplies shall be painted OSHA red.

Exceptions:
1. Brass or bronze valves on sprinkler risers mounted to the exterior of the building may be left unpainted.
2. Where OS&Y valves on the detector check assembly are the only control valves, at least one OS&Y valve shall be painted red."

Section 6.2.9 is hereby revised to read as follows:

"All connections to private fire service mains for fire protection systems shall be arranged in accordance with one of the following so that they can be isolated:

(1) A post indicator valve installed not less than 40 ft (12 m) from the building

(a) For buildings less than 40 ft (12 m) in height, a post indicator valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the post indicator valve."
(2) A wall post indicator valve

(3) An indicating valve in a pit, installed in accordance with Section 6.4

(4) A backflow preventer with at least one indicating valve not less than 40 ft (12 m) from the building

(a) For buildings less than 40 ft (12 m) in height, a backflow preventer with at least one indicating valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the backflow preventer.

(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

Section 10.1.5 is hereby added as follows:

"10.1.5 All ferrous pipe and joints shall be polyethylene encased per AWWA C150, Method A, B, or C. All fittings shall be protected with a loose 8-mil polyethylene tube or sheet. The ends of the tube or sheet 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."

Section 10.4.1.1 is hereby revised to read as follows:

"10.4.1.1 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material after installation.

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

Section 10.4.1.1.1 is hereby added as follows:

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

Section 10.4.3.2 is hereby revised to read as follows:

"10.4.3.2 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 10.4.3.2.1 through 10.4.3.2.4."
Section 3. Adoption of the 2016 California Electrical Code.

Section 8-3.01 of Chapter 3, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2013 California Electrical Code" is hereby amended to read as follows:

**Section 8-3.01 Adoption of the 2016 California Electrical Code.**

The 2016 California Electrical Code, based on the 2014 National Electrical Code as published by the National Fire Protection Association, is hereby amended to read as follows:

a) Article 310.106(B) Conductor Material is amended by the addition of a second paragraph to read as follows:

Copper wire shall be used for wiring No. 6 and smaller in all installations. Consideration for use of aluminum wiring can be made by the Building Official for feeder lines only on an individual basis where adequate safety measures can be ensured.

b) Article 310 Conductors for General Wiring is amended by the addition of Article 310.121 to read as follows:

**310.121 Continuous inspection of aluminum wiring.** Aluminum conductors of No. six (6) or smaller used for branch circuits shall require continuous inspection by an independent testing agency approved by the Building Official for proper torque of connections at their termination point.

c) Article 690.13 Building or Other Structure Supplied by a Photovoltaic System is amended by the addition to read as follows:

(A) Location. The PV disconnecting means shall be installed at a readily accessible location either on the outside of a building or structure or inside nearest the point of entrance of the system conductors. A single, visible-open, lockable AC disconnect shall be within 3 feet of the meter on the exterior of the building.

Section 4. Adoption of the 2016 California Mechanical Code.

Section 8-4.01 of Chapter 4, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2013 California Mechanical Code" is hereby amended to read as follows:

"Section 8-4.01 Adoption of the 2016 California Mechanical Code."
The 2016 California Mechanical Code, based on the 2015 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials, is hereby adopted by reference and made part of this code.

Section 5. Adoption of the 2016 California Plumbing Code.

Section 8-5.01 of Chapter 5, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2013 California Plumbing Code" is hereby amended to read as follows:

"Section 8-5.01 Adoption of the 2016 California Plumbing Code."

The 2016 California Plumbing Code, based on the 2015 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials, is hereby adopted by reference and made part of this code.

Section 6. Adoption of the 2016 California Energy Code.

Section 8-15.01 of Chapter 15, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2013 California Energy Code" is hereby amended to read as follows:

"Section 8-15.01 Adoption of the 2016 California Energy Code."

The 2016 California Energy Code, based on the 2016 Energy Code as published by the California Energy Commission, is hereby adopted by reference and made part of this code.

Section 7. Adoption of the 2016 California Fire Code.

Section 8-10.01 of Chapter 10, Title 8, of the San Juan Capistrano Municipal Code entitled "Adoption of the 2013 California Fire Code" is hereby amended to read as follows:

Section 8-10.01 Adoption of the 2016 California Fire Code.

The 2016 California Fire Code, based on the 2015 International Fire Code as published by the International Code Council (ICC), is hereby amended to read as follows:

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

Section 109.4 Violation penalties is hereby revised to read 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 shall fail to comply with any issued orders or notices 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 result in penalties assessed as prescribed in the OCFA Prevention Field Services adopted fee schedule. Each day that a violation continues after due notice has been served shall be deemed a separate offense.
Section 109.4.2 Infraction and misdemeanor is hereby added as follows:

109.4.2 Infraction and misdemeanor. 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. 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 are guilty of a misdemeanor.

Chapter 2
Definitions

Chapter 2 Definitions is adopted in its entirety with the following amendments:

Sections 202 General Definitions is hereby revised by adding “OCFA,” “Sky Lantern,” and “Spark Arrester” as follows:

202 General Definitions

OCFA: Orange County Fire Authority, fire authority having jurisdiction.

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.

SPARK ARRESTER. A listed device constructed of noncombustible material specifically for the purpose of meeting one of the following conditions:

3. Removing and retaining carbon and other flammable particles/debris from the exhaust flow of an internal combustion engine in accordance with California Vehicle Code Section 38366.
4. Fireplaces that burn solid fuel in accordance with California Building Code Chapter 28.

Chapter 3
General Requirements

Chapter 3 General Requirements is adopted in its entirety with the following amendments:

Section 304.1.2 Vegetation is hereby revised to read as follows:

304.1.2 Vegetation. Type, amount, or arrangement of weeds, grass, vines or other growth that is capable of being ignited and endangering property-needling to comply with OCFA Guidelines, shall be cut, thinned, and removed by the
owner or occupant of the premises in accordance with OCFA Guideline C-05 “Vegetation Management Guideline—Technical Design for New Construction, Fuel Modification Plans, and Maintenance Program. Vegetation clearance requirement in urban-wildland interface areas shall be in accordance with Chapter 49.

Section 305.6 Hazardous Conditions is hereby added as follows:

305.6 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.

Section 305.7 Disposal of rubbish is hereby added as follows:

305.7 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.

Section 307 OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES is hereby revised to read as follows:

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

Sections 307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies is hereby added 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 solely for cooking.

Section 307.6.1 Gas-fueled devices is hereby added as follows:

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 as defined in Section 202.

