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

March 28, 2014

Joseph K. Kirkpatrick
Chief Building Official
City of Irvine
One Civic Center Plaza
Irvine, CA 92623

RE: Ordinance #13-06

Dear Mr. Kirkpatrick:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on March 19, 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,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

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

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CALIFORNIA BUILDING STANDARDS COMMISSION

March 10, 2014

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

Subject: City of Irvine Amendments to the 2013 California Building Standards Code and Express Findings

Dear Mr. Walls:

Enclosed is Ordinance 13-06 of the City Council of the City of Irvine adopting the California Building Standards Code (California Code of Regulations, Title 24) with certain expressly identified modifications to the Codes. Also, enclosed is Resolution 13-124 of the City Council of the City of Irvine setting forth express findings that the modifications to the 2013 California Building Standards Code are reasonably necessary because of local climatic geological or topographical conditions.

This filing of City of Irvine modifications to the 2013 California Building Standards Code and related findings is submitted to the California Building Standards Commission in accordance with Health and Safety Code Section 17958.7(a).

Please contact me at 949-724-6320 if you have any questions regarding this filing.

Sincerely,

J. Kirkpatrick

Joseph K. Kirkpatrick
Chief Building Official

Enclosures:
City of Irvine Ordinance 13-06
City of Irvine Resolution 13-124

cc: (without enclosures)
Todd Litfin, City Attorney
Sharie Apodaca, City Clerk
Dennis Grubb, Assistant Fire Marshall

CITY COUNCIL ORDINANCE NO. 13-06

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

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

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

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

CHAPTER 1. ADOPTION OF BUILDING AND FIRE CODE

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

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

1. California Building Code (CBC) Volumes 1 and 2, 2013 edition with errata (Title 24, Part 2, California Code of Regulations), based on the 2012 International Building Code as published by the International Code Council.

2. California Residential Code (excluding Chapter 1, Division II), 2013 edition with errata (Title 24, Part 2.5, California Code of Regulations), based on the 2012 International Residential Code as published by the International Code Council.

3. California Green Building Standards Code, 2013 edition with errata (Title 24, Part 11, California Code of Regulations) as published by the International Code Council.

4. California Electrical Code, 2013 edition with errata (Title 24, Part 3, California Code of Regulations), based on the 2011 National Electrical Code, as published by the National Fire Protection Association.

5. California Mechanical Code, 2013 edition with errata (Title 24, Part 4, California Code of Regulations), based on the 2012 Uniform Mechanical

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

6. California Plumbing Code, 2013 edition with errata (Title 24, Part 5, California Code of Regulations), based on the 2012 Uniform Plumbing Code, including Appendices A, B, D, G, H and I as published by the International Association of Plumbing and Mechanical Officials.

7. California Energy Code, 2013 edition with errata (Title 24, Part 6, California Code of Regulations).

8. California Existing Building Code, 2013 edition with errata (Title 24, Part 10, California Code of Regulations).

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

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

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

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

California Fire Code (CFC), 2013 edition with errata (Title 24, Part 9, California Code of Regulations), the 2012 International Fire Code published by the International Code Council and the whole thereof, including Appendix B, Appendix BB, Appendix C and Appendix CC.

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

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

CHAPTER 2. ADMINISTRATIVE CODE FOR BUILDING CODE REGULATIONS

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

A. Building Code administrative provisions.

There is hereby adopted by the City Council for the purpose of prescribing administrative regulations for the Building Code Regulations of the City of

Irvine, the following administrative code provisions by reference subject to the modifications set forth in this Division:

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

Section 5-9-202. Scope and General.

A. Section 101.2 Scope, of Chapter 1, Division II of the California Building Code is hereby amended to add a new second paragraph to read:

The provisions of these codes shall apply to and affect all of the territory of the City of Irvine, except encroachments and public works located primarily in a public way; public utility towers and poles; mechanical equipment not specifically regulated in these codes; hydraulic flood control structures; facilities for the production, generation, storage or transmission of water or electrical energy by a local agency; and the buildings or structures of administration and instruction of public schools when acting under the State Contract Act and except as exempted by these codes.

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

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

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

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

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

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

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

101.4.5 Reserved.

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

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

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

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

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

"Division of Building and Safety".

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

Where referred to by this code, "building official" shall mean the Chief Building Official of the City of Irvine or his/her designee. Any and all

classification or title changes are made with respect to approvals thereto by the City Council.

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

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

When the Chief Building Official or his authorized representative shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care of control of any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Chief Building Official or his authorized representative for the purpose of inspection and examination pursuant to this code's Emergency Abatement Authority.

B. Emergency Abatement Authority. Section 104 of Chapter 1, Division II of the California Building Code is hereby amended to add Section 104.12 to read:

Section 104.12 Emergency Abatement Authority

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

   a. Order the immediate vacation of any tenants and prohibit occupancy until all repairs are completed.

   b. Post the premises as unsafe, substandard or dangerous.

   c. Board, fence or secure the building or site.

   d. Raze and grade that portion of the building or site to prevent further collapse and remove any hazard to the general public.

   e. Make emergency repairs as necessary to eliminate any imminent life safety hazard.

   f. Cause any dangerous water, electrical, gas or plumbing connections to be disconnected.

   g. Take any other action as appropriate under the circumstances.

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

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

b. The Chief Building Official or his/her designee shall give notice, setting forth the imminent life safety hazard found, to the owner, occupant, other responsible person or authorized representative of the building, structure or site upon which the hazardous condition exists. If the Chief Building Official or his designee determines that, under the circumstances, notice cannot be given or is impractical, correction or abatement of the hazard can be commenced without prior notice.

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

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

Section 5-9-205. Permits.

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

Section 105.1.3 Permit exemption.

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

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

Building Permits:

1. Amend Section 105.2 Building item 1 to read:

1. One story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the structure conforms to the Zoning Code and the floor area does not exceed 120 square feet (11 square meters).

2. Delete Section 105.2 Building item 5 Water tanks.

3. Amend Section 105.2 Building item 11. to read:

    11. Swings and other playground equipment. Exemptions from permit requirements of this code for playground equipment shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other state laws or ordinances of this jurisdiction and equipment is subject to City review and approval when otherwise required by state or local laws, regulations or standards.

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

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

Plumbing Permits:

1. Amend Section 105.2 Plumbing item 2 to read:

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

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

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

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

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

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

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

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

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

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

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

    a. Room additions (exterior of buildings and property area) 18 months

b. Pools/spas	12 months
c. Patio covers	6 months
d. Water heaters, water softeners and air conditioners	6 months
e. Fireplaces	6 months
f. Skylights	6 months
g. All other remodeling or building air conditioners	6 months

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

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

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

   Exterior walls and roofs of buildings shall be covered with finished materials, in accordance with City-approved plans and the Building Code within six months from the commencement of construction. A

written waiver of this requirement may be obtained from the Chief Building Official or his/her designated representative if the construction is screened from view from adjacent occupied or public property with fencing materials approved by City zoning and building regulations.

4. Definitions.

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

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

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

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

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

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

In the event that the applicant cannot provide a complete list of valid subcontractors at the time of permit issuance, the applicant shall provide such information to the City, within a reasonable period of time after

award of each permit. Failure to provide timely valid and current sub-contractor listings shall result in the permit applicant paying a penalty for default to the City in an amount equal to the original permit fee for each sub-contractor violation in order to defray City costs of enforcement of this section. Failure to remit penalty payment shall constitute a violation of this code, punishable as a misdemeanor under the City charter.

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

Section 105.11 Approvals. To be valid, any approval, waiver, determination or similar action referenced in this code benefiting the party so requesting such action must be in writing and prepared by a City individual with authority to provide the same.

Section 5-9-206. Construction documents.

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

Section 107.2.3 Means of egress. The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress, including the path of exit discharge to the public way, in compliance with the provisions of this code. In Group A occupancies, the construction documents shall designate the number of occupants to be accommodated on every floor and in all rooms and spaces.

Section 5-9-207. Reserved.

Section 5-9-208. Fees.

