

**BUILDING STANDARDS COMMISSION**

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



February 21, 2014

Gabriel Linares  
Building Official  
City of Brea  
1 Civic Center Circle  
Brea, CA 92821

RE: Ordinance #1171

Dear Mr. Linares:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on January 16, 2014.

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

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

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

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

Sincerely,

A handwritten signature in blue ink that reads "Enrique M. Rodriguez".

Enrique M. Rodriguez  
Associate Construction Analyst

cc: Chron  
Local Filings



City of Brea

December 19, 2013.

California Building Standards Commission  
2525 Natomas Park Dr., Suite 130  
Sacramento, California 95833-2936

**RE: City of Brea, Building Code Adoption Ordinance**

Mr. Jim McGowan:

On December 17, 2013, The City of Brea adopted the **2013 California Building Standards Code (Title 24)**, Residential, Electrical, Mechanical, Plumbing, Energy and Green Building Standards Codes with local amendments.

The City of Brea has recommended changes and modifications to the CA Codes and has advised that certain said changes and modifications to the 2013 Editions of the California Building Codes are reasonably necessary due to local conditions in the City of Brea and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Code or are reasonably necessary to safeguard life and property within the City of Brea.

The enclosed City Ordinance and resolution of findings is for your files.

If additional information is desired please telephone this office at (714) 471-4900.

Sincerely,

Gabriel Linares, P.E., C.B.O.  
Building Official

Attachment: Ordinance – No. 1171,  
Resolution of Findings

**City Council**

**Brett Murdock**  
*Mayor*

**Christine Marick**  
*Mayor Pro Tem*

**Ron Garcia**  
*Council Member*

**Roy Moore**  
*Council Member*

**Marty Simonoff**  
*Council Member*

## ORDINANCE NO. 1171

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BREA ADOPTING THE 2013 EDITION OF THE CALIFORNIA ADMINISTRATIVE, BUILDING, RESIDENTIAL, MECHANICAL, PLUMBING, ELECTRICAL, GREEN BUILDING STANDARDS, ENERGY, HISTORICAL BUILDING, AND EXISTING BUILDING CODES, AND THE 2012 EDITION OF THE INTERNATIONAL PROPERTY MAINTENANCE CODE, TOGETHER WITH APPENDICES, AMENDMENTS, DELETIONS AND PENALTIES, AND AMENDING TITLE 15 OF THE BREA CITY CODE

### A. RECITALS.

(i) Section 50022, et seq. of the California Government Code authorizes the adoption by reference of codes comprising the California Building Standards Code.

(ii) At least one (1) copy of said Codes, certified as full, true and correct, has been filed in the office of the City Clerk of the City of Brea in accordance with the provisions of California Government Code Section 50022.6.

(iii) A duly noticed public hearing, as required by California Government Code Section 50022.3, has been conducted and concluded prior to the adoption of this Ordinance.

(iv) All legal prerequisites to the adoption of this Ordinance have occurred.

### B. ORDINANCE.

NOW, THEREFORE, the City Council of the City of Brea does hereby ordain as follows:

**SECTION 1.** In all respects as set forth in the Recitals, Part A, of this Ordinance.

**SECTION 2.** Chapters 15.04, 15.08, 15.10, 15.12, 15.16, 15.20, 15.24, 15.28, 15.32, 15.34, and 15.36 of Title 15 of the Brea City Code hereby are repealed; provided, however, that said repeal shall not affect or excuse any violation thereof occurring prior to the effective date of this Ordinance and provided further that the Codes adopted by reference and amended by Ordinance No. 1146 of this City, shall continue to be applicable to construction wherein plans have been submitted for plan check as of the effective date of this Ordinance so long as the initial permit therefore is issued no later than ninety (90) days after the effective date of this Ordinance.

**SECTION 3.** A new Chapter 15.04 is hereby added to Title 15 of the Brea City Code to read as follows:

**“CHAPTER 15.04: ADMINISTRATIVE CODE**

**“Section**

- “15.04.010 2013 California Administrative Code adopted
- “15.04.020 Conflicting provisions

**§ 15.04.010 2013 CALIFORNIA ADMINISTRATIVE CODE ADOPTED**

Except as provided in this chapter, the ‘2013 California Administrative Code’ is hereby adopted in its entirety and shall be and become the Administrative Code of the City of Brea.

**§ 15.04.020 CONFLICTING PROVISIONS**

In the event of a conflict between any provision contained in the Administrative Code and the administrative provisions of the City’s building codes, the more specific provision shall be given effect, unless another applicable provision is determined by the Building Official to more fully provide for the public health and safety and/or will more fully promote the intent of the city’s building codes.”

**SECTION 4.**

A new Chapter 15.08 is hereby added to Title 15 of the Brea City Code to read as follows:

**“CHAPTER 15.08: BUILDING CODE**

**“Section**

- “15.08.010 2013 California Building Code adopted
- “15.08.020 2013 California Building Code-Amendments

**§15.08.010 2013 CALIFORNIA BUILDING CODE ADOPTED.**

The ‘2013 California Building Code’, including Appendix J, and incorporating the ‘2012 International Building Code’ as published by the International Code Council, hereby is adopted in its entirety as the Building Code of the City of Brea, together with the amendments, additions, deletions and exceptions set forth in this Chapter.

**§15.08.020 2013 CALIFORNIA BUILDING CODE-AMENDMENTS.**

The California Building Code is hereby amended as follows:

**SECTION 105.2 WORK EXEMPT FROM PERMIT-AMENDED**

**105.2 Work exempt from permit.** Exemptions from *permit* requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. *Permits* shall not be required for the following:

**Building:**

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11 m<sup>2</sup>).
2. Masonry fences not over 5 feet (1524 mm) high.
3. Oil derricks.
4. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
5. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons (18 925 L) and the ratio of height to diameter or width does not exceed 2:1.
6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or *story* below and are not part of an *accessible route*.
7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish 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 (457 mm) deep, do not exceed 5,000 gallons (18 925 L) 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 *dwelling*s.
12. Window *awnings* supported by an *exterior wall* that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Groups R-3 and U occupancies.
13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

#### **Electrical:**

**Repairs and maintenance:** Minor repair work, including the replacement of lamps or the connection of *approved* portable electrical equipment to *approved* permanently installed receptacles.

**Radio and television transmitting stations:** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

**Temporary testing systems:** A *permit* shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

#### **Gas:**

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or

make such equipment unsafe.

**Mechanical:**

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds (5 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

**Plumbing:**

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with the new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

**SECTION [F]903.2 WHERE REQUIRED-AMENDED**

**[F]903.2 Where required.** Approved automatic sprinkler systems in buildings and structures shall be provided in the following locations:

1. **New buildings:** Notwithstanding any applicable provisions of Sections [F]903.2.1 through [F]903.2.19, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area, as defined in Section 202, exceeds 5,000 square feet (465 m<sup>2</sup>), or the building is more than two stories in height, regardless of fire areas or allowable area.
2. **New buildings in the VHFHSZ:** An automatic sprinkler system shall be provided in all new occupancies in the VHFHSZ.

- b. An addition when the existing building is already provided with automatic sprinklers; or
- c. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

#### **SECTION [F]904.10.4 CLEAN-AGENT SYSTEM EXHAUST-AMENDED**

**[F]904.10.4 Clean-agent system exhaust.** In rooms without windows that open to the outside, an approved method shall be provided to exhaust any clean-agent from the room after system discharge.

#### **SECTION [F]905.4 LOCATION OF CLASS I STANDPIPE HOSE CONNECTIONS-AMENDED BY ADDING ITEM 7 AS FOLLOWS:**

- 8. The centerline of the 2.5 inches (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) above and no more than 24 inches above the finished floor.

#### **SECTION [F]907.3.1 DUCT SMOKE DETECTORS-AMENDED**

**[F]907.3.1 Duct smoke detectors.** Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is installed. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the California Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

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

#### **SECTION [F] 907.5.2.2 EMERGENCY VOICE/ALARM COMMUNICATION SYSTEMS-AMENDED**

**[F]907.5.2.2 Emergency voice/alarm communication systems.** Emergency voice/alarm communication systems required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plan required by Section 404. In high-rise buildings and Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level

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

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

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

**SECTION [F]907.9.1 WHERE REQUIRED IN EXISTING BUILDINGS AND STRUCTURES-AMENDED**

**[F]907.9.1 Occupancy requirements.** A fire alarm system shall be installed in accordance with Sections [F]907.3.1.1 through [F]907.3.1.8. Fire alarm systems shall be upgraded and extended throughout each building during tenant improvements in buildings previously equipped with a manual fire alarm system. This upgrade shall only extend to the area of tenant improvement.

**TABLE 1505.1-AMENDED**

**TABLE 1505.1<sup>a</sup>  
MINIMUM ROOF COVERING CLASSIFICATIONS  
TYPES OF CONSTRUCTION**

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

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m<sup>2</sup>.

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

**SECTION 1505.1.3 ROOF COVERINGS WITHIN ALL OTHER AREAS-AMENDED**

**1505.1.3 Roof coverings within all other areas.** The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

**SECTION 1505.5 NON-CLASSIFIED ROOFING- DELETED  
SECTION 1505.7 SPECIAL PURPOSE ROOFS-DELETED**

**SECTION 1807.1.6 PRESCRIPTIVE DESIGN OF CONCRETE AND MASONRY**

## FOUNDATION WALLS-AMENDED

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

## SECTION 1809.7 PRESCRIPTIVE FOOTINGS FOR LIGHT-FRAME CONSTRUCTION-AMENDED

**1809.7 Prescriptive footings for light-frame construction.** Where a specific design is not provided, concrete or masonry-unit footings supporting walls of light-frame construction shall be permitted to be designed in accordance with Table 1809.7. Prescriptive footings in Table 1809.7 shall not exceed one story above grade plane for structures assigned to Seismic Design Category D, E or F.

TABLE 1809.7  
PRESCRIPTIVE FOOTINGS SUPPORTING WALLS OF  
LIGHT-FRAME CONSTRUCTION <sup>a, b, c, d, e</sup>

NUMBER OF FLOORS SUPPORTED BY THE FOOTING <sup>f</sup>	WIDTH OF FOOTING (Inches)	THICKNESS OF FOOTING (inches)
1	12	6
2	15	6
3	18	8

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm

- Depth of footings shall be in accordance with Section 1809.4.
- The ground under the floor shall be permitted to be excavated to the elevation of the top of the footing.
- See Section 1908 for additional requirements for concrete footings of structures assigned to Seismic Design Category C, D, E or F.
- For thickness of foundation walls, see Section 1807.1.6.
- Footings shall be permitted to support a roof addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor.