Section 307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas is hereby added as follows:

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. 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 in accordance with Sections 305, 307, and 308.

Section 307.6.2.1 Where prohibited is hereby added as follows:

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 Wildland-Urban Interface Areas (WUI) or in locations where conditions could cause the spread of fire to the WRA or WUI unless determined by the Fire Code Official that the location or design of the device should reasonably prevent the start of a wildfire.

Section 309.2.1 Indoor charging of electric carts/cars is hereby added as follows:

309.2.1 Indoor charging of electric carts/cars. Indoor charging of electric carts/cars where the combined volume of all 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 608.9.

Section 320 Fuel Modification Requirements for New Construction is hereby added as follows:

320 Fuel Modification Requirements for New Construction. All new structures and facilities adjoining land containing hazardous combustible vegetation shall be approved and in accordance with the requirements of OCFA

Section 321 Clearance of brush or vegetation growth from roadways is hereby added as follows:

321 Clearance of brush or vegetation growth from roadways. 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.

Section 322 Unusual Circumstances is hereby added as follows:

322 Unusual circumstances. 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.

Section 323 Use of Equipment is hereby added as follows:

323 Use of equipment. Except as otherwise provided in this section, no person shall use, operate, or cause to be operated in, upon or adjoining any hazardous fire area any internal combustion engine which uses hydrocarbon fuels, unless the engine is equipped with a spark arrester as defined in Section 202 maintained in effective working order, or the engine is constructed, equipped and maintained for the prevention of fire.

Exceptions:
1. Engines used to provide motor power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code of the State of California.
2. Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in good mechanical condition.

Section 323.1 Spark Arresters is hereby added as follows:

323.1 Spark arresters. Spark arresters shall comply with Section 202, and when 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.

Section 324 Sky Lanterns or similar devices is hereby added as follows:

324 Sky Lanterns or similar devices. The ignition and/or launching of a Sky Lantern or similar device is prohibited.

Chapter 4

Emergency Planning and Preparedness

Chapter 4: Emergency Planning and Preparedness. Adopt only the sections, subsections, and amendment listed below:

401
401.3.4
401.9
402
403.2
404.5 – 404.6.6
407

Section 407.5 is revised to read as follows:

407.5 Hazardous Materials Inventory Statement. Where required by the fire code official, each application for a permit shall include OCFA’s Chemical Classification Packet in accordance with Section 5001.5.2.

Chapter 5

Fire Service Features

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

SECTION 501.1 Scope is revised to read as follows:
501.1 Scope. Fire service features for buildings, structures and premises shall comply with this chapter and, where required by the fire code official, with OCFA Guideline B-09, “Fire Master Plan for Commercial & Residential Development.” Fire service features for buildings, structures and premises located in State Responsibility Areas shall also comply with OCFA Guideline B-09a, “Fire Safe Development in State Responsibility Areas.”

Section 510.1 Emergency responder radio coverage is revised to read 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 the local authority having jurisdiction’s ordinance and this code.

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 required could have a negative impact on the normal operations of that facility, the fire code official shall have the authority to accept an automatically activated emergency radio coverage system.

This section shall not apply to the following:

1. Existing buildings or structures, unless required by the Building Official and OCFA for buildings and structures undergoing extensive remodel and/or expansion.
2. Elevators.
3. Structures that are three stories or less without subterranean storage or parking and that do not exceed 50,000 square feet on any single story.
4. Wood-constructed residential structures four stories or less without subterranean storage or parking that are not built integral to an above ground multi-story parking structure.
5. Should construction that is three stories or less that does not exceed 50,000 square feet on any single story include subterranean storage or parking, then this ordinance shall apply only to the subterranean areas.

Section 510.2 Emergency responder radio coverage in existing buildings is deleted without replacement:

Section 510.4.2.2 Technical Criteria is revised to read as follows:
510.4.2.2 Technical criteria. The fire code official shall maintain a document providing the specific technical information and requirements for the emergency responder radio coverage system. This document shall contain, but not be limited to, the various frequencies required, the location of radio sites, effective radiated power of radio sites, and other supporting technical information.

1. The frequency range supported from the 800 MHz Countywide Communications System shall be 851-869 MHz (base transmitter frequencies).
2. The frequency range supported to the 800 MHz Countywide Communications System shall be 806-824 MHz (radio field transmit frequencies).
3. A public safety radio amplification system shall include filters to reject frequencies below 851 MHz and frequencies above 869 MHz by a minimum of 35dB.
4. All system components must be 100 percent compatible with analog and digital modulations after installation without adjustments or modifications. The systems must be capable of encompassing the frequencies stated herein and capable of future modifications to a frequency range subsequently established by the jurisdiction.
5. Active devices shall have a minimum of -50 dB 3rd order intermodulation protection.
6. All active in-building coverage devices shall be FCC Part 90 Type Certified

Section 510.5.1 Approval prior to installation is revised to read as follows:

510.5.1 Approval prior to installation. Amplification systems capable of operating on frequencies licensed to any public safety agency by the FCC shall not be installed without prior plan submittal, coordination and approval from Orange County Communications and a copy of the approved plan provided to the fire and building code officials.

Section 510.5.2 Minimum qualification of personnel is revised to read as follows:

510.5.2 Minimum qualifications of personnel. The minimum qualifications of the system designer and lead installation personnel shall include both of the following:

1. A valid FCC-issued general radio operator’s license.
2. Certification of in-building system training issued by a nationally recognized organization, school or a certificate issued by the manufacturer of the equipment being installed.

Section 510.5.3 Acceptance test procedure item 7 is revised to read as follows:

510.5.3 Acceptance test procedure. When an emergency responder radio coverage system is required, and upon completion of installation, the building
owner shall have the radio system tested to ensure that two-way coverage on each floor of the building is not less than 90 percent. The test procedure shall be conducted as follows: ...

7. As part of the installation a spectrum analyzer or other suitable test equipment shall be utilized to ensure spurious oscillations are not being generated by the subject signal booster. This test shall be conducted at the time of installation and subsequent annual inspections by the FCC licensed technician hired by the property owner and an OCSD/Communications Division FCC-certified technician.