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

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

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

Section 109.2.2 Plan review fees. When submittal documents are required by California Building Code Chapter 1, Division II Section 107.3.4.1, a plan review fee shall be paid at the time of submitting the

submittal documents for plan review. Said plan review fees shall be as set forth in the fee schedule established by City Council resolution in effect at the time of plan review submittal.

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

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

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

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

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

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

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

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

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

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

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

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

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

2. Definitions:

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

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

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

Section 5-9-209. Inspections.

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

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

110.3.1 Pre-Construction Inspection. A pre-construction inspection shall be conducted prior to start of construction for all projects involving new buildings, all additions to non-residential structures, all remodels involving a new restaurant establishment and all non-residential tenant improvements exceeding 5,000 square feet unless waived by the Chief Building Official.

110.3.2 Footing and foundation inspection. Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94 in which case the concrete need not be on the job.

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

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

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

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

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

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

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

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

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

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

Section 5-9-210. Certificate of Occupancy

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

Exception: R-2 occupancy apartments and condominiums, R3 occupancy one- and two-family dwellings and work exempt from permits under Section 105.2.

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

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

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

Section 5-9-211. Reserved.

Section 5-9-212. Board of Appeals.

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

Section 113.1 General. An Appeals Board Committee shall be established, either prior to or immediately following receipt of a completed application for an appeal hearing, to hear and decide appeals of orders,

decisions or determinations made by the Chief Building Official relative to the application and interpretation of this code. This board/committee shall consist of one member appointed by each City Council member each who is qualified by experience and training to pass upon matters pertaining to building construction and who is not an employee of the City of Irvine. An additional two physically disabled persons shall be appointed by the City Council to participate and vote only on matters concerning physically disabled access.

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

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

The hearing is intended to be informal in nature. Formal rules of the California Evidence Code and discovery shall not apply, except that irrelevant and unduly repetitious evidence may be excluded at the Appeals Board Committee's discretion. Each party shall have the opportunity to offer testimony and evidence and cross-examine witnesses in support of his or her case.

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

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

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

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

Section 113.1.3 Notification of decision. Within 10 calendar-days of the hearing's conclusion, the Chief Building Official shall provide the applicant with the Appeals Board Committee decision in writing. The written

decision shall contain the Appeals Board Committee findings of fact and conclusions.

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

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

C. Qualifications. Section 113.3 of Chapter 1, Division II of the California Building Code is hereby deleted.

Section 5-9-213. Violations.

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

Section 114.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish, occupy, possess, control or have an interest in any building, structure or equipment regulated by this code, or cause the same to be done, in conflict with or in violation of any of the provisions of the codes and ordinances adopted by the City of Irvine.

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

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

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

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

Section 5-9-214. Reserved.

Section 5-9-215. Reserved.

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

CHAPTER 3. ADMINISTRATIVE CODE FOR FIRE CODE REGULATIONS

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

A. Fire Code administrative provisions.

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

Chapter 1, Division II of the California Fire Code, 2013 edition (Title 24, Part 9, California Code of Regulations).

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

Section 5-9-302. Reserved.

Section 5-9-303. Reserved.

Section 5-9-304. Reserved.

Section 5-9-305. Violation penalties.

A. Violation penalties. Section 109.4 of Chapter 1, Division II of the California Fire Code is hereby amended to read:

Section 109.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the Fire Code Official, or of a permit or certificate used under provisions of this code, shall be guilty of either a misdemeanor, infraction or both as prescribed in Section 109.3.2 and 109.4.3. Penalties shall be as prescribed in local ordinance. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

B. Infraction. Section 109.4.2 is hereby added to Chapter 1, Division II of the California Fire Code to read:

Section 109.4.2 Infraction. Except as provided in Section 109.4.3, persons operating or maintaining any occupancy, premises or vehicle subject to this code that shall permit any fire or life safety hazard to exist on premises under their control shall be guilty of an infraction.

C. Misdemeanor. Section 109.4.3 is hereby added to Chapter 1, Division II of the California Fire Code to read:

Section 109.4.3 Misdemeanor. Persons who fail to take immediate action to abate a fire or life safety hazard when ordered or notified to do so by the chief or a duly authorized representative, or who violate any of the following sections of this code, shall be guilty of a misdemeanor:

104.11.2 Obstructing operations

104.11.3 Systems and Devices

107.6 Overcrowding

109.2.2 Compliance with Orders and Notices

111.4 Failure to comply

305.4 Deliberate or negligent burning

308.2.1 Throwing or placing sources of ignition

310.7 Burning Objects

2404.7 Open or exposed flame

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

CHAPTER 4. AMENDMENTS TO BUILDING AND FIRE CODE TECHNICAL REGULATIONS

Section 5-9-401 Building Code.

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

APPROACH-DEPARTURE PATH. The flight path of the helicopter as it approaches or departs from the landing pad.

EMERGENCY HELICOPTER LANDING FACILITY (EHLF). A landing area on the roof of a 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.

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

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

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

B. Applicability. Section 403.1 of Chapter 4 of the California Building Code is hereby deleted and amended to read:

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

C. Emergency helicopter landing facility. Section 412.7 of Chapter 4 the California Building Code is hereby amended to add Section 412.7.6 to read:

Section 412.7.6. Emergency Helicopter Landing Facility. Emergency Helicopter Landing Facility (EHLF) shall be constructed as specified in Section 412.7.6.1 through 412.7.6.12.

Section 412.7.6.1 General. Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet above the lowest level of the fire department vehicle access shall have a rooftop emergency helicopter landing facility (EHLF) in a location approved by the Fire Code Official for exclusive use by fire, police and emergency medical helicopters.

Section 412.7.6.2 Rooftop Landing Pad. The landing pad shall be 50 feet x 50 feet or a 50-foot diameter circle that is pitched or sloped to provide drainage away from access points and passenger holding areas at a slope of 0.5 percent to two 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 pounds. For structural design requirements, see California Building Code.

Section 412.7.6.3 Approach-Departure Path. The emergency helicopter landing facility shall have two approach-departure paths separated in plan from each other by at least 90 degrees. No objects shall penetrate above the approach-departure paths. The approach-departure path begins at the edge of the landing pad, with the same width or diameter as the landing pad and is a rising slope extending outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.

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

Section 412.7.6.5 Safety Net. If the rooftop landing pad is elevated more than 30 inches (two feet, six inches) above the adjoining surfaces, a six-foot wide horizontal safety net capable of supporting 25 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 five inches, but less than 18 inches) below the pad elevation. The safety net shall slope upward, but the outer safety net edge shall not be above the elevation of the landing pad.

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

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

Section 412.7.6.8 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 2008.1.7 of Section 5-9-408 Fire Code Item H.

Section 412.7.6.9 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with CFC Section 1009.4.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

Section 412.7.6.10 Standpipe systems. The standpipe system shall be extended to the roof level on which the EHLF is located. All portions of the EHLF area shall be within 150 feet of a 2.5-inch outlet on a Class I or III standpipe.

Section 412.7.6.11 Fire extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairways or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths or the safety area. Installation, inspection and maintenance of extinguishers shall be in accordance with the CFC Section 906.

Section 412.7.6.12 EHLF. Fueling, maintenance, repairs or storage of helicopters shall not be permitted on the EHLF.

D. Address Identification. Section 501.2 of Chapter 5 of the California Building Code is hereby deleted and amended to read:

501.2 Address identification. New and existing buildings shall have approved address numbers as required by Chapter 5 Uniform Security Code of Division 9 Building Regulations of Title 5 Planning of the City of Irvine Municipal Code.

Exception: Legal non-conforming addressing may be maintained. Any replacement addressing shall comply to current provisions to the extent practicable as determined by the Chief Building Official.

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

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

701A.3 Application. New buildings, structures, additions and alterations pursuant to Section 701A.3.1.1 located in any Very High Fire Hazard Severity Zone, or within a 100-Foot Buffer Zone so designated on the currently adopted Wildland Fire Hazard Map for the City of Irvine constructed after the application date, shall comply with the provisions of this chapter.