## SECTION 2308.3.4 BRACED WALL LINE SUPPORT-AMENDED

**2308.3.4 Braced wall line support.** Braced wall lines and interior bearing walls shall be supported by continuous foundations.

## SECTION 2304.9.1 FASTENER REQUIREMENTS-AMENDED

**2304.9.1 Fastener requirements.** Connections for wood members shall be designed in accordance with the appropriate methodology in Section 2301.2. The number and size of fasteners connecting wood members shall not be less than that set forth in Table 2304.9.1. Staple fasteners in Table 2304.9.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E or F.

**Exception:** Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the building official.

## SECTION 3109.2 DEFINITIONS-AMENDED BY ADDING NEW DEFINITION

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

### **SECTION 3109.3 PUBLIC SWIMMING POOLS-AMENDED**

**Section 3109.3 Public swimming pools.** Public swimming pools shall be completely enclosed by a fence at least 5 feet in height or a screen enclosure. Openings in the fence shall not permit the passage of a 4-inch-diameter sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates.

### **SECTION 3109.4.1 BARRIER HEIGHT AND CLEARANCE-AMENDED**

**Section 3109.4.1 Barrier height and clearances.** The top of the barrier shall be at least 60 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches measured on the side of the barrier that faces away from the swimming pool.

### **APPENDIX J-ADOPTED.**

Appendix J of the California Building Code is hereby adopted by reference in its entirety with no amendments."

### **SECTION 5.**

A new Chapter 15.10 is hereby added to Title 15 of the Brea City Code to read as follows:

### **"CHAPTER 15.10 2013 CALIFORNIA RESIDENTIAL CODE**

#### **Section**

- 15.10.010 2013 California Residential Building Code adopted
- 15.10.020 2013 California Residential Building Code-Amendments

### **§15.10.010 2013 CALIFORNIA RESIDENTIAL CODE ADOPTED.**

The '2013 California Residential Code' and incorporating the '2012 International Residential Code' as published by the International Code Council, is hereby adopted in its entirety as the Residential Building Code of the City of Brea, together with the amendments, additions, deletions and exceptions set forth in this Chapter.

### **§15.10.020 2013 CALIFORNIA RESIDENTIAL CODE-AMENDMENTS.**

The California Residential Code is hereby amended as follows:

### **TABLE R301.2(1)-AMENDED**

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

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY <sup>f</sup>	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP <sup>e</sup>	ICE BARRIER UNDERLAYMENT REQUIRED <sup>h</sup>	FLOOD HAZARDS <sup>g</sup>	AIR FREEZING INDEX <sup>i</sup>	MEAN ANNUAL TEMP <sup>j</sup>
	Speed <sup>d</sup> (mph)	Topographic effects <sup>k</sup>		Weathering <sup>a</sup>	Frost line Depth <sup>b</sup>	Termite <sup>c</sup>					
Zero	85	No	D <sub>2</sub> or E	Negligible	12- 24"	Very Heavy	43	No	See Exhibit B	0	60

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

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. Temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. 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°F)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- 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.

**SECTION R403.1.3 SEISMIC REINFORCING. EXCEPTION-DELETED**

**SECTION R405.1 CONCRETE OR MASONRY FOUNDATIONS. EXCEPTION-DELETED**

**SECTION R902.1 ROOFING COVERING MATERIAL-AMENDED**

**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.

**SECTION R902.1.3 ROOF COVERINGS IN ALL OTHER AREAS-AMENDED**

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

**SECTION R902.2 FIRE-RETARDANT-TREATED SHINGLES AND SHAKES-AMENDED**

**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."

**SECTION 6.**

A new Chapter 15.12 is hereby added to Title 15 of the Brea City Code to read as follows:

**"CHAPTER 15.12: ELECTRICAL CODE**

"Section

- "15.12.010 2013 California Electrical Code adopted
- "15.12.020 2013 California Electrical Code-Amendments

**§15.12.010 2013 CALIFORNIA ELECTRICAL CODE ADOPTED.**

Except as provided in this chapter, the '2013 California Electrical Code', based on the 2011 National Electrical Code as published by the National Fire Protection Association, is hereby adopted in its entirety as the Electrical Code of the City of Brea, regulating and controlling the installation, arrangement, alteration, repair, use and other operation of electrical wiring, connections, fixtures and electrical appliances on premises within the City.

**“§15.12.020 CALIFORNIA ELECTRICAL CODE-AMENDMENTS.**

[Reserved for future amendments]”

**Section 7**

A new Chapter 15.16 is hereby added to Title 15 of the Brea City Code to read as follows:

**“CHAPTER 15.16: MECHANICAL CODE**

“Section

“15.16.010 2013 California Mechanical Code adopted

“15.16.020 2013 California Mechanical Code-Amendments

**§15.16.010 2013 CALIFORNIA MECHANICAL CODE ADOPTED.**

Except as provided in this chapter, the ‘2013 California Mechanical Code’, based on the ‘2012 Uniform Mechanical Code’ as published by the IAMPO, is hereby adopted in its entirety as the Mechanical Code of the City of Brea, regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance of heating, ventilating, cooling, refrigeration systems, incinerators and other miscellaneous heat producing appliances.

**§15.16.020 2013 CALIFORNIA MECHANICAL CODE-AMENDMENTS**

[Reserved for future amendments]”

**SECTION 8**

A new Chapter 15.20 is hereby added to Title 15 of the Brea City Code to read as follows:

**“CHAPTER 15.20: PLUMBING CODE**

“Section

“15.20.010 2013 California Plumbing Code adopted

“15.20.020 2013 California Plumbing Code-Amendments

**§15.20.010 2013 CALIFORNIA PLUMBING CODE ADOPTED.**

Except as provided in this chapter, the ‘2010 California Plumbing Code’, based on the ‘2012 Uniform Plumbing Code’ as published by the International Association of Plumbing and Mechanical Officials, is hereby adopted in its entirety as the Plumbing Code of the City of Brea, regulating erection, installation, alteration, repair, relocation, replacement, maintenance or use of plumbing systems within the City.

**§15.20.020 2013 CALIFORNIA PLUMBING CODE-AMENDMENTS**

[Reserved for future amendments]”

**SECTION 9.**

A new Chapter 15.24 is hereby added to Title 15 of the Brea City Code to read as follows:

**“CHAPTER 15.24: GREEN BUILDING STANDARDS CODE**

“Section

- “15.24.010 2013 California Green Building Standards Code adopted
- “15.24.020 2013 California Green Building Standards Code-Amendments

**§15.24.010 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE ADOPTED.**

Except as provided in this chapter, the ‘2013 California Energy Code’ is hereby adopted in its entirety and shall be and become the Green Building Standards Code of the City of Brea.

**§15.24.020 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE-AMENDMENTS**

The 2013 California Green Building Standards Code is hereby amended as follows:

**SECTION 202 DEFINITIONS–AMENDED BY ADDING NEW DEFINITION**

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

**SECTION 10.**

A new Chapter 15.28 is hereby added to Title 15 of the Brea City Code to read as follows:

**“CHAPTER 15.28: ENERGY CODE**

“Section

- “15.28.010 2013 California Energy Code adopted
- “15.28.020 2013 California Energy Code-Amendments

**§15.28.010 2013 CALIFORNIA ENERGY CODE ADOPTED.**

Except as provided in this chapter, the ‘2013 California Energy Code’, is hereby adopted in its entirety and shall be and become the Energy Code of the City of Brea, regulating erection, installation, alteration, repair, relocation, replacement, maintenance or use of energy systems.

**§15.28.020 2013 CALIFORNIA ENERGY CODE-AMENDMENTS.**

[Reserved for future amendments]”

**SECTION 11.**

A new Chapter 15.32 is hereby added to Title 15 of the Brea City Code to read as follows:

**“CHAPTER 15.32: PROPERTY MAINTENANCE CODE**

“Section

“15.32.010 2012 International Property Maintenance Code adopted

**§15.32.010 2012 INTERNATIONAL PROPERTY MAINTENANCE CODE ADOPTED.**

The 'International Property Maintenance Code, 2012 Edition', as published by the International Code Council, is hereby adopted in its entirety as the Property Maintenance Code of the City of Brea, regulating and controlling the conditions and maintenance of all property, buildings and structures; providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use, and the demolition of such existing structures as herein provided; providing for the issuance of permits and collection of fees therefor; provided, however, that notwithstanding the adoption of this code, the city may utilize and enforce any other provision of any code of the city relating to property maintenance.”

**SECTION 12.**

A new Chapter 15.34 is hereby added to Title 15 of the Brea City Code to read as follows:

**“CHAPTER 15.34: HISTORICAL BUILDING CODE**

“Section

“15.34.010 2013 California Historical Building Code adopted

“15.34.020 2013 California Historical Building Code-Amendments

**§15.34.010 2013 CALIFORNIA HISTORICAL BUILDING CODE ADOPTED.**

Except as provided in this chapter, the '2013 California Historical Building Code', is hereby adopted in its entirety and shall be and become the Historical Building Code of the City of Brea, regulating for the preservation, restoration, rehabilitation, relocation or reconstruction of buildings or properties designated as qualified historical buildings or properties.

**§15.34.020 2013 CALIFORNIA HISTORICAL BUILDING CODE-AMENDMENTS**

[Reserved for future amendments]”

**SECTION 13.**

A new Chapter 15.36 is hereby added to Title 15 of the Brea City Code to read as follows:

**“CHAPTER 15.36: EXISTING BUILDING CODE**

“Section

“15.36.010 2013 California Existing Building Code adopted

“15.36.020 2013 California Existing Building Code-Amendments

**§15.36.010 2013 CALIFORNIA EXISTING BUILDING CODE ADOPTED.**

Except as provided in this chapter, the ‘2013 California Existing Building Code’, is hereby adopted in its entirety and shall be and become the Existing Building Code of the City of Brea, regulating the alteration, repair, addition and change of occupancy of existing structures.

**“§15.36.020 2013 CALIFORNIA EXISTING BUILDING CODE-AMENDMENTS**

[Reserved for future amendments]”

**SECTION 14. PENALTIES.**

It shall be unlawful for any person, firm, partnership, or corporation to violate any provision or to fail to comply with any of the requirements of this Ordinance or any of the Codes hereby adopted. Unless deemed to be an infraction, any person, firm, partnership or corporation violating any provision of this Ordinance or any of the Codes hereby adopted or failing to comply with any of their requirements shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine not exceeding one thousand dollars (\$1,000.00), or by imprisonment not exceeding six (6) months, or by both such fine and imprisonment. Each and every person, firm, partnership, or corporation shall be deemed guilty of a separate offense for each and every day or any portion thereof during which any violation of any of the provisions of this Ordinance or the Codes hereby adopted is committed, continued or permitted by such person, firm, partnership or corporation, and shall be deemed punishable therefore as provided in this Ordinance.