Section 510.6.1 Testing and proof of compliance is revised to read as follows:

510.6.1 Testing and proof of compliance.
The owner of the building or their representative shall have the emergency responder radio coverage system shall be inspected and tested annually or where structural changes occur including additions or remodels that could materially change the original field performance tests. Testing shall consist of the following:

1. In-building system components shall be tested to determine general functional operability.
2. Signal boosters shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance.
3. Backup batteries and power supplies shall be tested under load of a period of one hour to verify that they will properly operate during an actual power outage. If within the 1-hour test period the battery exhibits symptoms of failure, the test shall be extended for additional 1-hour periods until the integrity of the battery can be determined.
4. Other active components shall be checked to verify operation within the manufacturer’s specifications.
5. If noncompliance is found, the FCC licensed technician will assess improvements necessary and provide such information to OCSD Communications and the fire and building code officials.
6. At the conclusion of the testing, a certification report, which shall verify compliance with Section 510.5.3, shall be submitted to OCSD Communications and the fire and building code officials.

Chapter 6

Building Services and Systems

Chapter 6 Building Services and Systems is adopted in its entirety without amendments:
Chapter 7

Fire-Resistance-Rated Construction

Chapter 7 Fire-Resistance-Rated Construction is adopted in its entirety without amendments.

Chapter 8

Interior Finish, Decorative Materials and Furnishings

Chapter 8 Interior Finish, Decorative Materials and Furnishings is adopted in its entirety without amendments.

Chapter 9

Fire Protection Systems

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

Section 903.2 Where required is hereby revised to read as follows:

903.2 Where required. Approved automatic sprinkler systems in buildings and structures shall be provided when one of the following conditions exists:

3. New buildings: Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.19, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area exceeds 5,000 square feet as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.

Exception: Subject to approval by the Fire Code Official, open parking garages in accordance with Section 406.5 of the California Building Code.

4. Existing Buildings: Notwithstanding any applicable provisions of this code, an automatic sprinkler system shall be provided in an existing building when an addition occurs and one of the following conditions exists:
   d. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5000 square feet
   e. When an addition exceeds 2000 square feet and the resulting building area exceeds 5000 square feet.
   f. An additional story is added above the second floor regardless of fire areas or allowable area.
**Exception:** Additions to Group R-3 occupancies shall comply with Section 903.2.8 (2).

**Section 903.2.8 Group R** is hereby revised to read as follows:

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

3. **New Buildings:** An automatic sprinkler system shall be installed throughout all new buildings.

4. **Existing R-3 Buildings:** An automatic sprinkler system shall be installed throughout when one of the following conditions exists:
   
   a. The total floor area increases by 50% of the existing area over a two-year period; or,
   
   b. The total area increases by 750 square feet or more over a 2-year period; or,
   
   c. An additional story is added to the structure regardless of the area involved; or,
   
   d. 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; or,
   
   e. Any addition to an existing building that has fire sprinklers installed.

**Exceptions:**

3. Pursuant to Health and Safety Code, Section 13113, occupancies housing ambulatory children only, none of whom are mentally ill children or children with intellectual disabilities, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and building 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 of the California Building Code, 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.

Section 903.3.5.3 Hydraulically calculated systems is hereby added 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 when required by the fire code official, the fire sprinkler system shall not exceed the water supply capacity specified by Table 903.3.5.3.

### TABLE 903.3.5.3
Hydraulically Calculated Systems

<table>
<thead>
<tr>
<th>PSI</th>
<th>Design %</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td></td>
</tr>
<tr>
<td>130</td>
<td></td>
</tr>
<tr>
<td>140</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 10

Means of Egress

Chapter 10 Means of Egress is adopted in its entirety without amendments.

Chapter 11

Construction Requirements for Existing Buildings

Chapter 11 Construction Requirements for Existing Buildings. Adopt only those sections and subsections listed below:
Chapter 20
Aviation Facilities

Chapter 20 Aviation Facilities is adopted in its entirety without amendments.

Chapter 21
Dry Cleaning

Chapter 21 Dry Cleaning is adopted in its entirety without amendments.

Chapter 22
Combustible Dust-Producing Operations

Chapter 22 Combustible Dust-Producing Operations is adopted in its entirety without amendments.

Chapter 23
Motor Fuel-Dispensing Facilities and Repair Garages

Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages is adopted in its entirety without amendments.

Chapter 24
Flammable Finishes

Chapter 24 Flammable Finishes is adopted in its entirety without amendments.

Chapter 25
Fruit and Crop Ripening

Chapter 25 Fruit and Crop Ripening is deleted in its entirety.

Chapter 26
Fumigation and Insecticidal Fogging
Chapter 26 Fumigation and Insecticidal Fogging is deleted in its entirety.

Chapter 27
Semiconductor Fabrication Facilities

Chapter 27 Semiconductor Fabrication Facilities is adopted in its entirety without amendments.

Chapter 28
Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities

Chapter 28 Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities is adopted in its entirety with the following amendments:

Section 2801.2 Permit is hereby revised to read as follows:

2801.2 Permit. Permits shall be required as set forth in Section 105.6 and 105.6.29.

Section 2808.2 Storage site is hereby revised to read as follows:

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

Section 2808.3 Size of piles is hereby revised to read as follows:

2808.3 Size of piles. Piles shall not exceed 15 feet in height, 50 feet in width and 100 feet in length.

Exception: The fire code official is authorized to allow the pile size to be increased where a fire protection plan is provided for approval that includes, but is not limited to, the following:

1. Storage yard areas and materials-handling equipment selection, design and arrangement shall be based upon sound fire prevention and protection principles.
2. Factors that lead to spontaneous heating shall be identified in the plan, and control of the various factors shall be identified and implemented, including provisions for monitoring the internal condition of the pile.
3. The plan shall include means for early fire detection and reporting to the public fire department; and facilities needed by the fire department for fire extinguishment including a water supply and fire hydrants.
4. Fire apparatus access roads around the piles and access roads to the top of the piles shall be established, identified and maintained.
5. Regular yard inspections by trained personnel shall be included as part of an effective fire prevention maintenance program.

Additional fire protection called for in the plan shall be provided and shall be installed in accordance with this code. The increase of the pile size shall be based upon the capabilities of the installed fire protection system and features.

Section 2808.4 Pile Separation is hereby revised to read as follows:

2808.4. Pile separation. Piles shall be separated from adjacent piles by a minimum distance of 20 feet. Additionally, piles shall have a minimum separation of 100 feet from combustible vegetation.

Section 2808.7 Pile fire protection is hereby revised to read 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.

Section 2808.9 Material-handling equipment is hereby revised to read 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, hogsht material, wood fines and raw product during fire-fighting operations.