Exceptions:

1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.
2. Buildings of an accessory character classified as Group U occupancy of any size located at least 50 feet from an applicable building.
3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C - Group U Agricultural Buildings), when located at least 50 feet from an applicable building.
4. Additions to and remodels of buildings shall comply with the provisions of this chapter, or an approved Fire Protection Plan.
5. Within a 100-Foot Buffer Zone, only decks, porches, balconies, exterior stairs and patio covers need to comply with the specific provisions contained in Section 701A3.2.

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

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

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

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

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

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

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

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

B. Horizontal beams consist of lumber having 4 x 6, minimum, nominal dimensions.

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

4. Section 702A Definitions is hereby amended to include the term 100-Foot Buffer Zone and after the term, its definition to read as follows:

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

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

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

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

1. New buildings or structures. Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.12, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area, as defined in Section 202, exceeds 5,000 square feet (465 m^2), or more than two stories in height, regardless of fire areas or allowable area.

Exceptions:

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

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

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

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

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

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

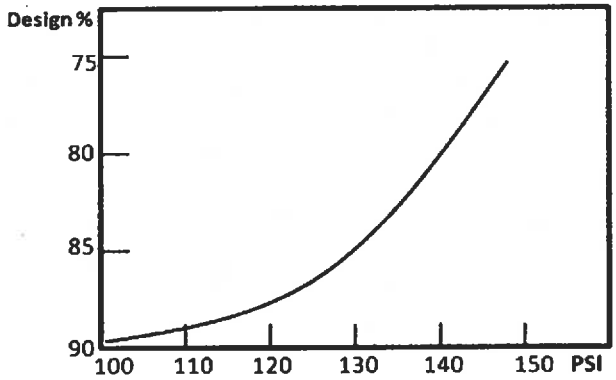
   An automatic sprinkler system shall be installed throughout any existing building when the floor area of alterations within any two year period exceeds 50 percent of gross floor area of the existing structure and the building gross floor area exceeds 5,500 square feet.

3. Section 903.3.5.3 Hydraulically calculated systems is hereby added as follows:

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

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

TABLE 903.3.5.3
Hydraulically Calculated Systems



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

   Exceptions:

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

5. Section 905.4 Location of Class I standpipe hose connections. Section 905.4 is hereby amended by adding items 7 to read:

   7. The centerline of the 2.5-inch outlet shall be no less than 18 inches above and no more than 24 inches above the finished floor.

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

   [F] 907.2.13 High-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire

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

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412.
2. Open parking garages in accordance with Section 406.5.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1.
4. Low-hazard special occupancies in accordance with Section 503.1.1.
5. In Group I-2 and R-2.1 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcasted by the emergency voice/alarm communication system.

7. Section 907.3.1 Duct smoke detectors is hereby deleted and amended to read:

[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.

8. Section 907.5.2.2 Emergency voice/alarm communication system is hereby deleted and amended to read:

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

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

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

9. Section 907.6.3.2 High-rise buildings is hereby deleted and amended to read:

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

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

10. Section 907.6.5 Monitoring is hereby revised by deleting and replacing the first paragraph to read:

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

G. Ventilation. Section 1203 of Chapter 12 of the California Building Code is hereby modified as follows:

1. Section 1203.2.1 Openings into attic is hereby deleted and amended to read:

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

2. 1203.3.1 Openings for under-floor ventilation is hereby deleted and amended to read:

   203.3.1 Openings for under-floor ventilation. The minimum net area of ventilation openings shall not be less than one square foot for each 150 square feet (0.67 m2 for each 100 m2) of crawl-space area. Ventilation openings shall be covered for their height and width with any of the following materials, provided that the least dimension of the covering shall not exceed 1/8 inch (3.2 mm):

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

   1203.3.1.1 [SPCB] Openings for under-floor ventilation shall be not less than 1 1/2 square feet (0.135 m2) for each 25 linear feet (7620

linear mm) of exterior wall. They shall be covered with corrosion-resistant wire mesh with mesh openings not less than 1/16 inch (1.6 mm) nor more than 1/8 inch (3.2 mm) in any dimension.

H. Minimum roof covering classification. Section 1505.1 of Chapter 15 of the California Building Code is hereby modified as follows:

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

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

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

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

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

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

1505.1.3 Roof coverings within all other areas. The entire roof covering of every existing structure where more than 50 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 comply with Table 1505.1.

I. Structural Tests and Special Inspections. Chapter 17 of the California Building Code is hereby modified as follows:

1. Section 1704.2.1 Special inspector qualifications is hereby deleted and amended to read:

Section 1704.2.1 Qualifications of special inspector, examination and certificate of registration.

1. The special inspector shall be a qualified person approved by the Building Official or his or her designated representative. The special inspector shall furnish continuous or periodic inspection on

the construction and work requiring his or her employment as prescribed in the applicable code and statement of special inspections. The special inspector shall report to the Chief Building Official in writing, noting all code violations and other information as required on forms prescribed by the City of Irvine.

2. Each person applying for listing/registration as a special inspector for the City of Irvine shall possess a valid special inspector certificate, issued as evidence of successful completion of testing/examination by a testing agency which is acceptable to the Chief Building Official, for each classification for which the person is applying. On special occasion, the Chief Building Official may administer an oral interview and/or appropriate testing for certification.

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

4. A registration card shall be issued to each such special inspector who qualifies. A renewal fee of $20.00 or as established by resolution of the City Council for each classification shall be charged on July 1 of each year, thereafter, at which time the special inspector may, at the Chief Building Official's discretion, be subject to reexamination.

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

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

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

2. Section 1704.2.5 Inspection of fabricators is hereby deleted and amended to read:

1704.2.5 Inspection of fabricators. Where fabrication of structural load-bearing members and assemblies is being performed on the

premises of a fabricator's shop, the fabricator must be registered and approved by a recognized agency to perform such work.

3. Section 1704.2.5.1 Fabrication and implementation procedures is hereby deleted and amended to read:

   Section 1704.2.5.1 Reserved.

4. Section 1704.2.5.2 Fabricator approval is hereby deleted and amended to read:

   1704.2.5.2 Fabricator approval. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved agency. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the Building Official, stating that the work was performed in accordance with the approved construction documents.

5. Section 1705.3 Special inspection for concrete construction of the California Building Code is hereby amended as follows:

   1. Table 1705.3. item 7 is hereby deleted and amended to read:

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

   2. Section 1705.3 Exception. Items 3, 4, and 5 of the exception are hereby deleted and amended to read:

      3. Concrete in building foundations and slabs supported on grade less than 500 square feet in area in all occupancies and other non-building construction.

      4. Concrete patios, driveways and sidewalks on grade.

      5. (Deleted)

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

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

      PRIVATE POOL is any constructed pool, permanent or portable, which is intended for noncommercial use as a swimming pool by not more than three owner families and their guests.

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

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

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

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

Exceptions:

A. The unlocking or unlatching device may be located on the inside of the enclosure at less than the required five feet in height when not operable from the outside of the enclosure.

B. Double-gates installed across vehicular access ways shall be self-closing and shall be equipped with a latching device which may be manually operated. Such gates shall be securely closed at all times when not in actual use.

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

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

A. Section 6.8.3 is hereby deleted and amended to read:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2½-inch inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the Fire Code Official. The size of piping and the number of inlets shall be approved by the Fire Code Official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2½-inch inlets shall be provided.

B. Section 8.3.3.1 is hereby deleted and amended to read:

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

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

C. Section 8.17.1.1.1 is hereby added as follows:

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

audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

D. 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 fire sprinkler plan is submitted. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

E. Section 11.2.3.1.1.1 is hereby added as follows:

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

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

F. Section 23.2.1.1. is hereby deleted and amended to read:

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

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

A. Section 6.16.1 is hereby deleted and amended to read:

6.16.1 A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2013 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

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

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

A. Section 4.1.3 is hereby added as follows:

4.1.3 Stock of Spare Sprinklers

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.

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

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).

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.