**SECTION 15. CIVIL REMEDIES**

The violation of any of the provisions of this Ordinance or any of the Codes hereby adopted shall constitute a nuisance and may be abated by the City through civil process by means of restraining order, preliminary or permanent injunction or in any other manner provided by law for the abatement of such nuisances.

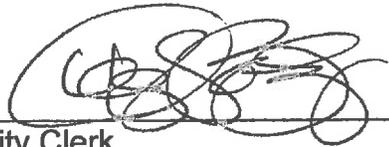
**SECTION 16. SEVERABILITY**

The City Council declares that, should any provision, section, paragraph, sentence or word of this Ordinance or the Codes hereby adopted be rendered or declared invalid by any final court action in a court of competent jurisdiction, or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences and words of this Ordinance and the Codes hereby adopted shall remain in full force and effect.

**SECTION 17.** The City Clerk shall certify to the adoption of this Ordinance.

APPROVED AND ADOPTED this 17th day of December, 2013.

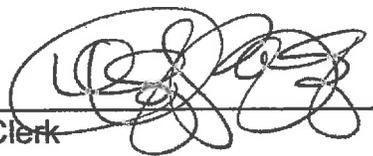
  
\_\_\_\_\_  
Mayor

ATTEST:   
\_\_\_\_\_  
City Clerk

I, Cheryl Balz, City Clerk of the City of Brea, do hereby certify that the foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Brea, held on the 5th day of November, 2013, and was finally passed at a regular meeting of the City Council of the City of Brea on the 17th day of December, 2013, by the following vote:

AYES: COUNCIL MEMBERS: Garcia, Moore, Simonoff, Marick, Murdock  
NOES: COUNCIL MEMBERS: None  
ABSENT: COUNCIL MEMBERS: None  
ABSTAINED: COUNCIL MEMBERS: None

DATED: December 23, 2013

  
\_\_\_\_\_  
City Clerk

THE FOREGOING INSTRUMENT IS A FULL TRUE AND  
CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE  
DATE: December 23, 2013  
CITY CLERK OF THE CITY OF BREA, CALIFORNIA

ATTEST:   
\_\_\_\_\_

## RESOLUTION NO. 2013-065

### A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BREA, CALIFORNIA, SETTING FORTH FINDINGS FOR REQUIRED AMENDMENTS TO THE 2013 CALIFORNIA CODES RELATIVE TO LOCAL CLIMATIC, TOPOGRAPHIC AND GEOLOGIC CONDITIONS

#### A. RECITALS:

(i) Health and Safety Code Section 17958 provides that the City of *Brea* shall adopt Ordinances and regulations imposing the same or modified or changed requirements as are contained in the regulations adopted by the State pursuant to Health and Safety Code Section 17922; and

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

(iii) Health and Safety Code Section 17958.5(a) permits the City to make modifications or changes to the Codes, which are reasonably necessary because of local climatic, geologic, or topographic conditions; and

(iv) Health and Safety Code Section 17958.7 requires that the City Council, before making any modifications or changes to the Codes, shall make an express finding that such changes or modifications are reasonably necessary because of local climatic, geologic, or topographic conditions; and

(v) the *Community Development* Department have recommended that changes and modifications be made to the Codes and have advised that certain said changes and modifications to the California Codes are reasonably necessary due to local conditions in the City of *Brea* and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes or are reasonably necessary to safeguard life and property within the City of {City}.

#### B. RESOLUTION:

**NOW, THEREFORE**, be it is found, determined and resolved by the City Council of the City of Brea as follows:

Amendments related to life and fire safety contained in Sections 403, 403.1, 403.1.1, 403.4.7.2, 403.4.8.1, 412.7, Table 1505.1, and 1505.1.3 of the 2010 Edition of the California Building Code, and Sections R403.1.3, R405.1, R902.1, R902.1.3, and R902.2 of the 2010 Edition of the California Residential Code, and Sections 202 and 4.304.1 of the 2010 Edition of the California Green Building Standards Code as recommended by the *Community Development* Department are hereby found to be reasonably necessary due to the following local conditions:

**A. Climatic Conditions**

1. Hot, dry Santa Ana winds are common to all areas within the City of Brea and Orange County in general. These winds, which can cause small fires to spread quickly, are a contributing factor to the high fire danger in the area, and create the need for an increased level of fire protection. This added protection will supplement normal fire department response available and provide immediate protection for life and safety of multiple occupants during fire occurrences.
2. Orange County and the City of Brea are located in a semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles, to rapid ignition and spread of fire. Therefore, there exists a need for additional fire protection measures.

**B. Geologic Conditions**

1. Orange County and the City of Brea 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";
2. Traffic and circulation congestion presently existing in the City of Brea 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.
3. 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 75 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 fire fighting apparatus and personnel arrive on the scene.

The City of Brea 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.

The City of Brea 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 75-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.

4. Areas of Brea lie within the Brea-Olinda oil field, and is known for its surface seeps of naturally occurring oil and tar since the days of the Spanish missionaries ("brea" is the Spanish word for tar). Before development, asphaltum, tar, and active oil seepage impacted approximately 10% of this 280-acre site. Although crude oil is not classified as a hazardous substance by the State of California, oil seeps and tar are generally viewed as unsightly and a "nuisance hazard."

Methane gas seepage has also been detected at several locations in the Brea. Under normal atmospheric conditions methane gas is not a hazard. However, at high concentrations it is flammable, and at concentrations between 55,000 and 140,000 ppm (parts per million), it is explosive. Although it is not toxic, it can lead to asphyxiation if it replaces oxygen in an enclosed space. Methane is lighter than air; therefore, it tends to migrate upward through permeable sediments, rock fractures, and man-made pathways. If allowed to accumulate inside buildings, dangerous explosions can result. If free of impurities, methane is colorless and odorless, making it difficult for a building's inhabitants to detect. Therefore areas in Brea have a need for increased protection and mitigation from methane gas.

Additional amendments have been made to Codes. On the recommendation of the Community Development Department, such amendments are hereby found to be either

administrative or procedural in nature or concern themselves with subjects not covered in such Codes. The changes made include provisions making each of said Codes compatible with other Codes enforced by the City.

Amendments to the 2010 Edition of the California Codes are found reasonably necessary based on the climatic and/or geologic conditions cited in Section 1 of this resolution and are listed as follows:

<u>Building Code Section</u>	<u>Findings in Section 1</u>
CBC 105.2,	B-1, B-2
CBC 907.3.1, 907.5.2.2, 907.9.1	A-1, B-2, B-3
CBC 903.2, 903.2.8, 904.10.4, 905.4	A-1, A-2, B-2
CBC 3109.2, 3109.3, 3109.4.1	B-2
CBC 1505.1, 1505.1.3, 1505.5, 1505.7	A-1, A-2, B-2, B-4
CRC R902.1, R902.1.3, R902.2	A-1, A-2, B-2, B-4
CBC 1807.1.6, 1809.7, 2308.3.4, 2304.9.1	B-1
CRC R301.2 (1), R403.1.3, R405.1	B-1
<u>Fire Code Section</u>	<u>Findings in Section 1</u>
CAFC 105.6.15, 304.1.2(7)(E), 305.5, 305.5.1, 305.5.1.1, 305.5.1.2, 305.5.2, 320, 322, 323, 324	A-1, A-2 A-1, A-2
CAFC 321.	G-4
CAFC 325.1, 326, 327,328, 503.2.1-503.2.6	A-1, A-2, B-2
503.6, 503.7, 506.1, 506.1, 507.5, 507.5.1	A-1, A-2
510, 608.1, 608.10, 903.2, 903.2.8, 904.10.4, 905.4, 907.3.1, 907.5.2.2, 907.9.1,	A-1, A-2 A-1, A-2
2002.1; 2008.1-2008.1.11,	B-3
2808.1-2808.11.2, 3310.1.1, 4908.1, 4908.2	A-1, A-2
5608.2-5611, 6004.2.2.7, A-2	A-1,
<u>Fire Code Referenced Standards Section</u>	<u>Findings in Section 1</u>
NFPA 13	
6.8.3, 6.8.4, 8.3.3.1, 8.16.1.3.4,	A-1, A-2
8.17.1.1.1, 10.3.5.3, 10.5.2.5, 10.9.1, 11.1.1.2, 23.2.1.1,	A-1, A-2
NFPA 13R	
6.11.1, 6.11.2, 611.5, 6.16.1,	A-1, A-2

NFPA 13D

4.1.3, 4.1.3.1, 4.1.3.2, 4.1.3.3, 4.1.3.4, 7.1.2, 7.3, 7.3.1, A-1, A-2

7.6, 8.69, 11.2.1.1 A-1, A-2

NFPA 14

6.4.5.4, 7.3.1.1, A-1, A-2

NFPA 24,

5.9.1.3, 5.9.1.3.1, 6.2.11(5), 6.3.3, 6.6.1, 10.1.6.3, 10.3.6.2, A-1, A-2

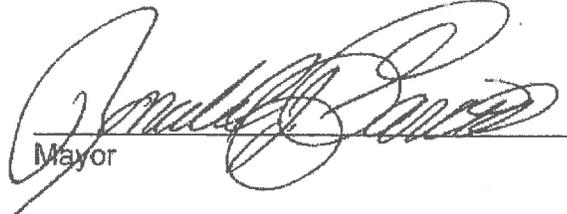
10.6.3.1, 10.6.4, 10.8.2.5, 10.9.1 A-1, A-2

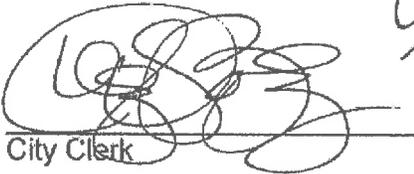
NFPA 72

23.8.2, 23.8.2.3, 26.2.3.1 A-1, A-2

The aforementioned amendments have been incorporated in detail in Ordinance Nos. 1171 and 1172, respectively.

**APPROVED and ADOPTED** 5th day of November, 2013.

  
Mayor

ATTEST:   
City Clerk



**BUILDING STANDARDS COMMISSION**

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



February 10, 2014

Julie Kunze  
Deputy Chief/Fire Marshal  
City of Brea  
1 Civic Center Circle  
Brea, CA 92821

RE: Ordinance #1172

Dear Ms. Kunze:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on January 16, 2014.