Section 2808.11 Temperature control is hereby added as follows:

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

Section 2808.11.1 Pile temperature control is hereby added as follows:

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

Section 2808.11.2 New material temperature control is hereby added 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 comply with the requirements of this chapter and be monitored to verify that the temperature remains stable.

Section 2808.12 Water availability is hereby added as follows:

2808.12 Water Availability. Facilities with over 2500 cubic feet shall provide a water supply. The minimum fire flow shall be no less than 500 GPM @ 20 psi for a minimum of 1 hour duration for pile heights up to 6 feet and 2 hour duration for pile heights over 6 feet. If there is no water purveyor, an alternate water supply with storage tank(s) shall be provided for fire suppression. The water supply tank(s) shall provide a minimum capacity of 2500 gallons per pile (maximum 30,000 gallons) for piles not exceeding 6 feet in height and 5000 gallons per pile (maximum 60,000) for piles exceeding 6 feet in height. Water tank(s) shall not be used for any other purpose unless the required fire flow is left in reserve within the tank at all times. An approved method shall be provided to maintain the required amount of water within the tank(s).

Section 2808.13 Tipping area is hereby added as follows:

2808.13 Tipping areas shall comply with the following:
1. Tipping areas shall not exceed a maximum area of 50 feet by 50 feet.
2. Material within a tipping area shall not exceed 5 feet in height at any time.
3. Tipping areas shall be separated from all piles by a 20 foot wide fire access lane.
4. A fire hydrant or approved fire water supply outlet shall be located within 150 feet of all points along the perimeter of the tipping area.
5. All material within a tipping area shall be processed within 5 days of receipt.

Section 2808.14 Emergency Contact is hereby added as follows:

2808.14 Emergency Contact. The contact information of a responsible person or persons shall be provided to the Fire Department and shall be posted at the entrance to the facility for responding units. The responsible party should be available to respond to the business in emergency situation.

Chapter 29
Manufacture of Organic Coatings

Chapter 29 Manufacture of Organic Coatings is adopted in its entirety without amendments.

Chapter 30
Industrial Ovens
Chapter 30 Industrial Ovens is adopted in its entirety without amendments.

Chapter 31
Tents and Other Membrane Structures

Chapter 31 Tents and Other Membrane Structures is adopted in its entirety without amendments.

Chapter 32
High-Piled Combustible Storage

Chapter 32 High-Piled Combustible Storage is adopted in its entirety without amendments.

Chapter 33
Fire Safety During Construction and Demolition

Chapter 33 Fire Safety During Construction and Demolition is adopted in its entirety without amendments.

Chapter 34
Tire Rebuilding and Tire Storage

Chapter 34 Tire Rebuilding and Tire Storage is adopted in its entirety without amendments.

Chapter 35
Welding and Other Hot Work

Chapter 35 Welding and Other Hot Work is adopted in its entirety without amendments.

Chapter 36
Marinas

Chapter 36 Marinas is adopted in its entirety without amendments.

Chapter 37
Combustible Fibers

Chapter 37 Combustible Fibers is adopted in its entirety without amendments.

Chapter 48
Motion Picture and Television Production Studio Sound Stages, Approved Production Facilities and Production Locations
Chapter 48 Motion Picture and Television Production Studio Sound Stages, Approved Production Facilities and Production Locations is adopted in its entirety without amendments.

Chapter 49
Requirements for Wildland-Urban Interface Fire Areas

Chapter 49 Requirements for Wildland-Urban Interface Fire Areas is adopted in its entirety with the following amendments:

Section 4906.3 Requirements is hereby revised to read as follows:

4906.3 Requirements. Hazardous vegetation and fuels around all applicable buildings and structure shall be maintained in accordance with the following laws and regulations:
1. Public Resources Code, Section 4291.
2. California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299 (see guidance for implementation “General Guideline to Create Defensible Space”).
4. California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07.

Section 4908 Fuel Modification Requirements for New Construction is hereby added as follows:

4908 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in a Wildfire Risk Area shall comply with the following:

1. Preliminary fuel modification plans shall be submitted to and approved by the fire code official prior to or concurrently with the approval of any tentative map.

2. Final fuel modification plans shall be submitted to and approved by the fire code official prior to the issuance of a grading permit.


3.1 The fuel modification plan shall include provisions for the maintenance of the fuel modification in perpetuity.
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.

Chapter 50

Chapter 50 Hazardous Materials – General Provisions is adopted in its entirety with the following amendments.

Section 5001.5.2 Hazardous Materials Inventory Statement (HMIS) is hereby revised to read as follows:

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.
7. Amount in storage.
8. Amount in use-closed systems.
9. Amount in use-open systems.

Section 5003.1.1.1 Extremely Hazardous Substances is hereby added 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.

Chapter 51
Aerosols

Chapter 51 Aerosols is adopted in its entirety without amendments.
Chapter 53
Compressed Gases

Chapter 53 Compressed Gases is adopted in its entirety without amendments.

Chapter 54
Corrosive Materials

Chapter 54 Corrosive materials is adopted in its entirety without amendments.

Chapter 55
Cryogenic Fluids

Chapter 55 Cryogenic Fluids is adopted in its entirety without amendments.

Chapter 56
Explosives and Fireworks

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

Section 5608.2 Firing is hereby added as follows:

5608.2 Firing. All fireworks displays, regardless of mortar, device, or shell size, shall be electrically fired.

Section 5608.3 Application for Permit is hereby added as follows:

Section 5608.3 Application for Permit. A diagram of the grounds on which the display is to be held showing the point at which the fireworks are to be discharged, the fallout area based on 100 feet per inch of shell size, the location of all buildings, roads, and other means of transportation, the lines behind which the audience will be restrained, the location of all nearby trees, telegraph or telephone line, or other overhead obstructions shall be provided to OCFA.

Chapter 57
Flammable and Combustible Liquids

Chapter 57 Flammable and Combustible Liquids is adopted in its entirety without amendments.

Chapter 58
Flammable Gases and Flammable Cryogenic Fluids

Chapter 58 Flammable Gases and Flammable Cryogenic Fluids is adopted in its entirety without amendments.
Chapter 59
Flammable Solids

Chapter 59 Flammable Solids is adopted in its entirety without amendments.

Chapter 60
Highly Toxic and Toxic Materials

Chapter 60 Highly Toxic and Toxic Materials is adopted in its entirety without amendments.

Chapter 61
Liquefied Petroleum Gases

Chapter 61 Liquefied Petroleum Gases is adopted in its entirety without amendments.