B. Section 7.1.2 is hereby deleted and amended to read:

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

C. Section 7.6 is hereby deleted and amended to read:

7.6 Alarms Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location subject to final approval by the Fire Code Official. Additional interior alarm devices shall be required to provide 55 dBA or greater so as to be 15 dBA above ambient. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level, but not less than 75 dBA. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exceptions:

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

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

A. Section 7.3.1.1 is hereby deleted and amended to read:

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

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

A. Section 6.2.1.1 is hereby added as follows:

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

B. Section 6.2.11 (5) is hereby deleted.

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

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

D. Section 6.2.11 (7) is hereby deleted.

E. Section 6.3.3 is hereby added as follows:

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

F. Section 10.1.6.3 is hereby added as follows:

10.1.6.3 All ferrous pipes 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 two-inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception: 316 Stainless Steel pipe and fittings.

G. Section 10.3.5.2 is hereby deleted and amended to read:

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

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

H. Section 10.3.5.3 is hereby added as follows:

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

I. Section 10.6.3.1 is hereby deleted and amended to read:

10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 24 inches, as measured from the interior face of the exterior wall to the center line of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with Section 10.6.2.

J. Section 10.6.4 is hereby deleted and amended to read:

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 5-9-402 Residential Code

A. Climatic and Geographic Design Criteria. Table R301.2(1) of Chapter 3 of the California Residential Code is hereby deleted and amended to read:

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

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

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

B. Development on or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors. Section R301.9 is hereby added to read:

R301.9 Development On Or Near Land Containing Or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors. The Fire Code Official may require the submittal for approval of geological studies, evaluations, reports, remedial recommendations and/or similar documentation from a state-licensed and department-approved individual or firm, on any parcel of land to be developed which has, or is adjacent to or within 1,000 feet (304.8 m) of, a parcel of land that has an active, inactive or abandoned oil or gas well operation, petroleum or chemical refining facility, petroleum or chemical storage, or may contain or give off toxic, combustible or flammable liquids, gases or vapors.

C. Fuel Modification Requirements for New Construction. Section R301.10 is hereby added to read:

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

D. Fire sprinkler attached garages, and carports with habitable space above. Section R309.6 is hereby modified by deleting and amending the exception to read:

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

E. Automatic Fire Sprinkler Systems. Section R313 is hereby modified as follows:

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

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

2. R313.2 One- and two-family dwellings automatic fire sprinkler systems. The exception to Section R313.2 is hereby deleted and amended to read:

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

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

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

G. Site Address. Section R319 is hereby deleted and amended as follows:

R319 Site Address. New and existing buildings shall have approved address numbers as required per Municipal Code Section 5-9-516.

Exception: Legal non-conforming addressing may be maintained. Any replacement addressing shall comply to current provisions to the extent practicable as determined by the Chief Building Official.

H. Application. Section R327.1.3 is hereby deleted and amended to read:

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

Exceptions:

1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.
2. Buildings of an accessory character classified as Group U occupancy of any size located least 50 feet from an applicable building.
3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C - Group U Agricultural Buildings), when located at least 50 feet from an applicable building.
4. Additions to and remodels of buildings shall comply with the provisions of this chapter or an approved Fire Protection Plan.
5. Within a 100-Foot Buffer Zone, only decks, porches, balconies, exterior stairs and patio covers need comply with the specific provisions contained in Section R327.1.3.2.

I. Existing Buildings. Section R327.1.3.1.1 is hereby added to read:

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

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

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

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

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

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

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

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

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

K. Fuel Modification Requirements for New Construction. Section R327.1.6 is hereby added to read:

R327.1.6 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in hazardous fire areas shall comply with the following:

1. Preliminary fuel modification plans shall be submitted to and approved by the Fire Code Official concurrent with the submittal for approval of any tentative map.

2. Final fuel modification plans shall be submitted to and approved by the Fire Code Official prior to the issuance of a grading permit.

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

3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.

4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval from the Fire Code Official.

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.

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

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

M. Under-Floor Space. Section R408 is hereby modified as follows:

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

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

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

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

N. Ventilation required. Section 806.1 is hereby modified by deleting the first paragraph and amending to read:

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

O. Roof covering materials. Section R902 is hereby modified as follows:

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

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

2. Section R902.1 Roof Coverings Material, the exceptions is hereby amended to add item 4 to read:

   Where less than 50 percent of the roof covering is replaced within any one-year period, the new roof covering may be Class A, or shall have the same class rating to match the existing, but in no case shall it be less than Class B.

3. Section R902.1.1 Roof coverings within very-high fire severity zones is hereby deleted and amended to read:

   R902.1.1 Roof coverings within very-high fire severity zones: reserved.

4. Section R902.1.2 Roof coverings within state responsibility areas is hereby deleted and amended to read:

   R902.1.2 Roof coverings within state responsibility areas: reserved.

5. R902.1.3 Roof coverings in all other areas is hereby deleted and amended to read:

   R902.1.3 Roof coverings in all other areas: reserved.

P. Section R1001.13 Chimney spark arresters is hereby added as follows:

   R1001.13 Chimney spark arresters. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester. Chimneys serving outdoor appliances or fireplaces shall be equipped with a spark arrester. The spark arrester shall meet the requirements of Section 2113.9.2 of the California Building Code.

Q. Chapter 44 Referenced Standards is revised as follows:

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

   A. Section 6.8.3 is hereby revised as follows:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2½-inch inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the Fire Code Official. The size of piping and the number of inlets shall be approved by the Fire Code Official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2½-inch inlets shall be provided.

B. Section 8.3.3.1 is hereby revised as follows:

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

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

C. Section 8.17.1.1.1 is hereby added as follows:

8.17.1.1.1 Residential Waterflow Alarms. A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed, 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.

D. 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.

E. Section 11.2.3.1.1.1 is hereby added as follows:

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

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

F. Section 23.2.1.1 is hereby revised as follows:

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

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

A. Section 6.16.1 is hereby revised as follows:

6.16.1 A local water-flow 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 2013 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.

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

   A. Section 4.1.3 is hereby added as follows:

      4.1.3 Stock of Spare Sprinklers

      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 been operated or damaged in any way can be promptly replaced.

      4.1.3.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers utilized on the property.

      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).

      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.

   B. Section 7.1.2 is hereby revised as follows:

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

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

7.6 Alarms Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location subject to final approval by the Fire Code Official. Additional interior alarm devices shall be required to provide 55 dBA or greater so as to be 15 dBA above ambient. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level, but not less than 75 dBA, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exception:

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

Section 5-9-403 Green Building Code - Reserved

Section 5-9-404. Electrical Code.

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

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

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

B. Conductor Material. Section 310.106(B) of the California Electrical Code is hereby deleted and amended to read:

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

Aluminum conductors No. 6 and smaller may only be installed with prior approval by the Chief Building Official and shall require continuous inspection during installation by an independent testing agency for proper torqueing of connections at their termination point.

Section 5-9-405. Plumbing Code.

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

602.5 Saline waste. Except where permitted by State law, it shall be unlawful to install or replace any plumbing equipment, including any automatic or self-regenerating water softener unit, the operation of which may result in the discharge of saline waste into the facilities of the Irvine Ranch Water District, or the discharge of such wastes that might pollute any surface or underground stream, watercourse, lake or any body of water, including any underground, natural or artificial storage reservoir, or which might impair or contribute to the impairment of the usefulness of such waters for human or animal consumption, or domestic, agricultural, industrial or recreational purposes or for any other useful purpose.

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

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

C. Materials for gas piping. The first paragraph of Section 1208.5 of the California Plumbing Code is hereby deleted and amended to read:

Section 1208.5. Acceptable Piping Materials and Joining Methods. Materials used for piping systems shall comply with the requirements of this chapter or shall be acceptable to the authority having jurisdiction. All pipe used for the installation, extension, alteration or repair of any exterior underground piping system shall be approved polyethylene or other approved non-metallic pipe, tubing and fittings.

Section 5-9-406 Mechanical Code - Reserved.

Section 5-9-407 Swimming Pool Code - Reserved.

Section 5-9-408 Fire Code

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

1. APPROACH-DEPARTURE PATH. The flight path of the helicopter as it approaches or departs from the landing pad.

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

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

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

5. HIGH-RISE BUILDING. Other than in Group I-2 occupancies, "high-rise buildings" as used in this code:

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

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

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

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

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

7. 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.