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

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

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

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

Sincerely,

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

Enrique M. Rodriguez  
Associate Construction Analyst

cc: Chron  
Local Filings



City of Brea

RECEIVED  
2014 JAN 15 PM 3:21  
CITY OF BREA  
CIVIC & CULTURAL CENTER  
1000 N. GARDEN AVENUE  
BREA, CALIFORNIA 92610

January 13, 2014

California Building Standards Commission  
2525 Natomas Park Drive, Suite 130  
Sacramento, CA 95833-2936

**RE: City of Brea, Fire Code Adoption Ordinance**

Mr. Jim McGowan:

On December 17, 2013, the City of Brea adopted the **2013 California Fire Code**, with local amendments.

The City of Brea has recommended changes and modifications to the CA Code and has advised that certain said changes and modifications to the 2013 Edition of the California Fire Code are reasonably necessary due to local conditions in the City of Brea and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Code or are reasonably necessary to safeguard life and property within the City of Brea.

The enclosed City Ordinance and resolution of findings is for your files.

If additional information is desired, please telephone this office at 714.990.7658.

Sincerely,

Julie Kunze, Deputy Chief/Fire Marshal  
Brea Fire Department

Attachment: Ordinance – No. 1172  
Resolution of Findings

**City Council**

**Brett Murdock**  
*Mayor*

**Christine Marick**  
*Mayor Pro Tem*

**Ron Garcia**  
*Council Member*

**Roy Moore**  
*Council Member*

**Marty Simonoff**  
*Council Member*

## ORDINANCE NO. 1172

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BREA ADOPTING BY REFERENCE THE 2013 EDITION OF THE CALIFORNIA FIRE CODE, INCLUDING APPENDICES CHAPTER 4, A, B, BB, E, F, G, H, I and K, AND EXCLUDING APPENDICES C, CC, D AND J, TOGETHER WITH CERTAIN AMENDMENTS, ADDITIONS, DELETIONS AND EXCEPTIONS, INCLUDING FEES AND PENALTIES, AND AMENDING TITLE 16 OF THE BREA CITY CODE

### A. RECITALS.

(i) Government Code Section 50020, et seq., authorizes the adoption, by reference, of the 2013 California Fire Code.

(ii) At least one (1) copy of the Code adopted herein by reference, certified as a full, true and correct copy thereof by the City Clerk of the City of Brea, has been filed in the office of the City Clerk in accordance with the provisions of California Government Code Section 50022.6.

(iii) A duly noticed public hearing, as required by California Government Code Section 50022.3, has been conducted and was concluded prior to the adoption of this Ordinance.

(iv) All legal prerequisites to the adoption of this Ordinance have occurred.

### B. ORDINANCE.

**NOW, THEREFORE,** the City Council of the City of Brea does hereby find, determine and ordain as follows:

**SECTION 1.** In all respects, as set forth in the Recitals, Part A, of this Ordinance.

**SECTION 2.** Chapter 16.04 of Title 16 of the Brea City Code is hereby repealed; provided, however that said repeal shall not apply to or excuse any violation thereof occurring prior to the effective date of this Ordinance and provided further that the 2010 California Fire Code, as adopted by reference by the City of Brea, shall continue to be applicable to construction wherein plans have been submitted for plan check prior to the effective date of this Ordinance, so long as the initial permit therefore is issued no later than ninety (90) days after such effective date.

**SECTION 3.** A new Chapter 16.04 is hereby added to Title 16 of the Brea City Code to read as follows:

## **"CHAPTER 16.04: BREA FIRE CODE**

### **"Sections**

- "16.04.010 Fire Code adopted
- "16.04.020 Enforcement and inspections
- "16.04.030 Chapter 1 Scope and administration amendments
- "16.04.040 Chapter 2 Definitions amendments
- "16.04.050 Chapter 3 General requirements amendments
- "16.04.060 Chapter 5 Fire service features amendments
- "16.04.070 Chapter 6 Building services and system amendments
- "16.04.080 Chapter 9 Fire protection systems amendments
- "16.04.090 Chapter 20 Aviation Facilities amendments
- "16.04.100 Chapter 28 Lumber yards and woodworking facilities amendments
- "16.04.110 Chapter 33 Fire safety during construction and demolition amendments
- "16.04.120 Chapter 49 Requirements for wildland interface areas amendments
- "16.04.130 Chapter 56 Explosives and fireworks amendments
- "16.04.140 Chapter 60 Highly toxic and toxic materials amendments
- "16.04.150 Chapter 80 Referenced standards amendments
- "16.04.160 Fees added

### **§16.04.010 FIRE CODE ADOPTED.**

The 2013 Edition of the California Fire Code including Appendices Chapter 4, A, B, BB, E, F,G, H, I, and K and excluding Appendices C, CC, D and J, together with the following amendments, additions, deletions and exceptions, are hereby adopted by reference as the Fire Code of the City of Brea.

### **§16.04.020 ENFORCEMENT AND INSPECTIONS.**

The California Fire Code, with amendments, shall be enforced by the Brea Fire Department. The Fire Chief of the Brea Fire Department may detail such members of the fire department as inspectors as shall be necessary from time to time.

### **§16.04.030 CHAPTER 1 SCOPE AND ADMINISTRATION AMENDMENTS.**

**Section 101.1 Title** is hereby revised as follows:

**Section 101.1 Title.** This Code shall be known as the Brea Fire Code, hereinafter referred to as 'this Code.'

**Section 102.10 Conflicting provisions** is hereby revised as follows:

**Section 102.10 Conflicting provisions.** Where there is a conflict between a general requirement and a specific requirement, the Fire Code Official shall decide which requirement meets the general intent of this Code.

**Section 105.6.15 Fire hydrants and valves** is hereby deleted in its entirety.

**Section 105.6.47 Additional permits** is hereby amended by adding the following:

**Cut Christmas trees.** No person shall sell, display or store for resale, in the City of Brea, any cut Christmas tree, unless a permit therefore has been issued by the Chief.

**Oil and natural gas wells.** To drill, own, operate, or maintain an oil or natural gas well.

**Potentially hazardous general use.** To conduct an activity or operation that is not specifically addressed by other permits, but which is likely to produce conditions hazardous to life or property.

**Recreational fires.** To conduct a recreational fire, as defined in Section 307.

**Rifle range.** To establish, maintain, or operate a rifle range.

**Residential based care facilities.** Including, but not limited to, care for the elderly, care for the developmentally disabled, and half-way homes shall be regulated under this section and a permit issued by the Fire Department to each business engaging in these operations.

**Section 107.6 Occupant count** is hereby added as follows:

**107.6 Occupant count.** The supervisor of each place of assembly shall have an effective system to keep count of the number of occupants present in the assembly area. If the Chief determines at any time that an accurate count of occupants is not being maintained, the occupancy shall be cleared until an accurate count can be made.

**Section 109.4 Violation penalties** is hereby amended to read as follows:

**109.4 Violation penalties.** Persons who shall violate any provision of this Code or shall fail to comply with any of its requirements, or who shall erect, install, alter, repair or do work in violation of the approved construction documents used under provisions of this Code, shall be guilty of a misdemeanor unless such violation is expressly made punishable as an infraction. Alternatively or in addition, any violation of this Code may be punished by administrative penalty and issuance of an administrative citation.

**Section 111.4 Failure to comply** is hereby revised as follows:

**111.4 Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be guilty of a misdemeanor.

**Section 113.3 Work Commencing before permit issuance** is hereby revised as follows:

**113.3 Work commencing before permit issuance.** Any person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to an additional fee that is equal to the original permit fee, which shall be in addition to the required per fees.

#### **§16.04.040 CHAPTER 2 DEFINITIONS AMENDMENTS**

**Section 202 GENERAL DEFINITIONS** is hereby amended by adding the following definitions:

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

**HAZARDOUS FIRE AREA.** All areas identified within Section 4906.2 and other areas as determined by the Fire Code Official do to the presence of combustible vegetation, or the proximity of the property to an area that contains combustible vegetation.

**JURISDICTIONAL AREA.** Any area under the jurisdiction, including the territorial area, of the City of Brea, including all areas annexed thereto after adoption of this Code.

**RIFLE RANGE.** Any indoor or outdoor firing shooting or target range established, maintained or operated for the discharge of a rifle, pistol, revolver, shotgun or firearm.

**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.

**VEHICLE FUELING APPLIANCE.** A listed natural gas compressor package not containing storage, designed for the unattended dispensing of natural gas into the fuel tanks of motor vehicles.

#### **§16.04.050 CHAPTER 3 GENERAL REQUIREMENTS AMENDMENTS.**

**Section 304.1.2 (7) (E)** is hereby added as follows:

(E) Fuel Modification Plan Guideline for High Fire Hazard Areas

**Section 305.5 Outdoor fires** is hereby added as follows:

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

**305.5.1 Where prohibited.** Outdoor fires shall not be built, ignited or maintained in fuel modification areas, Wildfire Risk Areas (WRA) and Fire Hazard Severity Zones (FHSZ), except by permit from the Fire Code Official.

**Exception:** A permit is not required for the following:

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

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

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

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

**Section 307.1.1 Prohibited open burning** is hereby revised as follows:

**307.1.1 Prohibited open burning.** Open burning in fire hazard zones shall be prohibited. Open burning on all other areas shall be prohibited when atmospheric conditions or local circumstances make such fires hazardous.

**SECTION 319 CHRISTMAS TREE SALES** is hereby added as follows:

## SECTION 319

### CHRISTMAS TREE SALES

#### **319.1 General.**

No person shall sell, display for sale, or store for sale in the City of Brea, any cut Christmas tree, unless a permit therefor has been obtained from the Fire Department. Applicants must comply with all rules and regulations and obtain all required permits and licenses including a City business license.

#### **319.1.1 Permit - When issued.**

Permits to sell, display for sale, or store for sale cut Christmas trees in the City of Brea may only be issued for the period from November 5 to December 31. The applicant must show that the proposed location and method of any activity will not constitute a fire hazard or violation of law.

#### **319.1.2 Cleanup deposit.**

Each applicant, if other than a permanent established year-round business, shall pay a cleanup guarantee deposit in such amount as established by Resolution to the City Council. The applicant must agree that not later than the tenth day of January following the issuance of such permit, all unsold trees, combustible waste and accumulation of sawdust will be removed from the permitted location and disposed of properly. Following the tenth day of January the City may remove and dispose of accumulations and apply the deposit to costs, including overhead expenses (30%), incurred by such removal.

#### **319.1.3 Return of deposit.**

The Fire Marshal will inspect permitted sites as soon as possible after January 10 of each year. Permittees who have completed the site cleanup will receive a refund of the cleanup guarantee deposit.