Chapter 62
Organic Peroxides

Chapter 62 Organic Peroxides is adopted in its entirety without amendments.

Chapter 63
Oxidizers, Oxidizing Gases, and Oxidizing Cryogenic Fluids

Chapter 63 Oxidizers, Oxidizing Gases, and Oxidizing Cryogenic Fluids is adopted in its entirety without amendments.

Chapter 64
Pyrophoric Materials

Chapter 64 Pyrophoric Materials is adopted in its entirety without amendments.

Chapter 65
Pyroxylin (Cellulose Nitrate) Plastics

Chapter 65 Pyroxylin (Cellulose Nitrate) Plastics is adopted in its entirety without amendments.

Chapter 66
Unstable (Reactive) Materials

Chapter 66 Unstable (Reactive) Materials is adopted in its entirety without amendments.

Chapter 67
Water-Reactive Solids and Liquids

Chapter 67 Water-Reactive Solids and Liquids is adopted in its entirety without amendments.

Chapter 80
Referenced Standards

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

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

Section 6.7.3 is hereby revised to read as follows:

6.7.3 Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public 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 2½" 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 or as approved. When the fire sprinkler density design requires more than 500 gpm (including inside hose stream demand), or a standpipe system is included, four 2½" inlets shall be provided.

Section 8.3.3.1 is hereby revised to read 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:

(7) Quick-response type as defined in 3.6.4.8
(8) Residential sprinklers in accordance with the requirements of 8.4.5
(9) Quick response CMSA sprinklers
(10) ESFR sprinklers
(11) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
(12) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

Section 11.1.1.1 is hereby added as follows:
11.1.1.1 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 use or 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 use or occupancy.

Section 11.2.3.1.1.1 is hereby added as follows:

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

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 OCFA 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.

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

Section 7.1.2 is hereby revised to read as follows:

7.1.2 The sprinkler system piping shall not have separate control valves installed unless supervised by a central station, proprietary, or remote station alarm service:

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

Section 7.3.1.1 is hereby revised to read 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.

NFPA 24, 2016 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

Section 6.2.8.1 is hereby added as follows:
6.2.8.1 All indicating valves controlling fire suppression water supplies shall be painted OSHA red.

Exceptions:
3. Brass or bronze valves on sprinkler risers mounted to the exterior of the building may be left unpainted.
4. Where OS&Y valves on the detector check assembly are the only control valves, at least one OS&Y valve shall be painted red.

Section 6.2.9 is hereby revised to read as follows:

All connections to private fire service mains for fire protection systems shall be arranged in accordance with one of the following so that they can be isolated:

(2) A post indicator valve installed not less than 40 ft (12 m) from the building

(a) For buildings less than 40 ft (12 m) in height, a post indicator valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the post indicator valve.

(2) A wall post indicator valve

(3) An indicating valve in a pit, installed in accordance with Section 6.4

(4) A backflow preventer with at least one indicating valve not less than 40 ft (12 m) from the building

(a) For buildings less than 40 ft (12 m) in height, a backflow preventer with at least one indicating valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the backflow preventer.

(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

Section 10.1.5 is hereby added as follows:

10.1.5 All ferrous pipe and joints shall be polyethylene encased per AWWA C150, Method A, B, or C. All fittings shall be protected with a loose 8-mil polyethylene tube or sheet. The ends of the tube or sheet 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

Section 10.4.1.1 is hereby revised to read as follows:

10.4.1.1 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material after installation.

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

Section 10.4.1.1.1 is hereby added as follows:

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

Section 10.4.3.2 is hereby revised to read as follows:

10.4.3.2 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 10.4.3.2.1 through 10.4.3.2.4.

Appendices

Appendix A is deleted in its entirety without amendments.

Appendix B is adopted in its entirety without amendments.

Appendix BB is adopted in its entirety without amendments.

Appendix C is adopted in its entirety without amendments.

Appendix CC is adopted in its entirety without amendments.

Appendix D is deleted in its entirety without amendments.

Appendix E is deleted in its entirety without amendments.

Appendix F is deleted in its entirety without amendments.

Appendix G is deleted in its entirety without amendments.

Appendix H is adopted in its entirety without amendments.

Appendix I is deleted in its entirety without amendments.
Appendix J is deleted in its entirety without amendments.

Appendix K is deleted in its entirety without amendments.

Appendix L is deleted in its entirety without amendments.

Appendix M is deleted in its entirety without amendments.

Appendix N is deleted in its entirety without amendments.

Section 8. Adoption of the 2016 California Green Building Standards Code.

Section 8-16.01 of Chapter 16, Title 8, of the San Juan Capistrano Municipal Code entitled “Adoption of the 2013 California Green Building Standards Code” is hereby amended to read as follows:

"Section 8-16.01 Adoption of the 2016 California Green Building Standards Code.

The 2016 California Green Building Standards Code is hereby adopted by reference and made part of this code subject to the following amendments:

a) Section 202 Definitions is amended to add the following:
   Sustainability. Consideration of present development and construction impacts on the community, the economy, and the environment without compromising the needs of the future.

b) Section 4.304.1 Irrigation controllers is amended to read as follows:
   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 of communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input."

Section 9. Adoption of the 2016 California Residential Code.

Section 8-17.01 of Chapter 17, Title 8, of the San Juan Capistrano Municipal Code entitled “Adoption of the 2013 California Residential Code” is hereby amended to read as follows:

Section 8-17.01 Adoption of the 2016 California Residential Code.

The 2016 California Residential Code, based on the 2015 International Residential Code as published by the International Code Council (ICC), is hereby adopted by reference and made part of this code subject to the following amendments:

Section R100 “Division II Administration” is hereby amended to read as follows:
1. **Subsection R101.1 “Title”** is hereby amended to read as follows:

“These provisions shall be known as the California Residential Code of the City of San Juan Capistrano, and shall be cited as such and will be referred to herein as “this code.””

2. **Subsection R101.2 “Scope”** is hereby amended to read as follows:

“The provisions of the California Residential Code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one and two story dwellings and townhouses not more than three stories above grade plane in height with separate means of egress and their accessory structures.

Exception: Live/work units complying with the requirements of Section 419 of the California Building Code shall be permitted to be built as one and two story dwellings or townhouses. Fire suppression required by Section 419.5 of the California Building Code when constructed under the California Residential Code shall conform to Section 903.3.1.3 of the California Building Code.

The provisions of these codes shall apply to and affect all of the territory of the City of San Juan Capistrano, 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.”