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

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

1. Vegetation. Section 304.1.2 (7) is hereby deleted and amended to read as follows:

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

2. Ignition Sources. Section 305 is hereby amended by adding the following sections:

   A. Section 305.5 Chimney Spark Arresters. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester. The spark arrester shall meet the requirements of Section 2113.9.2 of the California Building Code.

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

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

      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 barbeque or grill, incinerator or outdoor fireplace located at least 30 feet from combustible vegetation.
      3. Installations or uses approved by the Fire Code Official.

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

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

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

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

3. Open Burning, Recreational Fires and Portable Outdoor Fireplaces Section 307, is hereby modified by adding the following sections:

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

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

307.6.1 Gas-fueled devices. Outdoor fireplaces, fire pits and similar devices fueled by natural gas or liquefied-petroleum gas are allowed when approved by the Building Department and the device is designed to only burn a gas flame and not wood or other solid fuel. At R-3 occupancies, combustible construction shall not be located within three feet of an atmospheric column that extends vertically from the perimeter of the device unless otherwise provided in the gas-fueled device product listing. At other R occupancies, the minimum distance shall be ten feet. Where a permanent Building Department approved hood and vent is installed, combustible construction may encroach upon this column between the bottom of the hood and the vent opening. Where chimneys or vents are installed, they shall have a spark arrester in accordance with Section 305.5.

307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas. Fireplaces burning wood or other solid fuel shall be constructed in accordance with the California Building Code and Section 305.5. Fires in a fireplace shall be contained

within a firebox with an attached chimney. The opening in the face of the firebox shall have an installed and maintained method of arresting sparks. The burning of wood or other solid fuel in a device is not allowed within 15 feet of combustible structures, unless within a permanent or portable fireplace. Conditions which could cause a fire to spread within 25 feet of a structure or to vegetation shall be eliminated prior to ignition. Fires in devices burning wood or solid fuel shall be managed per Section 307.5.

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

4. Development On Or Near Land Containing Or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors. Section 319, is hereby added as follows:

   Section 319 Development On Or Near Land Containing Or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors.

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

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

   Section 320 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in areas with or adjacent to land having hazardous combustible vegetation shall comply with the requirements in the edition of OCFA Vegetation Management Guidelines currently in use at the time of plan submittal.

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

   Section 321 Clearance of brush or vegetation growth from roadways. The Fire Code Official is authorized to cause areas within ten feet (3048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic to be cleared of flammable vegetation and other combustible growth. Measurement shall be from the flow-line or the end of the improved edge of the roadway surfaces.

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

7. Unusual Circumstances. Section 322 is hereby added as follows:

   Section 322 Unusual Circumstances. The Fire Code Official may suspend enforcement of the vegetation management requirements and require reasonable alternative measures designed to advance the purposes of this code if determined that in any specific case that any of the following conditions exist:

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

8. Use of Equipment. Section 323 is hereby added as follows:

   Section 323 Use of Equipment. Except as otherwise provided in this section, no person shall use, operate or cause to be operated, in, upon or adjoining any hazardous fire area any internal combustion engine which uses hydrocarbon fuels, unless the engine is equipped with a spark arrester as defined in Section 323.1 maintained in effective working order, or the engine is constructed, equipped and maintained for the prevention of fire.

Exception:

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

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

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

   Spark arresters affixed to the exhaust system of engines or vehicles subject to Section 323 shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.

9. Restricted Entry. Section 324 is hereby added as follows:

   Section 324 Restricted Entry. The Fire Official shall determine and publicly announce when Hazardous Fire Areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of Hazardous Fire Areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the Hazardous Fire Area is closed to entry, is prohibited.

   Exception:

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

10. Trespassing on posted property. Section 325 is hereby added as follows:

Section 325 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.

11. Sky Lanterns or similar devices. Section 326 is hereby added to read:

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

Exceptions:

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

C. Emergency Planning and Preparedness. Chapter 4 of the California Fire Code is hereby amended to delete without replacement all provisions except for sections 401, 402, 403, 404.6 through 404.7.6, 407, 408.3.1 through 408.3.2 and 408.12 through 408.12.3.

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

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

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

2. Section 503.2.1.1 is hereby added as follows:

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

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

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

   505.1 Address identification. New and existing buildings shall have approved address numbers as required by Chapter 5 Uniform Security Code of Division 9 Building Regulations of Title 5 Planning of the City of Irvine Municipal Code.

   Exception: Legal non-conforming addressing may be maintained. Any replacement addressing shall comply with current provisions to the extent practicable as determined by the Chief Building Official.

4. Section 510 Emergency Responder Radio Coverage is hereby deleted and replaced as follows:

   Section 510 Emergency Responder Radio Coverage

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

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

1. Section 608.1 Scope is hereby amended as follows:

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

2. 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 electric/cars battery electrolyte exceeds 50 gallons shall comply with following:

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

F. Fire Protection Systems. Chapter 9 of the California Fire Code is hereby amended as follows:

1. Section 903.2 is hereby deleted and amended to read:

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

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

Exceptions:

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

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

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

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

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

   Section 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 902.1 shall be provided throughout all new buildings with a Group R fire area.

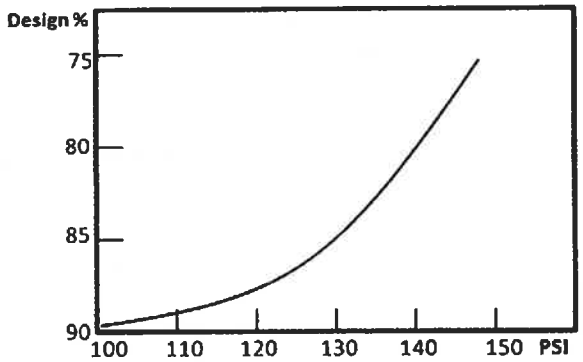
   An automatic sprinkler system shall be installed throughout any existing building when the floor area of the alteration within any two-year period exceeds 50 percent of area of the existing structure and the building area exceeds 5,500 square feet.

3. Section 903.3.5.3 Hydraulically calculated systems are hereby added as follows:

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

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

TABLE 903.3.5.3
Hydraulically Calculated Systems



4. Exceptions to Section 903.4, Sprinkler system monitoring and alarms, is hereby amended by deleting items 3 and 5, and renumbering the Exceptions as follows:

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

5. Section 905.4, Location of Class I standpipe hose connections, is hereby amended by adding item 7 as follows:

    7. The centerline of the 2.5-inch outlet shall be no less than 18 inches above and no more than 24 inches above the finished floor.

6. Section 907.2.13, High-rise buildings, is hereby amended by deleting and replacing the first paragraph as follows:

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

provided with an automatic smoke detection system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.6.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the California Building Code.
2. Open parking garages in accordance with Section 406.5 of the California Building Code.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the California Building Code.
4. Low-hazard special occupancies in accordance with Section 503.1.1 of the California Building Code.
5. In Group I-2 and R-2.1 occupancies, the alarm shall sound at a constantly attended location and occupant notification shall be broadcast by the emergency voice/alarm communication system.

7. Section 907.3.1, Duct smoke detectors, is hereby deleted and amended to read:

Section 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.

8. Section 907.5.2.2, Emergency voice/alarm communication system, is hereby amended to read:

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

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

   Exception: In Group I-2 and R-2.1 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

9. Section 907.6.3.2, High-rise buildings, is hereby deleted and amended to read:

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

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

10. Section 907.6.5, Monitoring, is hereby deleted and amended to read:

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

G. Chapter 11 of the California Fire Code is hereby amended to delete without replacement all provisions except for Sections 1103.7, 1103.7.3, 1103.7.3.1, 1103.7.8 through 1103.7.8.2, 1103.7.9 through 1103.7.9.10, 1103.8 through 1103.8.5.3 and 1106.

H. Aviation Facilities. Chapter 20 of the California Fire Code is hereby amended by adding the following section:

SECTION 2008, Emergency Helicopter Landing Facility (EHLF)

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

Section 2008.1.1 Rooftop Landing Pad. The landing pad shall be 50 feet x 50 feet or a 50-foot diameter circle that is pitched or sloped to provide drainage away from access points and passenger holding areas at a slope of 0.5 percent to two 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 pounds. For structural design requirements, see California Building Code.