#### **319.1.4 Liability.**

Each permittee shall provide general liability insurance as required by the City of Brea Risk Manager, protecting against any claim for any damages caused in any manner from the use of such lot or the keeping or sale of any Christmas trees therein, or otherwise in the exercise of rights granted by such permit issued pursuant to this Section. A certificate of such insurance shall be filed with the Fire Marshal showing the City as a named insured hereunder.

**Section 320 PROJECTILE FIRING** is hereby added as follows:

## **SECTION 320**

### **PROJECTILE FIRING**

No person shall, in any brush or grass-covered area or area covered with flammable material, possess, fire, or cause to be fired any tracer bullets, tracer charge, flammable propellant model rockets or any type of projectile that discharged smoldering or flammable material. Nothing in this section shall apply to any law enforcement acting in the course of such officer's duties other than target practice.

**SECTION 321 DEVELOPMENT ON OR NEAR LAND CONTAINING OR EMITTING TOXIC, COMBUSTIBLE OR FLAMMABLE GASSES OR VAPORS** is hereby added as follows:

### **SECTION 321**

#### **DEVELOPMENT ON OR NEAR LAND CONTAINING OR EMITTING TOXIC, COMBUSTIBLE OR FLAMMABLE GASSES OR VAPORS**

All projects will be required to conform to the current adopted 'City of Brea Combustible Soil-Gas Guideline'.

**SECTION 322 FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION** is hereby added as follows:

### **SECTION 322**

#### **FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION**

All new buildings and additions to be built or installed in areas containing combustible vegetation shall comply with the following:

1. Preliminary fuel modification plans shall be submitted to and approved by the Fire Code Official concurrent with the submittal for approval of any tentative map.
2. Final fuel modification plans shall be submitted to and approved by the Fire Code Official prior to the issuance of a grading permit.
3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Guideline.
4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval by the Fire Code Official.
5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.
6. Very High Fire Hazard Severity Zone Developer Packet.

**SECTION 323 CLEARANCE OF BRUSH OR VEGETATION GROWTH FROM ROADWAYS** is hereby added as follows:

**SECTION 323**

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

The Fire Code Official is authorized to require areas within 10 feet (3048 mm) on each side of portions of highways, roads, 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 324 UNUSUAL CIRCUMSTANCES** is hereby added as follows:

**SECTION 324**

**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 325 USE OF EQUIPMENT** is hereby added as follows:

**SECTION 325**

**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 325.1 and maintained in effective

working order, or the engine is constructed, equipped and maintained for the prevention of fire.

**Exception:**

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

**Section 325.1 Spark arrestors** is hereby added as follows:

**325.1 Spark arrestors.** Spark arrestors shall comply with the following:

1. The device shall be constructed of nonflammable material specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch (0.58 mm) in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.
2. Spark arresters affixed to the exhaust system of engines or vehicles 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 326 RESTRICTED ENTRY** is hereby added as follows:

**SECTION 326**

**RESTRICTED ENTRY**

The Fire Code Official shall determine and publicly announce when hazardous fire areas shall be closed to entry and when such areas shall again be opened to entry.

**Exception:**

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

**SECTION 327 TRESPASSING ON POSTED PROPERTY** is hereby added as follows:

**SECTION 327**

**TRESPASSING ON POSTED PROPERTY**

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

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

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

**SECTION 328 SKY LANTERNS OR SIMILAR DEVICES** is hereby added as follows:

**SECTION 328**

**SKY LANTERNS OR SIMILAR DEVICES**

Possession or use of a sky lantern or similar device employing a candle, flame or other potential ignition source shall be prohibited.

**§16.04.060 CHAPTER 5 FIRE SERVICE FEATURES AMENDMENTS.**

**Section 503.2.1 Dimensions** is hereby revised as follows:

**503.2.1 Dimensions.** Fire apparatus access roads shall have two (2) unobstructed 12 feet travel lanes. Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches. Approved security gates shall have a minimum of two unobstructed 12 feet travel lanes and shall be in accordance with Section 503.6. Street widths are to be measured from top face of curb to top face of curb, on streets with curb and gutter, and from flow-line to flow-line on streets with rolled curbs.

**Section 503.2.3 Surface** is hereby revised as follows:

**503.2.3 Surface.** Fire apparatus access roads shall be designed, and maintained to support the imposed loads of fire apparatus (75,000 lbs. load/25,000 point load) and shall be surfaced so as to provide all-weather driving capabilities. Alternative driving surfaces shall be designed by a registered civil engineer and shall be subject to approval by the Brea Fire Department.

**Section 503.2.4 Turning radius** is hereby revised as follows:

**503.2.4 Turning radius** The required turning radius of a fire apparatus access road shall be determined by the Fire Code Official. Fire access road turns and corners shall be designed with a minimum inner radius of 17 feet and an outer radius of 45 feet. Radius must be concentric.

**Section 503.2.5 Dead ends** is hereby revised as follows:

**503.2.5 Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved area for turning around apparatus. All turnarounds shall be approved by a Fire Code Official. Roads 600 feet or longer in length may not terminate in a radius or hammerhead turnabout, but must become part of an inter-tying loop circulation system.

**Section 503.2.6 Grade** is hereby revised as follows:

**503.2.6 Grade.** The grade of the fire department access road shall be within the limits established by the Fire Code Official based on the fire department's apparatus. The Gradient for the Fire Department access road shall not exceed ten (10 %) percent.

**Section 503.6 Security gates** is hereby revised as follows:

**503.6 Security gates.** The installation of security gates across a fire apparatus access road shall be approved by the Fire Chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

Secured automated vehicle gates or entries shall utilize approved Knox access switches when required by a Fire Code Official. Secured non-automated vehicle gates or entries shall utilize an approved padlock or chain (maximum link overlock shackle size of ¼ inch) when required by a Fire Code Official.

Gate arms securing parking lots and parking structures shall be equipped with a Fire Department approved dual-keyed Knox key electric switch. When activated, the arm or arms shall open to allow fire and law enforcement access.

Secured automated vehicle gates or entries shall utilize a straight 30 feet approach and departure, measured from the furthestmost related gate, island, guard shack structure or other obstructions.

In the event of a power failure, the gates shall be defaulted or automatically transferred to a fail safe mode allowing the gate to be pushed open without the use of special knowledge or any equipment. If a two-gate system is used, the override switch must open both gates.

If there is no sensing device that will automatically open the gates for exiting, a Fire Department approved Knox electrical override switch shall be placed on both the interior and exterior of the gate in an approved location.

A final field inspection by the Fire Marshal or an authorized representative is required before electronically controlled gates may become operative. Prior to final inspection, electronic gates shall remain in a locked-open position.

**Section 503.7 Apparatus access to fire hazard severity zones** is hereby added as follows:

**503.7 Apparatus access to fire hazard severity zones.** A minimum of two separate public access and exit roads are required in developments within a Fire Hazard Severity Zone or as approved by the Fire Code Official.

**Section 505.1 Address identification** is hereby revised as follows:

**505.1 Address identification.** New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 0.5 inch for single-family residences.

All multi-family, multi-retail and multi-commercial occupancies shall have a minimum of 6 inch high numbers, with a minimum one-and-one-half inch (1 ½") stroke.

All light and heavy industrial occupancies shall have a minimum of ten (10) inch high numbers, with a minimum one-and-one-half inch (1 ½") stroke. All complexes that are three (3) stories or greater in height and/or have two (2) or more building units shall have a minimum of ten (10) inch high numbers, with a one-and-one-half inch (1 ½") stroke.

All multi-family, multi-retail and multi-industrial occupancies shall identify individual units with numbers a minimum of four (4) inches, affixed to the unit's front door entrance or frame. All buildings with a rear door access shall identify that unit with the proper numbers affixed to the door or frame.

All buildings with two (2) or more units shall identify utility meters according to the unit being serviced.

Numbers shall be affixed on a structure in clear view, unobstructed by trees or shrubs.

**Section 506.1 Where required** is hereby revised as follows:

**506.1 Where required.** Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for emergency or non-emergency purposes, the Fire Code Official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the Fire Code Official.

**506.1.1 Locks.** An approved lock shall be installed on gates or similar barriers when required by the Fire Code Official. Secured emergency access gates serving apartment, town home or condominium complex courtyard, paseos, pool, Jacuzzi, sauna, or spa areas must be provided with a key box or lock in addition to association or facility locks.

The nominal height of Knox lock box installations shall be five (5) feet above grade. Location and installation of Knox key boxes must be approved by the Fire Code Official.

Section 506.1.2 remains unchanged.

**Section 507.5 Fire hydrant systems** is hereby revised as follows:

**507.5 Fire hydrant systems.** Fire hydrant systems shall comply with Sections 508.5.1 through 508.5.6 Minimum basic fire hydrant spacing for residential and all commercial or industrial properties shall be spaced not more than three hundred (300) feet along streets or fire apparatus access roadways, so that all fire apparatus-accessible portions of the building are within one hundred fifty (150) feet of a hydrant.

**Section 507.5.1 Where required** is hereby revised as follows:

**507.5.1 Where required.** Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than three hundred (300) feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the Fire Code Official.

The remainder of Section 507.5 remains unchanged.

**Section 507.5.7 Private hydrants** is hereby added as follows:

**507.5.7 Private hydrants.** Private hydrants shall be painted OSHA safety red.

**Section 510.1 Emergency responder radio coverage** is hereby revised 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 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 City of Brea In-Building 800 Megahertz ordinance and/or successor provisions thereto.

**Exceptions:**

1. Where it is determined by the Fire Code Official that the radio coverage system is not needed.
2. In facilities where emergency responder radio coverage is required and such systems, components or equipment could have a negative impact on normal operations of the facility, the Fire Code Official shall have the authority to accept an automatically activated emergency responder radio coverage system.

**Sections 510.2, 510.4, and 510.5 are deleted without replacement.**

**Section 510.6.1 Testing and proof of compliance, Item 5,** is hereby revised as follows:

**5. Testing and proof of compliance.** At the conclusion of the testing, a report, which shall verify compliance with Section 510.5.4, shall be submitted to the Fire Code Official. In addition, one complete copy of the report shall be posted in the building, on the wall immediately adjacent to the Fire Alarm Control Panel.

**§16.04.070 CHAPTER 6 BUILDING SERVICES AND SYSTEMS AMENDMENTS.**

**Section 608.1 Scope** is hereby revised as follows:

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

**Section 608.10 Indoor charging of electric carts/cars** is hereby added as follows:

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

1. Spill control and neutralization shall be provided and comply with Section 608.5.
2. Room ventilation shall be provided and comply with Section 608.6.1.
3. Signage shall be provided and comply with Section 608.7.1
4. Smoke detection shall be provided and comply with Section 907.