3. **Subsection R105.2 “Work exempt from permit”** is hereby amended to read as follows:

“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. Such structures must comply with the setback and height requirements of the City Zoning Ordinance and the Fire Code.
2. Masonry or concrete fences not over 36 inches in height measured from the top of footing to top of wall.
3. Sidewalks and driveways.
4. Retaining walls that are not over 48 inches in height measured from the bottom of footing to top of wall unless supporting a surcharge, impounding Class I, II or II-A liquids or at the top or bottom of slope.
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. Decks, platforms or similar structures not exceeding 200 square feet in area not more than 30 inches above adjacent grade at any point, and not attached to a dwelling and do not serve the exit door required by Section R311.4.

7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work that does not involve electrical, mechanical or plumbing work.

8. 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.

9. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.

10. Swings and other playground equipment accessory to detached one- and two-family dwellings.

11. 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.

12. Radio and television antenna, 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."

4. **Subsection R105.3.2 “Time limitation of application”** is hereby amended to read 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 180 days after the date of filing, unless a permit has been issued. The building official is authorized to grant, in writing, one extension of time, for a period not more than 180 days."

5. **Subsection R105.5 “Expiration”** 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. Before such work can be recommenced after a permit expires, a new permit shall first be obtained to do so, 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 expiration, the permittee shall pay a new full permit fee.

The building official is authorized to grant, in writing, one extension of time, for a period not more than 180 days. 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. No permit shall be extended more than once.”

6. **Subsection R106.1 “Submittal documents”** is hereby amended to add a second paragraph that reads:

   Soil report, prepared by an Engineer licensed by the State to practice by such, shall be submitted at the time of permit application. Soil report is required for all new construction and additions. The Building Official may waive the requirement of soil report if it is found that the scope of work applied for is not necessary to have a soil report.”

7. **Subsection R106.3 “Examination of documents”** is hereby amended to add a second paragraph that reads:

“Subsection R106.3. Examination of Documents.
   When submittal documents are required by Section R106.1, a plan review fee shall be paid at the time of submitting the documents for plan review. Said plan review fees are separate fees from the permit fees specified in Section R108.2 and are in addition to the permit fees. Said plan review fee shall be as set forth in the City Council Fee Resolution.”

8. **Subsection R106.5 “Retention of construction documents,”** is hereby amended to add a second paragraph that reads:

“The approved plan, permit application and 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.”

9. **Subsection R108.2 “Schedule of permit fees”** is hereby amended to add a sentence at the end of the paragraph that reads:

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

10. **Subsection R108.3 “Building Permit Valuations”** is hereby amended to add a second paragraph that reads:

“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 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.”

11. **Subsection R108.6 “Work commencing before permit issuance”** is hereby amended to add a second paragraph that reads:

“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.”

12. **Subsection R108.5 “Refunds”** is hereby amended to read in its entirety;

“R108.5 Refunds.

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.”

13. **Section R108 “Fees”** is hereby amended by adding a new Subsection R108.7 Fees/Deposits as follows:

“R108.7 Fees/Deposit. The Building Official may require a deposit from the applicant for a certain project or work in order to secure the request for 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.”

**Another new Subsection R109.5 Re-inspections** is hereby added to Section R109 of Division II of CRC to read in its entirety as follows:
"R109.5 Re-inspections. A re-inspection fee may be assessed for each inspection or re-inspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

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

Re-inspection fees may be assessed when the inspection record card is not posted or otherwise made available on the work site; the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the Building Official.

To obtain a re-inspection, the applicant shall pay the re-inspection fee as established by the City Council Fee Resolution.

In instances where re-inspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid."

14. Subsection R112.1 "General" is hereby amended to read as follows:

"R112.1 General. Any person adversely affected by a decision, order, or determination by the Building Official under the California Building Code may appeal the matter to the City Building Standards Appeal Board pursuant to the appeal provisions as established by City Council resolution."

15. Subsection R110.1 "Use and occupancy" is hereby amended to read as follows:

"No construction or erection of a building or structure shall be used or occupied, and no change in the existing occupancy classification of any building or structure or portion thereof shall be made until the Building Official has issued a certificate of occupancy for said building or structure in accordance with the provisions of section R110.2. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the City. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the City shall not be valid."

16. Subsection R110.3 "Certificate issued" is hereby amended to read as follows and section R110.4 "Temporary Occupancy" is deleted in its entirety:
“(a) The Building Official shall not issue a certificate of occupancy for any building or structure subject to this code when the Building Official has found violation(s) of any municipal code, county code or applicable state law provision related to any form of building or grading activity occurring on the subject property.

(b) If the Building Official determines that a certificate of occupancy may be issued as in conformance with the requirements of this Code, the certificate shall contain the following:

1. The building permit number;
2. The address of the building;
3. The name and address of the owner;
4. A description of that portion of the building for which the C of O is issued;
5. A statement that the described portion of the building has been inspected for Compliance with the requirements of this code for the group and division of Occupancy and the use;
6. The name of the Building Official.

(c) Exception: A certificate of occupancy may be issued by the Building Official in those instances where the Building Official finds and determines that the building or structure is otherwise completed but not all zoning conditions of approval have been satisfied and: i) occupancy will not otherwise constitute a threat to the public health and safety; ii) remaining work constitutes a very minor portion of the project; iii) the remaining work is secured by the posting of appropriate surety performance bonding as approved by the Building Official; iv) the applicant shall pay a required fee to process the exception application. This exception is not applicable where the work on the structure or building has not satisfied all requirements of this Building Code.”

17. **Subsection R110.5 “Revocation”** is hereby amended to read as follows:

“The Building Official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portions thereof is in violation of any City ordinance or regulation or any of the provisions of this code.”

**Chapter 2 Definitions** is adopted in its entirety with the following amendment:

**Section 202 Definitions** is hereby revised by adding “OCFA” and “Spark Arrester” as follows:

**OCFA:** Orange County Fire Authority, fire authority having jurisdiction.

**SPARK ARRESTER.** A listed device constructed of noncombustible material specifically for the purpose of meeting one of the following conditions:
1. Removing and retaining carbon and other flammable particles/debris from the exhaust flow of an internal combustion engine in accordance with California Vehicle Code Section 38366.
2. Fireplaces that burn solid fuel in accordance with California Building Code Chapter 28.