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

Section 2008.1.3 Safety Area. The safety area is a horizontal plane level with the landing pad surface and shall extend 25 feet in all

directions from the edge of the landing pad. No objects shall penetrate above the plane of the safety area.

Section 2008.1.4 Safety Net. If the rooftop landing pad is elevated more than 30 inches (two feet, six inches) above the adjoining surfaces, a 6-foot wide horizontal safety net capable of supporting 25 pounds per square foot 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 five inches, but less than 18 inches) below the pad elevation. The safety net shall slope upward, but the outer safety net edge shall not be above the elevation of the landing pad.

Section 2008.1.5 Take-off and Landing Area. The takeoff and landing area shall be free of obstructions and have a minimum area of 100 feet x 100 feet or a 100 foot diameter.

Section 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.

Section 2008.1.7 Special Markings. The Emergency Helicopter Landing Facility shall be marked as indicated in Figure 2008.1.7

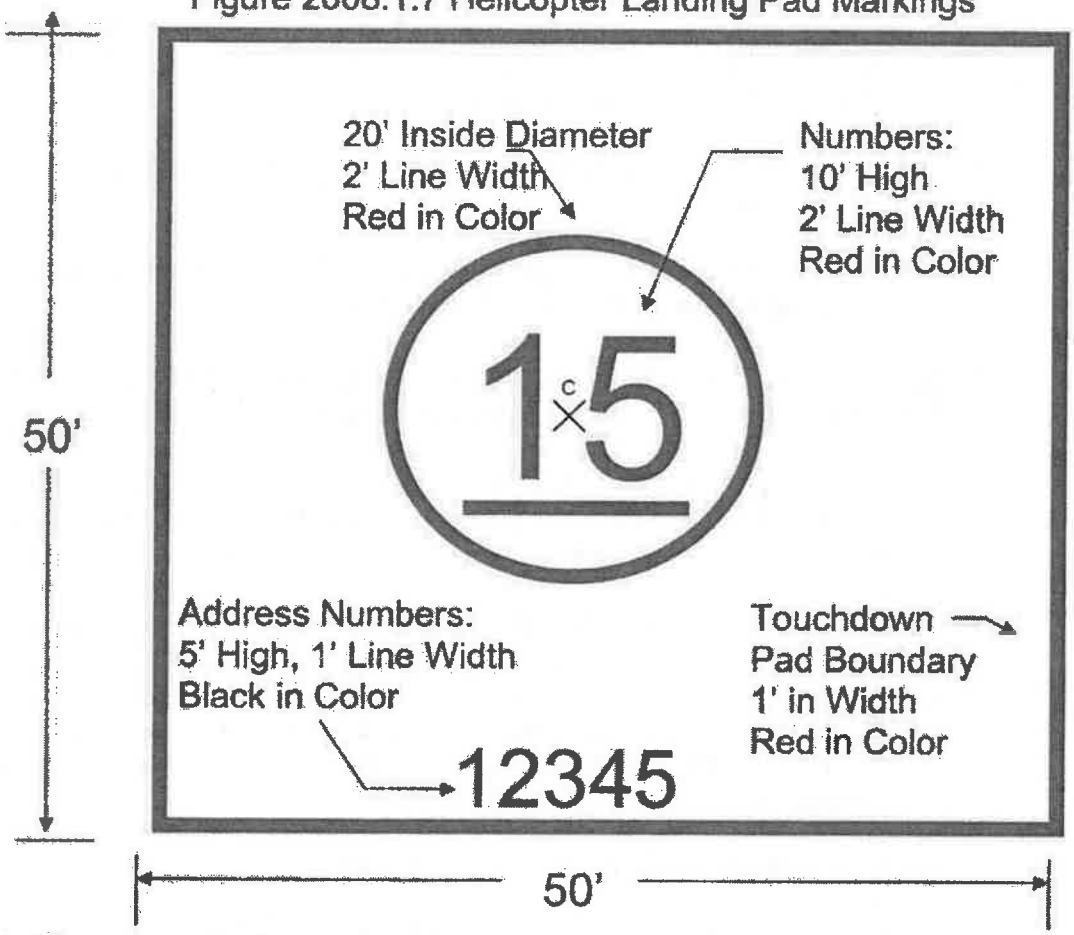
Section 2008.1.8 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform 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.

Section 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.

Section 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 stairways or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area. Installation, inspection and maintenance of extinguishers shall be in accordance with the California Fire Code, Section 906.

Section 2008.1.11 EHLF. Fueling, maintenance, repairs or storage of helicopters shall not be permitted.

Figure 2008.1.7 Helicopter Landing Pad Markings



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

I. Lumber Yards and Woodworking Facilities. Chapter 28 of the California Fire Code is hereby amended as follows:

1. Section 2801.2, Permit, is hereby deleted and amended to read:

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

2. Section 2808.2, Storage site, is hereby deleted and amended to read:

   Section 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 Fire Code Official obtained before transferring products to the site.

3. Section 2808.3, Size of piles, is hereby amended to modify the first sentence as follows:

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

4. Section 2808.7, Pile fire protection, is hereby amended by adding the following sentence to the end of the paragraph:

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

5. Section 2808.9, Material handling equipment, is hereby amended by adding the following sentence at the beginning of the section:

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

6. 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.

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

   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.

J. Requirements for Wildland-Urban Interface Fire Areas. Chapter 49 of the California Fire Code is hereby amended as follows:

1. Section 4906.3, Vegetation, is hereby revised by adding Section "(5)" as follows:

   (5) OCFA Vegetation Management Guideline.

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

   4908 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in hazardous fire areas shall comply with the following:

   1. Preliminary fuel modification plans shall be submitted to and approved by the Fire Code Official concurrent with the submittal for approval of any tentative map.

   2. Final fuel modification plans shall be submitted to and approved by the Fire Code Official prior to the issuance of a grading permit.

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

   3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.

   4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approved 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.

K. Hazardous Materials – General Provisions. Chapter 50 of the California Fire Code is hereby amended as follows:

1. Section 5001.5.2, Hazardous Materials Inventory Statement, is amended by deleted and amending the first paragraph to read:

   Section 5001.5.2 Hazardous Materials Inventory Statement (HMIS). When required by the *Fire Code Official*, an application for a permit shall include *Orange County Fire Authority's Chemical Classification Packet*, which shall be completed and approved prior to approval of plans, and/or the storage, use or handling of

chemicals on the premises. The HMIS shall include the following information:

2. Section 5003.1.1, Maximum allowable quantity per control area of hazardous material posing a physical hazard, is hereby amended by deleting Footnote K.

3. Section 5003.1.1.1, Extremely Hazardous Substances, is hereby added as follows:

   Section 5003.1.1.1 Extremely Hazardous Substances. No person shall use or store any amount of extremely hazardous substances (EHS) in excess of the disclosable amounts (see Health and Safety Code Section 25500 *et.* al) in a residential zoned or any residentially developed property.

4. Section 5003.5, Hazard identification signs, is hereby deleted and amended to read:

   Section 5003.5 Hazard Identification Signs. Unless otherwise exempted by the Fire Code Official, visible hazard identification signs as specified in the Orange County Fire Authority Signage Guidelines for the specific material contained shall be placed on stationary containers and above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used or handled in quantities requiring a permit and at specific entrances and locations designated by the Fire Code Official.

L. Cryogenic Fluids. Chapter 55 of the California Fire Code is hereby amended as follows:

1. Section 5503.4.1, Identification signs, is hereby deleted and amended to read:

   Section 5503.4.1 Identification Signs. Visible hazard identification signs in accordance with the Orange County Fire Authority Signage Guidelines shall be provided at entrances to buildings or areas in which cryogenic fluids are stored, handled or used.

M. Explosives and Fireworks Chapter 56 of the California Fire Code is hereby amended as follows:

1. Section 5601.2, Retail Fireworks, is hereby added to read:

56101.2 Retail Fireworks. The storage, use, sale, possession and handling of fireworks 1.4G (commonly referred to as Safe & Sane) and fireworks 1.3G is prohibited.