#### **§16.04.080 CHAPTER 9 FIRE PROTECTION SYSTEMS AMENDMENTS.**

**Section 903.2 Where required** is hereby revised as follows:

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

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, as defined in Section 202, exceeds 5,000 square feet (465 m<sup>2</sup>), or more than two stories in height, regardless of fire areas or allowable area.
2. **New buildings in the VHFHSZ:** An automatic sprinkler system shall be provided in all new occupancies in the VHFHSZ.
3. **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 when one of the following conditions exists:
  - a. When the addition is 50% or more of the existing building area and the resulting building area, as defined in Section 202, exceeds 5000 square feet (465 m<sup>2</sup>); or
  - b. When the addition exceeds 2000 (185.81 m<sup>2</sup>) square feet and the resulting building area, as defined in Section 202, exceeds 5000 square feet (465 m<sup>2</sup>); or

- c. An additional story is added above the second floor regardless of fire areas or allowable area.

Exception: Group R-3 occupancies. Group R-3 occupancies shall comply with Section 903.2.8.

**Section 903.2.8 Group R** is hereby revised 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 buildings:** An automatic sprinkler system shall be installed throughout when one of the following conditions exists:
  - a. When an addition is 33% or more of the existing building area, as defined in Section 202, or greater than 1000 square feet (92.903 m<sup>2</sup>) within a two year period; or
  - b. An addition when the existing building is already provided with automatic sprinklers; or
  - c. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.
3. **Existing buildings in the Very High Fire Hazard Severity Zone:** An automatic sprinkler system shall be installed throughout when one of the following conditions exists:
  - a. When an addition is 33% or more of the existing building area, as defined in Section 202, or greater than 1000 square feet (93.902 m<sup>2</sup>) within a two year period; or
  - b. An addition when the existing building is already provided with automatic sprinklers; or
  - c. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

**Section 904.10.4 Clean-agent system exhaust** is hereby added as follows:

**904.10.4 Clean-agent system exhaust.** In rooms without windows that open to the outside, an approved method shall be provided to exhaust any clean-agent from the room after system discharge.

**Section 905.4 Location of Class I standpipe hose connections** is hereby revised by adding item 7 as follows:

7. The centerline of the 2.5 inches (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) above and no more than 24 inches above the finished floor.

**Section 907.3.1 Duct smoke detectors** is hereby revised as follows:

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

**Exception:**

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

**Section 907.5.2.2 Emergency voice/alarm communication systems** is hereby revised as follows:

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

1. Elevator groups.

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

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

**Section 907.9.1 Occupancy requirements** is hereby revised as follows:

**907.9.1 Occupancy requirements.** A fire alarm system shall be installed in accordance with Sections 907.3.1.1 through 907.3.1.8. Fire alarm systems shall be upgraded and extended throughout each building during tenant improvements in buildings previously equipped with a manual fire alarm system. This upgrade shall only extend to the area of tenant improvement.

#### **§16.04.090 CHAPTER 20 AVIATION FACILITIES AMENDMENTS.**

**Section 2002.1 Definitions** is hereby revised by adding the following definitions:

**EMERGENCY HELICOPTER LANDING FACILITY (EHLF).** A landing area on the roof of a high-rise building that is not intended to function as a heliport or helistop but is capable of accommodating fire or medical helicopters engaged in emergency operations.

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

**SECTION 2008 EMERGENCY HELICOPTER LANDING FACILITY** is hereby added as follows:

#### **SECTION 2008**

#### **EMERGENCY HELICOPTER LANDING FACILITY**

**2008.1 General.** Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 ft. above the lowest level of the fire department vehicle access shall have a rooftop emergency helicopter landing facility (EHLF) in a location approved by the Fire Code Official for use by fire, police, and emergency medical helicopters only.

**2008.1.1 Rooftop Landing Pad.** The landing pad shall be 50 ft. x 50 ft. or a 50 ft. diameter circle that is pitched or sloped to provide drainage away from access

points and passenger holding areas at a slope of 0.5 percent to 2 percent. The landing pad surface shall be constructed of approved non-combustible, nonporous materials. It shall be capable of supporting a helicopter with a maximum gross weight of 15,000 lbs. For structural design requirements, see California Building Code.

**2008.1.2 Approach-Departure Path.** The emergency helicopter landing facility shall have two approach-departure paths separated from each other by at least 90 degrees. No objects shall penetrate above the approach-departure paths. The approach-departure path begins at the edge of the landing pad, with the same width or diameter as the landing pad and is a rising slope extending outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.

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

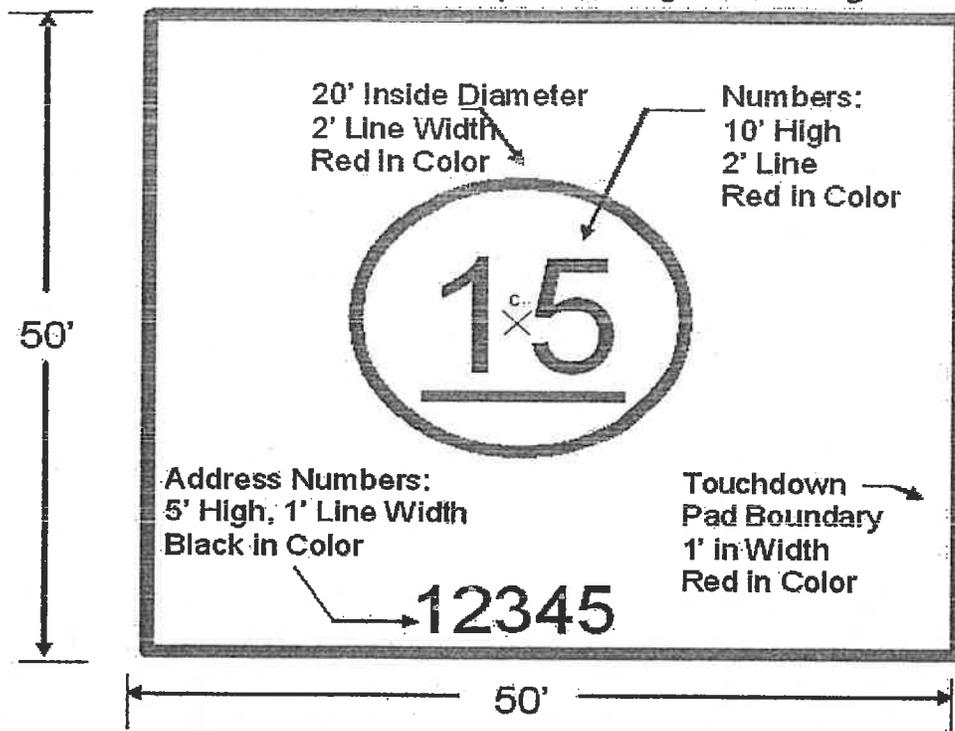
**2008.1.4 Safety Net.** If the rooftop landing pad is elevated more than 30 in. (2'-6") above the adjoining surfaces, a 6 ft. in wide horizontal safety net capable of supporting 25 lbs./psf shall be provided around the perimeter of the landing pad. The inner edge of the safety net attached to the landing pad shall be slightly dropped (greater than 5 in. but less than 18 in.) below the pad elevation. The safety net shall slope upward but the outer safety net edge shall not be above the elevation of the landing pad.

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

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

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

Figure 1108.1.7 Helicopter Landing Pad Markings



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

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

**2008.1.9 Standpipe systems.** The standpipe system shall be extended to the roof level on which the EHLF is located. All portions of the EHLF area shall be within 150 feet of a 2.5-inch outlet on a Class I or III standpipe.

**2008.1.10 Fire extinguishers.** A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairway or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area. Installation, inspection, and maintenance of extinguishers shall be in accordance with the CFC, Section 906.

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

**§16.04.100 CHAPTER 28 LUMBER YARDS AND WOODWORKING FACILITIES AMENDMENTS.**

**Section 2808.1 General** is hereby revised as follows:

**2808.1 General.** The storage and processing of more than 400 cubic feet of wood chips, hogged materials, fines, compost, green waste, and raw product produced from yard waste, debris and recycling facilities shall comply with Sections 1908.2 through 1908.10.

**Section 2808.2 Storage site** is hereby revised as follows:

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

**Section 2808.3 Size of piles** is hereby revised as follows:

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

**Section 2808.7 Pile fire protection** is hereby revised 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 as follows:

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

**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 the 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 be monitored to verify that the temperature remains stable.

**§16.04.110 CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION AMENDMENTS.**

**Section 3310.1.1 Required access for construction sites** is hereby added as follows:

**3310.1.1 Required access for construction sites.** Construction sites shall have a minimum of 6 feet perimeter security fencing with gates installed for fire apparatus access. Gate widths shall be a minimum of 24 feet for fire apparatus roadways and 6 feet for walk-in entry. Secured vehicle gates or entries shall utilize approved Knox padlock or entries shall utilize an approved padlock or chain (maximum link or lock shackle size of 1/4") when required by a Fire Code Official. Temporary fire lane signs shall be provided and maintained to allow emergency access during construction. Hydrants, Fire Department connections, and fire lanes shall be posted, 'Fire Lane-No Parking' when required by a Fire Code Official.

**§16.04.120 CHAPTER 49 REQUIREMENTS FOR WILDLAND-URBAN INTERFACE FIRE AREAS AMENDMENTS.**

**SECTION 4908 FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION** is hereby added as follows:

**SECTION 4908**

**FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION**

**4908.1 General.** All new buildings or additions to be built or installed in areas containing combustible vegetation shall comply with the City of Brea Very High Fire Hazard Severity Zone Requirements.

**Section 4908.2 Homeowners Associations** is hereby added as follows:

**4908.2 Homeowners Associations.** Where the Fuel Modification Zone is to be maintained by a homeowners' association the following apply:

1. The conditions, covenants and restrictions recorded against all property within the homeowners' association shall require specifically budgeted funds

sufficient to meet the ongoing maintenance obligations of the applicable fuel modification requirements.

2. The Fuel Modification Zone shall be subject to an annual inspection conducted by a representative of the Fire Department in order to assure that the Fuel Modification Zone continues to be maintained in compliance with the applicable fuel modification requirements.

3. Any occupied structure on any lot which adjoins a Fire Hazard Severity Zone shall be constructed in compliance with all requirements of the City's Building or Fire Code (as amended).