18. Subsection R301.2 “Climatic and geographic design criteria” Table R301.2 (1) is hereby amended to read as follows:

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

<table>
<thead>
<tr>
<th>GROUND SNOW LOAD</th>
<th>WIND DESIGN</th>
<th>SEISMIC DESIGN CATEGORY</th>
<th>SUBJECT TO DAMAGE FROM</th>
<th>WINTER DESIGN TEMP</th>
<th>ICE BARRIER UNDERLAMENT REQUIRED</th>
<th>FLOOD HAZARDS</th>
<th>AIR FREEZING INDEX</th>
<th>MEAN ANNUAL TEMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>110</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>D2 or E</td>
<td>Negligible</td>
<td>43</td>
<td>See Exhibit B</td>
</tr>
</tbody>
</table>

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(1)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
e. Temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.

f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.

g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.

h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."

i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3 (2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32")

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)"

k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

Chapter 3 Building Planning is adopted in its entirety with the following amendments and additions:

Section R301.9 Fuel Modification Requirements for New Construction is hereby added as follows:

"R301.9 Fuel Modification Requirements for New Construction. All new structures and facilities adjoining land containing hazardous combustible vegetation shall be approved and in accordance with the requirements of OCFA Guideline C-05 "Vegetation Management Guideline – Technical Design for new Construction Fuel Modification Plans and Maintenance Program."

Section R309.6 Fire sprinkler attached garages, and carports with habitable space above is hereby amended by modifying the exception to read as follows:

"Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing carports and/or garages that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8."
Section R313.1 Townhouse automatic fire sprinkler systems is hereby amended by modifying the exception to read as follows:

"Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8."

Section R313.2 One- and two-family dwellings automatic fire sprinkler systems is hereby amended by modifying the exception to read as follows:

"Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic sprinkler system unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8."

Section R313.3.6.2.2 Calculation procedure is hereby revised to read as follows:

"Section 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."

(The remainder of the section is unchanged)

Section R319.1 Address identification is hereby revised to read as follows:

"R319 Site Address. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches in height with a stroke width of not less than 0.5 inch. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained."

Section R326 Swimming Pools, Spas, and Hot Tubs

R326.1 General. Swimming pool enclosures and safety devices shall comply with Section 3109 in the California Building Code.

Section R337.1.3 Application is hereby revised to read as follows:
"R337.1.3 Application. New buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date, and additions to and remodel of buildings constructed before 2012 located in areas currently designated as such, shall comply with the provisions of this chapter. The provisions shall also apply to additions, remodels, and accessory structures located within 100 feet of a fuel modification zone, vegetation management area, or similar area containing hazardous combustible vegetation, regardless of whether the property is currently located in a designated Fire Hazard Severity Zone or Wildland-Urban Interface Area, when materials and/or construction methods for exterior wildfire exposure were previously required at the property by the Building or Fire Code Official.

Exceptions:
1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.
2. Buildings of an accessory character classified as a Group U occupancy of any size located at least 50 feet from an applicable building.
3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C – Group U Agricultural Buildings), when located at least 50 feet from an applicable building."

Section R337.1.6 Fuel Modification Requirements for New Construction is hereby added as follows:

"R337.1.6 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in a Wildfire Risk Area shall comply with the following:

1. Preliminary fuel modification plans shall be submitted to and approved by the fire code official prior to or concurrently with the approval of any tentative map.

2. Final fuel modification plans shall be submitted to and approved by the fire code official prior to the issuance of a grading permit.


3.1. The fuel modification plan shall include provisions for the maintenance of the fuel modification in perpetuity.
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."

Section R403.1.3 Seismic reinforcing is modified by deleting the exception for masonry stem walls:

In Seismic Design Categories D₀, D₁ and D₂ masonry stem walls without solid grout and vertical reinforcing are not permitted.

Section R902 ROOFING CLASSIFICATION is hereby amended to read as follows:

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

Exceptions:
1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks."

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

R902.2 first paragraph is amended by revising it to allow only Class A treated wood roofs 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 roofs."

Chapter 10 Chimneys and Fireplaces is adopted in its entirety with the following amendments:
Section R1001.13 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices is hereby added as follows:

"R1001.13 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices. Outdoor fireplaces, fire pits, fire rings, or similar exterior devices shall comply with this section.

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

Section R1001.13.1 Gas-fueled devices is hereby added as follows:

"R1001.13.1 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. 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 R1003.9.2."

Section R1001.13.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas is hereby added as follows:

"R1001.13.2 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 Section R1001. 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."

Section R1001.13.3 Devices using wood or fuels other than natural gas or liquefied-petroleum gas is hereby added as follows:

"R1001.13.3 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) 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."
Chapter 44 Referenced Standards is adopted in its entirety with the following amendments:

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

Section 6.7.3 is hereby revised to read as follows:

"6.7.3 Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public 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 2½" 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 or as approved. When the fire sprinkler density design requires more than 500 gpm (including inside hose stream demand), or a standpipe system is included, four 2½" inlets shall be provided."

Section 8.3.3.1 is hereby revised to read 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:

1. Quick-response type as defined in 3.6.4.8
2. Residential sprinklers in accordance with the requirements of 8.4.5
3. Quick response CMSA sprinklers
4. ESFR sprinklers
5. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
6. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems"

Section 11.1.1.1 is hereby added as follows:

"11.1.1.1 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 use or 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 use or occupancy."

**Section 11.2.3.1.1.1** is hereby added as follows:

"11.2.3.1.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the fire code official:

1) Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;
2) Use a maximum of 40 psi, if available;
3) Utilize the OCFA 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."

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

**Section 7.1.2** is hereby revised to read as follows:

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

**Appendix O Vehicular Gates** is adopted with only the section indicated below:

**SECTION AO103.3 Vehicular gates or other barriers across required fire apparatus access roads** is hereby added as follows:

"AO103.3 Vehicular gates or other barriers across required fire apparatus access roads. The installation of gates or other barriers across a required fire apparatus access road shall be approved by the fire code official. Gates or barriers shall be in accordance with Orange County Fire Authority Guideline B-09 "Fire Master Plans for Commercial and Residential Development."

**Section 10. Deletion of Section 8-6.03**

Section 8-6.03 of Chapter 6, Title 8, of the San Juan Capistrano Municipal Code is hereby deleted and of no further force or effect.

**Section 11. City Clerk’s Certification**

The City Clerk shall certify to the adoption of this Ordinance and cause the same to be posted at the duly designated posting places within the City and published once within (15) days after the passage and adoption as required by law; or, in the alternate, the City Clerk may cause to be published a summary of this Ordinance and a certified copy of the text of
this Ordinance shall be posted in the Office of the City Clerk five (5) days prior to the date of adoption of this Ordinance; and, within fifteen (15) days after adoption, the City Clerk shall cause to be published the aforementioned summary and shall post a certified copy of this Ordinance, together with the vote for and against the same, in the Office of the City Clerk.