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

2. Section 5601.3, Seizure of Fireworks, is hereby added to read:

5601.3 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 Title 19 CCR, Chapter 6. Any seizure or removal pursuant to this section shall be in compliance with all applicable statutory, constitutional and decisional law.

3. Section 5602, Explosives and blasting, is hereby added to read:

5602 Explosives and Blasting. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within wildland-urban interface areas or hazardous fire areas except by permit from the Fire Code Official.

4. Section 5508.1, General, is hereby deleted and amended to read:

5508.1 General. Outdoor fireworks displays, use of pyrotechnics before a proximite audience and pyrotechnic special effects in theatrical, and group entertainment productions, shall comply with California Code of Regulations, Title 19 , Division 1, Chapter 6 – Fireworks, the Orange County Fire Authority Guidelines for Public Fireworks Displays, and with the conditions of the permit as approved by the Fire Code Official.

5. Section 5508.2, Firing, is hereby added to read:

5508.2 Firing. All fireworks displays shall be electrically fired.

N. Flammable and Combustible Liquids, Chapter 57 of the California Fire Code, is hereby amended as follows:

1. Section 5704.2.3.2, Label or placard, is hereby amended by deleted and replacing the first paragraph to read:

5704.2.3.2 Label or placard. Tanks more than 100 gallons (379 L) in capacity, which are permanently installed or mounted and used for

the storage of Class I, II or III liquids, shall bear a label and placard identifying the material therein. Placards shall be in accordance with the Orange County Fire Authority Signage Guidelines.

Highly Toxic and Toxic Materials, Chapter 60 of the California Fire Code, is hereby amended as follows:

1. Section 6004.2.2.7, Treatment System, is hereby amended by deleting exceptions 1 and 2 and replacing with the following:

   Exception:

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

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

O. Reference Standards, Chapter 80, is revised as follows:

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

   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, 2½ inch inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the chief. The size of piping and the number of inlets shall be approved by the Fire Code Official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet

connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2½ inch inlets shall be provided.

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 first submitted. Sprinklers in light hazard occupancies shall be one of the following:

1. Quick-response type as defined in 3.6.4.7 (fix numbering 1-4)
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 8.17.1.1.1 is hereby added as follows

8.16.1.1.1 Residential Waterflow Alarms. 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 within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Section 11.1.1.2 is hereby added as follows:

11.1.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction/s in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 12.3.2.1.2 (d) curve "G".

Use is considered undetermined if a specific tenant/occupant is not identified at the time the sprinkler plan is submitted. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

Section 11.2.3.1.1.1 is hereby added as follows:

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

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

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 six months prior to working plan submittal unless otherwise approved by the authority having jurisdiction.

2. 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

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.

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

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

4.1.3.4 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 7.6 is hereby deleted in its entirety and replaced as follows:

7.6 Alarms. Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location subject to final approval by the Fire Code Official. Additional interior alarm devices shall be required to provide 55 dBA or greater so as to be 15 dBA above ambient. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level, but not less than 75 dBA, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exception #1: When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.

Exception #2: When smoke detectors specified under California Building Code Section 310.9 are used to sound an alarm upon waterflow switch activation.

3. 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 6.16.1 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 2013 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

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

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

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

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

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

Section 6.2.1.1 is hereby added as follows:

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

Section 6.2.11 (5) is hereby deleted without replacement.

Section 6.3.3 is hereby added as follows:

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

Section 10.1.6.3 is hereby added as follows:

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

Exception: 304 or 316 Stainless Steel pipe fittings.

Section 10.3.6.2 is hereby revised as follows:

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

Section 10.3.63 is hereby added as follows:

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

Section 10.6.3.1 is hereby revised as follows:

10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 24 inches, as measured from the interior face of the exterior wall to the centerline of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with Section 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 5-9-409 Uniform Housing Code.

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

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

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

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

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

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

D. Swimming Pools. Section 505.8 is hereby added to the 1997 Uniform Housing Code to read:

505.8 Swimming Pools. All swimming pool and spa water shall be maintained in a clear condition which is free of algae, insects, and debris and in a sanitary condition. The entire floor of the swimming pool or spa shall be clearly visible.

E. Heating. Section 701.2 of the 1997 Uniform Housing Code is hereby deleted and amended to read:

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

F. General. Section 1001.1 of the 1997 Uniform Housing Code is hereby deleted and amended to read:

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

G. Hazardous or Insanitary Premises. Section 1001.11 of the 1997 Uniform Housing Code is hereby deleted and amended to read:

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

SECTION 6. Section 6-7-903 of Chapter 9 of Section 6 of Division 7 of the Irvine Municipal Code is hereby deleted in its entirety and amended to read as follows:

Section 6-7-903. Thresholds for Covered Projects.

A. "Covered Project" shall mean any of the following projects:

1. All projects involving new or existing residential development, except for additions and renovations of a single residential unit;
2. All projects involving new non-residential development;
3. All projects involving the addition of non-residential floor area of 1,000 square feet or greater, or 10,000 square feet or greater of paved surface area serving a non-residential use; and
4. All projects involving non-residential demolition and/or renovation of 10,000 square feet or greater of project area, or having a project valuation of $200,000.

SECTION 7. If any section, subsection, subdivision, sentence, clause, phrase or portion of this Ordinance is, for any reason, held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have adopted this Ordinance and each section, subsection, subdivision, sentence, clause, phrase or portion thereof, irrespective of the fact that any one or more sections, subsection, subdivision, sentence, clause, phrase or portions thereof be declared invalid or unconstitutional.

PASSED AND ADOPTED by the City Council of the City of Irvine at an adjourned regular meeting held on the 12th day of November 2013.

MAYOR OF THE CITY OF IRVINE

ATTEST:

INTERIM CITY CLERK OF THE CITY OF IRVINE

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

I, MARIE MACIAS, Interim City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Ordinance was introduced for first reading on the 22nd day of October 2013 and duly adopted at an adjourned regular meeting of the City Council of the City of Irvine held on the 12th day of November 2013.

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

INTERIM CITY CLERK OF THE CITY OF IRVINE

CITY COUNCIL RESOLUTION NO. 13-124

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

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

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

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

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

WHEREAS, the Chief Building Official has recommended that changes and modifications be made to the Codes and has advised that certain of said changes and modifications to the California Building Standards Code provisions of the 2013 California Building Code, the 2013 California Residential Code, the 2013 California Fire Code, the 2013 California Mechanical Code, the 2013 California Plumbing Code and the 2013 California Electrical Code are reasonably necessary to safeguard life and property due to local conditions in the City of Irvine and has further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes.

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

SECTION 1. Changes and modifications to the 2013 California Building Code, the 2013 California Residential Code, and 2013 California Fire Code as recommended by the Chief Building Official and Orange County Fire Authority are hereby found to be reasonably necessary due to local climatic, topographic or geologic conditions as referenced in the tables below and defined thereafter.