#### **§16.04.130 CHAPTER 56 EXPLOSIVES AND FIREWORKS AMENDMENTS.**

**Section 5608.2 Fireworks displays** is hereby added as follows:

**5608.2 Fireworks displays.** Fireworks displays shall be in accordance with the Brea Fire Department Guidelines for Public Fireworks Displays, the regulations of the State Fire Marshal, and the conditions of the permit as approved by the Fire Code Official.

**SECTION 5609 RETAIL FIREWORKS** is hereby added as follows:

#### **SECTION 5609**

#### **RETAIL FIREWORKS**

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

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

**SECTION 5610 SEIZURE OF FIREWORKS** is hereby added as follows:

#### **SECTION 5610**

#### **SEIZURE OF FIREWORKS**

The Fire Code Official shall have the authority to seize, take, and remove all fireworks stored, sold, offered for sale, used or handled in violation of the provisions of the Code and Title 19 CCR, Chapter 6. Any seizure or removal

pursuant to this section shall be in compliance with all applicable statutory, constitutional, and decisional law.

**SECTION 5611 FIRING** is hereby added as follows:

**SECTION 5611**

**FIRING**

All fireworks displays must be electrically fired.

**§16.04.140 CHAPTER 60 HIGHLY TOXIC AND TOXIC MATERIALS AMENDMENTS.**

**Section 6004.2.2.7 Treatment systems, exceptions** is hereby revised as follows:

**Exceptions:**

1. Toxic gases – storage/use. Treatment systems are not required for toxic gases supplied by cylinders or portable tanks not exceeding 1,700 pounds (772 Kg) water capacity when the following are provided:

1.1 A listed or approved gas detection system with a sensing interval not exceeding 5 minutes.

1.2 For storage, valve outlets are equipped with gas-tight outlet plugs or caps.

1.3 For use, an approved listed or approved automatic-closing fail-safe valve located immediately adjacent to cylinder valves. The fail-safe valve shall close when gas is detected at the permissible exposure limit (PEL) by a gas detection system monitoring the exhaust system at the point of discharge from the gas cabinet, exhausted enclosure, ventilated enclosure or gas room. The gas detection system shall comply with Section 6004.2.2.10.

**§16.04.150 CHAPTER 80 REFERENCED STANDARDS AMENDMENTS** is adopted in its entirety with the following amendments:

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

**Section 6.8.1.3** is hereby deleted in its entirety.

**Section 6.8.3** is hereby revised as follows:

**6.8.3** Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 45 feet from a public hydrant. The size of piping and the number

of inlets shall be approved by the chief. If acceptable to the water authority, it may be installed on the backflow assembly. Fire Department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

**Section 6.8.4** is hereby added as follows:

**6.8.4** Fire Department connections shall be isolated from the sprinkler system by means of a flange mounted wafer or butterfly style check valve.

**Section 8.3.3.1** is hereby revised as follows:

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

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

**Section 8.16.1.3.4** is hereby revised as follows:

**Section 8.16.1.3.4** Large private fire service main systems shall have post indicating sectional controlling valves at appropriate points when the system serves more than 3 appurtenances in order to permit sectionalizing the system in the event of a break or for marking of repairs or extensions. Note: A hydrant or a single fire line service to a building counts as one appurtenance.

**Section 8.17.1.1.1 Residential waterflow alarms** is hereby added as follows:

**8.17.1.1.1** A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas in each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an

uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

**Section 10.3.5.3** is hereby added as follows:

**10.3.5.3** All jointed bolt accessories including, but not limited to, bolts, nuts, angle eye bolts, and all thread rod shall be stainless steel.

**Section 10.8.2.5** is hereby added as follows:

**10.8.2.5** The trench shall be excavated for thrust blocks and inspected prior to pour. Care shall be taken when forming and pouring thrust blocks that fittings and joints are not buried in concrete.

**Section 10.9.1** is hereby revised as follows:

**10.9.1** Backfill shall be well tamped in layers and wetted under and around pipes to prevent settlement or lateral movement. Backfill shall consist of clean fill sand to a minimum of 12" below and to a minimum of 12" above the pipe. In lieu of sand backfill, native soil backfill which has been determined to be acceptable for backfill by a registered geological engineer or site specific soils report may be used.

**Section 11.1.1.2** is hereby added as follows:

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

**Section 23.2.1.1** is hereby revised as follows:

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

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

**Section 6.11.1** is hereby revised as follows:

**6.11.1** At least one Fire Department connection shall be provided for buildings, accessible by the Fire Department.

**Section 6.11.2** is hereby revised as follows:

**6.11.2** Fire Department connections shall consist of at least two 2 ½ inch female couplings.

**Section 6.11.5** is hereby added as follows:

**6.11.5** Fire Department connections shall be isolated from the sprinkler systems by means of a flange mounted wafer or butterfly style check valve.

**Section 6.16.1** is hereby revised as follows:

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

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

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

**Section 4.1.3** is hereby added as follows:

#### **4.1.3 Stock of Spare Sprinklers**

**Section 4.1.3.1** is hereby added as follows:

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

**Section 4.1.3.2** is hereby added as follows:

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

**Section 4.1.3.3** is hereby added as follows:

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

**Section 4.1.3.4** is hereby added as follows:

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

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

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

**Section 7.3.1** is hereby deleted in its entirety and replaced as follows:

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

**Section 7.6** is hereby deleted in its entirety and replaced with the following:

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

**Exception:**

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.

**Section 8.3.5.1.1** is hereby amended as follows:

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

**Section 11.2.1.1** is hereby revised as follows:

**11.2.1.1** The system shall be hydrostatically tested for leakage at 50 lbs. above the maximum water supply pressure up to a maximum of 150 lbs. This test shall be conducted with plugs in sprinkler outlets. Sprinklers shall be installed after the hydro test and before the final inspection. Plugs used for the hydro test shall be retained on site for verification after removal.

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

**Section 6.4.5.4.** is hereby deleted in its entirety and replaced with the following:

**6.4.5.4** The location of the FDC shall be approved and be no more than 45 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire Department inlet connections shall be painted OSHA safety red.

**Section 7.3.1.1 Hose connection height** is hereby is deleted in its entirety and replaced with the following:

**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, 2013 Edition, Installation of Private Fire Service Mains and Their Appurtenances** is hereby amended as follows:

**Section 5.9.1.3** is hereby revised as follows:

**5.9.1.3** The Fire Department connection shall be of an approved type and contain a minimum of two 2 ½ inch inlets. The location shall be approved and be no more than 45 feet from a public fire hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. The supply pipe shall be painted OSHA safety red.

**Section 5.9.1.3.1** is hereby added as follows:

**5.9.1.3.1** When the sprinkler density design is 500 gpm (including the interior hose stream demand) or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

**Section 6.2.11 (5)** is hereby deleted without replacement and (6) and (7) renumbered:

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

**Section 6.3.3** is hereby added as follows:

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

**Section 6.6.1** is hereby deleted in its entirety and replaced with the following:

**6.6.1** Large private fire service main systems shall have post indicating sectional controlling valves at appropriate points when the system serves more than 3 appurtenances in order to permit sectionalizing the system in the event of a break or making repairs or extensions. A hydrant or a single fire line service to a building counts as one appurtenance.

**Section 10.1.6.3** is hereby added as follows:

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

Exception: 304 and 316 Stainless Steel pipe and fittings

**Section 10.3.6.2** is hereby revised as follows:

**10.3.6.2** All bolted joint accessories including but not limited to bolts, nuts, angle eye bolts, and all thread rod shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to poly-tube, and after installation.

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

**Section 10.6.3.1** is hereby revised as follows:

**10.6.3.1** Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 18 inches, as measured from the interior of the exterior wall. The pipe under the building or building

foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or comply with 10.6.2.

**Section 10.6.4** is hereby revised as follows:

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

**Section 10.8.2.5** is hereby added as follows:

**10.8.2.5** The trench shall be excavated for thrust blocks and inspected prior to pour. Care shall be taken when forming and pouring thrust blocks that fittings and joints are not buried in concrete.

**Section 10.9.1** is hereby revised as follows:

**10.9.1** Backfill shall be well tamped in layers and wetted under and around pipes to prevent settlement or lateral movement. Backfill shall consist of clean fill sand to a minimum of 12 inches below and a minimum of 12 inches above the pipe. In lieu of sand backfill, native soil backfill, which is determined to be acceptable by a registered geological engineer or site specific soils report may be used.

## **NFPA 72, 2013 Edition, National Fire Alarm Code**

**Section 23.8.2** is hereby revised as follows:

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

**Section 23.8.2.3** is hereby deleted without replacement.

**Section 26.2.3.1** is hereby revised as follows:

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

## **§16.04.160 FEES**

A. Fee schedules for any permits, licenses, inspections, plan check or other related work or services provided by the Fire Department in connection with the application of this chapter or the Code adopted hereby ('fire service fees') shall be as

established by resolution of the City Council as the same may be amended from time to time.

B. Unless otherwise provided by this Code, fire service fees established pursuant to paragraph 'A' of this Section are due and payable upon receipt of an invoice therefor from the City. It is a violation of this Section to fail to pay any fire service fee when due. Any fire service fee is delinquent if it remains unpaid thirty (30) days after the date of the invoice. Any fire service fee that becomes delinquent shall be subject to the following monetary penalty. "Thirty-one (31) days after the date of invoice, a penalty of ten percent (10%) of the fire service fee shall be added, and each month thereafter, an additional penalty of ten percent (10%) of the original fire service fee shall be added, up to a maximum penalty amount not to exceed the original invoiced amount."

**SECTION 4. Penalties.** It shall be unlawful for any person, firm, partnership, or corporation to violate any provision or to fail to comply with any of the requirements of this Ordinance or the Code hereby adopted. Unless a violation is deemed therein to be an infraction, any person, firm, partnership, or corporation violating any provision of the Ordinance or the Code hereby adopted or failing to comply with any of their requirements shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding One Thousand Dollars (\$1,000.00) or by imprisonment not exceeding six (6) months, or by both such fine and imprisonment. Alternatively or in addition to the foregoing, violation of this Ordinance or the Code adopted hereby may be punishable by administrative penalty. Each such person, firm, partnership, or corporation shall be deemed guilty of a separate offense for each and every day or any portion thereof during which any violation of any of the provisions of this Ordinance or the Code hereby adopted is committed, continued or permitted by such person, firm, partnership or corporation, and shall be deemed punishable therefore as provided in this Ordinance.

**SECTION 5. Civil Remedies Available.** The violation of any of the provisions of this Ordinance or the Code hereby adopted shall constitute a nuisance and may be abated by the City through civil process by means of restraining order, preliminary or permanent injunction or in any other manner provided by law for the abatement of such nuisances.