Section 12. Severability

If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held out to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of San Juan Capistrano hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsection, sentence clause, phrases or portions be declared valid or unconstitutionally.

Section 13. Local Findings

1. Climatic Conditions:

A. Orange County and the City of San Juan Capistrano are located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds, which may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials. Frequent periods of drought and low humidity add to the fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are also prone to disrupt utility services throughout the County. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles 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 firefighting 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 Orange County Fire Authority’s ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County.

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 and 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.

2. Topographical Conditions:

A. Natural slopes of 15 percent or greater generally occur throughout the foothills of Orange County. The elevation change cause by the hills creates the geological foundation on which communities within Orange County are built and will continue to be built. With much of the populated flatlands already built upon, future growth will occur in areas with steeper slopes and greater constraints in terrain.

B. Road circulation features located throughout the County also make amendments reasonably necessary. Located through the County are major roadways, highways and flood control channels that create barriers and slow response times. Hills, slopes, street and storm drain design accompanied with occasional heavy rainfall, cause roadway flooding and landslides, and at times may make an emergency access route impassable. There are areas in Orange County that naturally have extended Fire Department emergency response times that exceed the 5 minute goal.

C. Placement of multiple occupancy buildings, location of arterial roads, and fire department staffing constraints due to recent revenue-limiting state legislation have made it difficult for the fire department to locate additional fire stations and provide manpower sufficient to concentrate fire companies and personnel to control fires in high density apartment or condominium buildings. Fire Department equipment does not allow easy access to areas of buildings greater than 55 feet above the level of Fire Department vehicle access. These conditions create the need for built-in on-site fire protection systems to protect occupants and property until firefighting apparatus and personnel arrive on the scene.

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.

3. Geological Conditions:

A. Orange County and the City of San Juan Capistrano are located in a highly active seismic area. There are earthquake faults that run along both the northeastern and southwestern boundaries of Orange County. The Newport-Inglewood Fault Zone (NIFZ) which runs through Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude, hypocenter off Newport Beach coast), which took 120 lives, with areas damaged from Laguna Beach to Marina del Rey and
inland to Whittier, and poses one of the greatest hazards to lives and property in the
nation. Regional planning for reoccurrence is recommended by the State of California,
Department of Conservation. There was also an earthquake in December 1989, with
the epicenter located near the City of Irvine. The fault on which this quake occurred was
unknown prior to this activity. The October 17, 1989, Santa Cruz earthquake resulted in
only one major San Francisco fire in the Marina district, but when combined with the 34
other fires and over 500 responses, the department was taxed to its full capabilities.
The Marina fire was difficult to contain because mains supplying water to the district
burst during the earthquake. If more fires had been ignited by the earthquake, it would
have been difficult for the fire department to contain them. Experts predict a major
earthquake in our area within the next 50 years. This situation creates the need for both
additional fire protection measures and automatic on-site fire protection for building
occupants since a multitude of fires may result from breakage of gas and electric lines
as a result of an earthquake. As noted by “Planning Scenario on a Major Earthquake
on the Newport-Inglewood Fault Zone, 1988, State Department of Conservation,” page
59, “unfortunately, barely meeting the minimum earthquake standards of building codes
places a building on the verge of being legally unsafe.”

B. Traffic and circulation congestion presently existing in the City of
San Juan Capistrano often places fire department response time to fire occurrences at
risk. This condition will be exacerbated by any major disaster, including any earthquake
wherein damage to the highway system will occur. This condition makes the need for
additional on-site protection for property occupants necessary.

C. The City of San Juan Capistrano is located in an area subject to a
climatic condition of high winds and low humidity. This combination of events creates
an environment, which is conducive to rapidly spreading fires. Control of such fires
requires rapid response. 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,
Section 6, Figure 6-2 of ASCE 7 identifies a significant increase in the amount of wind
force at 60 feet above the ground. Use of aerial type firefighting apparatus above this
height would place rescue personnel at increased risk of injury.

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

E. Untreated wood roofs cause or contribute to serious fire hazard and
to the rapid spread of fires when such fires are accompanied by high winds. Pieces of
burning wooden roofs become flying brands and are carried by the wind to other
locations and thereby spread fire quickly. Recent Grand Jury Report findings support
this concern.
F. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of San Juan Capistrano held on the 15th day of November 2016.

PAM PATTERTSON, ESQ., MAYOR

MARIAM MORRIS, CITY CLERK

STATE OF CALIFORNIA )
COUNTY OF ORANGE )SS
CITY OF SAN JUAN CAPISTRANO )

I, MARIA MORRIS, appointed City Clerk of the City of San Juan Capistrano, do hereby certify that the foregoing is a true and correct copy of Ordinance No. 1040 which was regularly introduced and placed upon its first reading at the Regular Meeting of the City Council on the 18th day of October 2016, and that thereafter, said Ordinance was duly adopted and passed at the Regular Meeting of the City Council on the 15th day of November 2016, by the following vote, to wit:

AYES: COUNCIL MEMBERS: Allevato, Perry, Ferguson and Mayor Patterson
NOES: COUNCIL MEMBERS: Reeve
ABSENT: COUNCIL MEMBERS: None

MARIAM MORRIS, CITY CLERK
STATE OF CALIFORNIA  )
COUNTY OF ORANGE    ) ss
CITY OF SAN JUAN CAPISTRANO )

I, MARIA MORRIS, declare as follows:

That I am the duly appointed and qualified City Clerk of the City of San Juan Capistrano; That in compliance with State laws, Government Code section 36933(1) of the State of California, on the 20th day of October 2016, at least 5 days prior to the adoption of the ordinance, I caused to be posted a certified copy of the proposed ordinance entitled:


This document was posted in the Office of the City Clerk.

MARIA MORRIS, CITY CLERK
San Juan Capistrano, California
That I am the duly appointed and qualified City Clerk of the City of San Juan Capistrano; that in compliance with State laws, Government Code section 36933(1) of the State of California.

On the 21st day of November 2016, I caused to be posted a certified copy of Ordinance No. 1040, adopted by the City Council on October 4, 2016, entitled:


This document was posted in the Office of the City Clerk.

MARIA MORRIS, CITY CLERK
San Juan Capistrano, California