A. California Building Code - amended sections and referenced findings:

2013 California Building Code Amendments/Findings Legend		
CODE SECTION	**SUBJECT**	**FINDINGS I,II,III**
403.1	High-rise buildings Application	II & III-A
412.7.6 thru 412.7.6.12	Emergency Helicopter Landing Facility	II & III-A
701A.3,	Application, Very High Fire Severity Zone (VHFSZ)	I & II
701A.3.1.1	Existing Buildings in VHFSZ	I & II
701A.3.2	Construction Features in VHFSZ	I & II
903.2	Fire Sprinklers, where required	II & III-B
903.2.8	Fire sprinklers for Group R	II-B & III-B
903.3.5.3	Hydraulically calculated fire sprinkler systems	I & II
903.4	Fire sprinkler system supervision and alarms (of valves)	III-A
905.4	Location of Class I standpipe hose connections	III-A
907.3.1	Duct smoke detectors	III-A
907.5.2.2	Emergency voice/alarm communication system	II &III-A
1203	Protection of exterior openings in attic and under floor spaces	I & II
1505.1	Roof covering classification rating	I & II
Chapter 35	Reference Standards	
	2010 NFPA 13 (Sprinkler Systems)	II & III
	2010 NFPA 13-R (Multi-Family Sprinkler Systems)	II & III
	2010 NFPA 13-D (Single Family Sprinkler Systems)	II & III
	2007 NFPA 14 (Standpipe Systems)	II & III
	2010 NFPA 24 (Underground Water Supply Systems)	II & III

B. California Fire Code - amended sections and referenced findings:

2013 California Residential Code Amendments/Findings Legend		
CODE SECTION	SUBJECT	FINDINGS I,II,III
R301.9	Development on or near land containing or emitting toxic, combustible or flammable liquids, gases or vapors	III
R301.10	Fuel modification requirements for new construction	I & II
R309.6	Fire sprinkler attached garages, carports with habitable space above	III
R313.1	Townhouse automatic fire sprinkler systems	III
R313.2	One- and two-family dwellings automatic fire sprinkler system	III
R313.3.6.2.2	Calculation procedures	III
R319	Site Address	II
R327.1.3	Application, Very High Fire Severity Zone (VHFSZ)	I & II
R327.1.3.1.1	Existing Buildings in VHFSZ	I & II
R327.1.3.2	Construction Features in VHFSZ	I & II
R327.1.6	Fuel modification requirements for new construction	I & II
R408.2	Protection of exterior openings in under floor spaces	I & II
R806.1	Protection of exterior openings in attic spaces	I & II
R902.1	Roof covering classification rating	I & II
R1001.13	Spark arrestors	I & II
Chapter 35	Reference Standards	
	2010 NFPA 13 (Sprinkler Systems)	II & III
	2010 NFPA 13-R (Multi-Family Sprinkler Systems)	II & III
	2010 NFPA 13-D (Single Family Sprinkler Systems)	II & III

C. California Residential Code - amendments and referenced findings:

2013 California Fire Code OCFA Local Amendments Findings Legend		
CODE SECTION	SUBJECT	FINDINGS I,II,III
304.1.2	Vegetation	I & II
305.5	Chimney spark arrestors	I & II
305.6	Outdoor fires	I & II
305.6.1	Where prohibited	I & II
305.6.1.1	Fuel Modification Area	I & II
305.6.1.2	Supervision	I & II
305.6.2	Hazardous conditions	I & II
305.6.3	Disposal of rubbish	I & II

307.6	Outdoor Fireplaces, Fire Pits, Fire Rings, and Outdoor Fireplaces	I & II
307.6.1	Gas-fueled devices	I & II
307.6.2	Devices using wood or fuels other than natural gas or LPG	I & II
307.6.2.1	Where prohibited	I & II
319	Development on or near land containing or emitting toxic, combustible or flammable liquids, gases or vapors	III
326	Sky Lanterns or similar devices	I & II
608.10	Indoor charging of electric carts/cars	III-A
903.2	Fire Sprinklers, where required	II & III-B
903.2.8	Fire Sprinklers, group R	II-B & III-B
903.3.5.3	Hydraulically calculated fire sprinkler systems	I & II
903.4	Fire sprinkler system supervision and alarms (of valves)	III-A
905.4	Location of Class I standpipe hose connections	III-A
907.3.1	Duct smoke detectors	III-A
907.5.2.2	Emergency voice/alarm communication system	II &III-A
2008.1. thru 2008.1.11	Emergency Helicopter Landing Facility	II & III-A
5003.1.1(1)	Maximum allowable quantity per control area	III & III
5003.1.1.1	Extremely hazardous substances	III
6004.2.2.7	Treatment systems (Highly toxic & toxic material)	II & III
Chapter 50	Reference Standards	
	2010 NFPA 13 (Sprinkler Systems)	II & III
	2010 NFPA 13-R (Multi-Family Sprinkler Systems)	II & III
	2010 NFPA 13-D (Single Family Sprinkler Systems)	II & III
	2007 NFPA 14 (Standpipe Systems)	II & III
	2010 NFPA 24 (Underground Water Supply Systems)	II & III
	2010 NFPA 72 (Fire Alarm Systems)	II

FINDINGS

I. Climatic Conditions

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

Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles, and the requirement to climb 75 feet vertically up flights of stairs will greatly impact the response time to reach an incident scene. Additionally, there is a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type firefighting apparatus above this height would place rescue personnel at increased risk of injury.

B. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the Orange County Fire Authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County.

C. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage capacities and consumption, and a limited amount of rainfall, future water allocation is not fully dependable. This necessitates the need for additional and on-site fire protection features. It would also leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to floors in a fire.

D. These dry climatic conditions and winds contribute to the rapid spread of even small fires originating in high-density housing or vegetation. These fires spread very quickly and create a need for increased levels of fire protection. The added protection of fire sprinkler systems and other fire protection features will supplement normal fire department response by providing immediate protection for the building occupants and by containing and controlling the fire spread to the area of origin. Fire sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent.

II. Topographic conditions

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

B. Traffic and circulation congestion is an artificially created, obstructive topographical condition, which is common throughout Orange County.

C. These topographical conditions combine to create a situation, which places fire department response time to fire occurrences at risk, and makes it necessary to provide automatic on-site fire-extinguishing systems and other protection measures to protect occupants and property.

III. Geologic Conditions

The City of Irvine is located in a seismically active area adjacent to the Newport-Inglewood and San Joaquin Hills Faults capable of producing significant earthquake events.

A. Earthquake events are known to be accompanied by disruption of traffic flow and fires. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks, there exists a need to provide increased protection for anyone on upper floors of buildings. As an example, the October 17, 1989, Santa Cruz earthquake resulted in one major fire in the Marina District (San Francisco). When combined with the 34 other fires locally and over 500 responses, the department was taxed to its fullest capabilities. The Marina fire was difficult to contain because main lines supplying water to the district burst during the earthquake. This situation creates the need for both additional fire protection and automatic on-site fire protection for building occupants.

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

C. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.

D. Portions of the County contain active or former oil production fields. These areas contain a variety of naturally occurring gasses, liquids and vapors. These compounds present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary to implement appropriate mitigation.

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

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

Findings:

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

SECTION 2. The following changes and modifications to the 2013 California Plumbing Code as recommended by the Chief Building Official are hereby found to be reasonably necessary due to the following local climatic, geologic, or topographic conditions:

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

Findings:

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

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

C. Section 1208.5 is amended to prohibit the use of metallic gas pipe underground.

Findings for B and C:

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

SECTION 3. The following changes and modifications to the 2013 California Electrical Code, as recommended by the Chief Building Official, are hereby found to be reasonably necessary due to the following local climatic, geologic or topographic conditions.

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

Findings:

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

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

B. Section 310.106 is amended to require continuous inspection when aluminum conductors No. 6 and smaller are used for branch circuits.

Findings:

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

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

SECTION 4. Additional amendments have been made to the administrative provisions of the 2013 California Building Code, the 2013 California Fire Code, the 2013 California Mechanical Code, the 2013 California Plumbing Code, the 2013 California Electrical Code, the 2013 California Existing Building Code and the 2013 California Residential Code. On the recommendation of the Chief Building Official and the Fire Chief, such amendments are hereby found to be either administrative or procedural in nature. The changes made include provisions making each of said codes compatible with other codes and ordinances enforced by the City and fee schedules adopted by City Council resolution.

SECTION 5. A copy of this Resolution together with the Ordinance adopting the 2013 California Building Code, the 2013 California Fire Code, the 2013 California Mechanical Code, the 2013 California Plumbing Code, the 2013 California Electrical Code, the 2013 California Existing Building Code, 2013 California Residential Code, and all City amendments thereto shall be filed with the California Building Standards Commission by the Chief Building Official of the City of Irvine.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 22nd day of October 2013.

MAYOR OF THE CITY OF IRVINE

ATTEST:

INTERIM CITY CLERK OF THE CITY OF IRVINE

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

I, MARIE MACIAS, Interim City Clerk of the City of Irvine, does hereby certify that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 22nd day of October 2013.

AYES:	3	COUNCILMEMBERS:	Agran, Krom and Shea
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	2	COUNCILMEMBERS:	Lalloway and Choi

INTERIM CITY CLERK OF THE CITY OF IRVINE