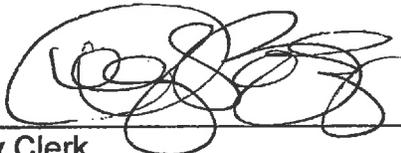
**SECTION 6. Severability.** The City Council hereby declares that should any provision, section, paragraph, sentence, or word of this Ordinance or the Code hereby adopted be rendered, or declared invalid by any final court action in a court of competent jurisdiction, or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences and works of this Ordinance and the Code hereby adopted shall remain in full force and effect.

**SECTION 7.** This Ordinance shall become operative at 12:01 a.m. on January 18, 2014.

**SECTION 8.** The City Clerk shall certify to the adoption of this Ordinance.

APPROVED AND ADOPTED this 17th day of December, 2013.

  
\_\_\_\_\_  
Mayor

ATTEST:   
\_\_\_\_\_  
City Clerk

I, Cheryl Balz, City Clerk of the City of Brea, do hereby certify that the foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Brea, held on the 5th day of November, 2013, and was finally passed at a regular meeting of the City Council of the City of Brea on the 17th day of December, 2013, by the following vote:

AYES: COUNCIL MEMBERS: Garcia, Moore, Simonoff, Marick, Murdock

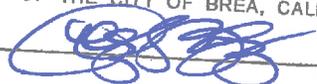
NOES: COUNCIL MEMBERS: None

ABSENT: COUNCIL MEMBERS: None

ABSTAIN: COUNCIL MEMBERS: None

DATED: December 23, 2013  
  
\_\_\_\_\_  
City Clerk

THE FOREGOING INSTRUMENT IS A FULL TRUE AND  
CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE  
DATE: December 23 2013  
CITY CLERK OF THE CITY OF BREA, CALIFORNIA

ATTEST:   
\_\_\_\_\_



## RESOLUTION NO. 2013-065

### A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BREA, CALIFORNIA, SETTING FORTH FINDINGS FOR REQUIRED AMENDMENTS TO THE 2013 CALIFORNIA CODES RELATIVE TO LOCAL CLIMATIC, TOPOGRAPHIC AND GEOLOGIC CONDITIONS

#### A. RECITALS:

(i) Health and Safety Code Section 17958 provides that the City of *Brea* shall adopt Ordinances and regulations imposing the same or modified or changed requirements as are contained in the regulations adopted by the State pursuant to Health and Safety Code Section 17922; and

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

(iii) Health and Safety Code Section 17958.5(a) permits the City to make modifications or changes to the Codes, which are reasonably necessary because of local climatic, geologic, or topographic conditions; and

(iv) Health and Safety Code Section 17958.7 requires that the City Council, before making any modifications or changes to the Codes, shall make an express finding that such changes or modifications are reasonably necessary because of local climatic, geologic, or topographic conditions; and

(v) the *Community Development* Department have recommended that changes and modifications be made to the Codes and have advised that certain said changes and modifications to the California Codes are reasonably necessary due to local conditions in the City of *Brea* and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes or are reasonably necessary to safeguard life and property within the City of {City}.

#### B. RESOLUTION:

**NOW, THEREFORE,** be it is found, determined and resolved by the City Council of the City of Brea as follows:

Amendments related to life and fire safety contained in Sections 403, 403.1, 403.1.1, 403.4.7.2, 403.4.8.1, 412.7, Table 1505.1, and 1505.1.3 of the 2010 Edition of the California Building Code, and Sections R403.1.3, R405.1, R902.1, R902.1.3, and R902.2 of the 2010 Edition of the California Residential Code, and Sections 202 and 4.304.1 of the 2010 Edition of the California Green Building Standards Code as recommended by the *Community Development* Department are hereby found to be reasonably necessary due to the following local conditions:



## **A. Climatic Conditions**

1. Hot, dry Santa Ana winds are common to all areas within the City of Brea and Orange County in general. These winds, which can cause small fires to spread quickly, are a contributing factor to the high fire danger in the area, and create the need for an increased level of fire protection. This added protection will supplement normal fire department response available and provide immediate protection for life and safety of multiple occupants during fire occurrences.
2. Orange County and the City of Brea are located in a semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles, to rapid ignition and spread of fire. Therefore, there exists a need for additional fire protection measures.

## **B. Geologic Conditions**

1. Orange County and the City of Brea 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";
2. Traffic and circulation congestion presently existing in the City of Brea 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.
3. 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 75 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 fire fighting apparatus and personnel arrive on the scene.

The City of Brea 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.

The City of Brea 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 75-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.

4. Areas of Brea lie within the Brea-Olinda oil field, and is known for its surface seeps of naturally occurring oil and tar since the days of the Spanish missionaries ("brea" is the Spanish word for tar). Before development, asphaltum, tar, and active oil seepage impacted approximately 10% of this 280-acre site. Although crude oil is not classified as a hazardous substance by the State of California, oil seeps and tar are generally viewed as unsightly and a "nuisance hazard."

Methane gas seepage has also been detected at several locations in the Brea. Under normal atmospheric conditions methane gas is not a hazard. However, at high concentrations it is flammable, and at concentrations between 55,000 and 140,000 ppm (parts per million), it is explosive. Although it is not toxic, it can lead to asphyxiation if it replaces oxygen in an enclosed space. Methane is lighter than air; therefore, it tends to migrate upward through permeable sediments, rock fractures, and man-made pathways. If allowed to accumulate inside buildings, dangerous explosions can result. If free of impurities, methane is colorless and odorless, making it difficult for a building's inhabitants to detect. Therefore areas in Brea have a need for increased protection and mitigation from methane gas.

Additional amendments have been made to Codes. On the recommendation of the Community Development Department, such amendments are hereby found to be either



administrative or procedural in nature or concern themselves with subjects not covered in such Codes. The changes made include provisions making each of said Codes compatible with other Codes enforced by the City.

Amendments to the 2010 Edition of the California Codes are found reasonably necessary based on the climatic and/or geologic conditions cited in Section 1 of this resolution and are listed as follows:

<u>Building Code Section</u>	<u>Findings in Section 1</u>
CBC 105.2,	B-1, B-2
CBC 907.3.1, 907.5.2.2, 907.9.1	A-1, B-2, B-3
CBC 903.2, 903.2.8, 904.10.4, 905.4	A-1, A-2, B-2
CBC 3109.2, 3109.3, 3109.4.1	B-2
CBC 1505.1, 1505.1.3, 1505.5, 1505.7	A-1, A-2, B-2, B-4
CRC R902.1, R902.1.3, R902.2	A-1, A-2, B-2, B-4
CBC 1807.1.6, 1809.7, 2308.3.4, 2304.9.1	B-1
CRC R301.2 (1), R403.1.3, R405.1	B-1

<u>Fire Code Section</u>	<u>Findings in Section 1</u>
CAFC 105.6.15, 304.1.2(7)(E), 305.5, 305.5.1,	A-1, A-2
305.5.1.1, 305.5.1.2, 305.5.2, 320, 322, 323, 324	A-1, A-2
CAFC 321.	G-4
CAFC 325.1, 326, 327,328, 503.2.1-503.2.6	A-1, A-2, B-2
503.6, 503.7, 506.1, 506.1, 507.5, 507.5.1	A-1, A-2
510, 608.1, 608.10, 903.2, 903.2.8, 904.10.4, 905.4,	A-1, A-2
907.3.1, 907.5.2.2, 907.9.1,	A-1, A-2
2002.1, 2008.1-2008.1.11,	B-3
2808.1-2808.11.2, 3310.1.1, 4908.1, 4908.2	A-1, A-2
5608.2-5611, 6004.2.2.7,	A-1,
A-2	

<u>Fire Code Referenced Standards Section</u>	<u>Findings in Section 1</u>
NFPA 13	
6.8.3, 6.8.4, 8.3.3.1, 8.16.1.3.4,	A-1, A-2
8.17.1.1.1, 10.3.5.3, 10.5.2.5, 10.9.1, 11.1.1.2, 23.2.1.1,	A-1, A-2
NFPA 13R	
6.11.1, 6.11.2, 611.5, 6.16.1,	A-1, A-2



NFPA 13D

4.1.3, 4.1.3.1, 4.1.3.2, 4.1.3.3, 4.1.3.4, 7.1.2, 7.3, 7.3.1, A-1, A-2

7.6, 8.69, 11.2.1.1 A-1, A-2

NFPA 14

6.4.5.4, 7.3.1.1, A-1, A-2

NFPA 24,

5.9.1.3, 5.9.1.3.1, 6.2.11(5), 6.3.3, 6.6.1, 10.1.6.3, 10.3.6.2, A-1, A-2

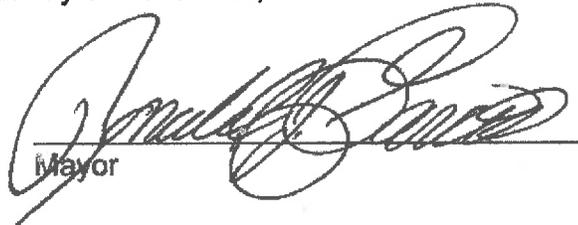
10.6.3.1, 10.6.4, 10.8.2.5, 10.9.1 A-1, A-2

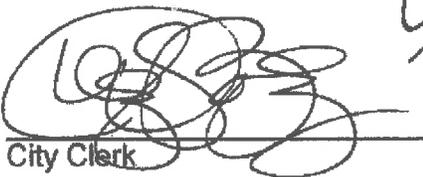
NFPA 72

23.8.2, 23.8.2.3, 26.2.3.1 A-1, A-2

The aforementioned amendments have been incorporated in detail in Ordinance Nos. 1171 and 1172, respectively.

**APPROVED and ADOPTED** 5th day of November, 2013.

  
\_\_\_\_\_  
Mayor

ATTEST:   
\_\_\_\_\_  
City Clerk



I, Cheryl Balz, City Clerk of the City of Brea, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the City Council of the City of Brea held on the 5th day of November, 2013 by the following vote:

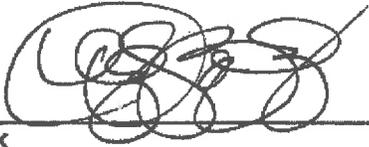
AYES: COUNCIL MEMBERS: Marick, Moore, Simonoff, Murdock, Garcia

NOES: COUNCIL MEMBERS: None

ABSENT: COUNCIL MEMBERS: None

ABSTAIN: COUNCIL MEMBERS: None

DATED: November 11, 2013

  
\_\_\_\_\_  
City Clerk

