

Ordinance No. _____

An Ordinance Adopting the 2019 California Building, Residential, Electrical, Mechanical, Plumbing, Fire, Energy, and Green Building Standards, and Referenced Standards Codes with Modifications for Local Conditions and Making Certain Other Amendments to Chapter 16 (Building Regulations) of the City Code

THE CITY COUNCIL OF THE CITY OF SARATOGA DOES ORDAIN AS
FOLLOWS:

Section 1. Findings.

The City Council finds and declares as follows:

- A. The State of California has adopted the 2019 California Building Code (California Code of Regulations, Title 24, Part 2, Volumes 1 and 2, based upon the 2018 International Building Code as published by the International Code Council); the 2019 California Residential Code (California Code of Regulations, Title 24, Part 2.5, based upon the 2018 International Residential Code as published by the International Code Council); the 2019 California Electrical Code (California Code of Regulations, Title 24, Part 3, based on the 2017 National Electrical Code as published by the National Fire Protection Association); the 2019 California Mechanical Code (California Code of Regulations, Title 24, Part 4, based on the American National Standard 2018 Uniform Mechanical Code); the 2019 California Plumbing Code (California Code of Regulations, Title 24, Part 5, based on the American National Standard 2018 Uniform Plumbing Code); the 2019 California Energy Code (California Code of Regulations, Title 24, Part 6); the 2019 California Historical Building Code (California Code of Regulations, Title 24, Part 8); the 2019 California Fire Code (California Code of Regulations, Title 24, Part 9, based on the 2018 International Fire Code as published by the International Code Council); the 2019 California Existing Building Code, Title 24, Part 10 based on the 2018, International Existing Building Code, as published by the International Code Council); the 2019 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11); and the 2019 California Referenced Standards Code (California Code of Regulations, Title 24, Part 12). These Codes shall hereinafter be referred to collectively as the “Building Codes.”
- B. On October 25, 2019 and November 1, 2019, notices were published in a qualifying newspaper of general circulation stating the time and place of a November 6, 2019 public hearing and including a notice of the purpose and subject matter of a proposed ordinance adopting the Building Codes with local additions, deletions, and amendments. On November 6, 2019 the City Council opened the public hearing, invited public testimony, and continued the hearing to November 20, 2019.
- C. On November 20, 2019, the City Council of Saratoga conducted the continued public hearing and, after considering all testimony and written materials provided in connection with that hearing, introduced this ordinance adopting the Building Codes with local additions, deletions, and amendments, and waived the reading thereof. Following public testimony and consideration, the City Council of Saratoga found that adoption of the Building Codes was in the public interest. Except as to the additions, deletions, and amendments hereinafter described, the Building Codes are hereby adopted and shall be the Building Regulations of the City, effective January 1, 2020 or as soon thereafter as this ordinance takes effect.

- D. On November 6, 2019, at least one copy of the Building Codes certified as true copies by the City Clerk was filed with the City Clerk for public inspection.
- E. Additions, deletions, and amendments similar to those adopted in the City of Saratoga's 2016 Building Regulations were and are deemed reasonably necessary because of local climatic, geological, or topographical conditions pursuant to Government Code Section 17958.5. Express findings that these modifications to the Building Codes were reasonably necessary were filed upon the adoption of the City of Saratoga's 2016 Building Regulations with the California Building Standards Commission in accordance with California Health and Safety Code Section 17958.7 and are available as a public record. Said additions, deletions, amendments, and findings are hereby readopted.
- F. The new additions, deletions, and amendments hereinafter described are hereby adopted and are deemed reasonably necessary because of local climatic, geological, or topographical conditions pursuant to Government Code Section 17958.5. Express findings that these modifications to the Building Codes are reasonably necessary are hereby made and will be filed with the California Building Standards Commission in accordance with California Health and Safety Code Section 17958.7 before this ordinance takes effect.
- G. With respect to the additions and amendments made to the Energy Code described herein, the City Council has found that these changes are cost-effective in accordance with California Public Resources Code Section 25402.1(h)(2). The finding of cost-effectiveness is described in greater detail in the Staff Report and the accompanying analyses. The City Council has also found, pursuant to Public Resources Code Section 25402.1(h)(2), that the additions and amendments to the Energy Code described herein will require the diminution of energy consumption levels permitted by the energy standards issued in Title 24, Part 6. The City Council's findings of cost-effectiveness and energy savings will be filed with the California Energy Commission pursuant to Title 24 Chapter 10-106 before this ordinance takes effect.
- H. While the ordinance codified in this Article is in force, a true copy of the Building Codes shall be kept for public inspection in the office of the Building Official and a reasonable supply of the Building Codes shall be available for public purchase in the office of the City Clerk.

Section 2. Adoption.

Article 16-15 of the Saratoga City Code concerning the Building Code is hereby deleted in its entirety and replaced with Article 16-15 attached in Appendix A.

Article 16-18 of the Saratoga City Code concerning the Residential Code is hereby deleted in its entirety and replaced with Article 16-18 attached in Appendix A.

Article 16-20 of the Saratoga City Code concerning the Fire Code is hereby deleted in its entirety and replaced with Article 16-20 attached in Appendix A.

Article 16-25 of the Saratoga City Code concerning the Plumbing Code is hereby deleted in its entirety and replaced with Article 16-25 attached in Appendix A.

Article 16-30 of the Saratoga City Code concerning the Mechanical Code is hereby deleted in its entirety and replaced with Article 16-30 attached in Appendix A.

Article 16-35 of the Saratoga City Code concerning the Electrical Code is hereby deleted in its entirety and replaced with Article 16-35 attached in Appendix A.

Article 16-49 of the Saratoga City Code concerning the Green Building Standards Code is hereby deleted in its entirety and replaced with Article 16-49 attached in Appendix A.

Article 16-51 of the Saratoga City Code concerning the Energy Code is hereby deleted in its entirety and replaced with Article 16-51 attached in Appendix A.

Article 16-55 of the Saratoga City Code concerning the Referenced Standards Code is hereby deleted in its entirety and replaced with Article 16-55 attached in Appendix A.

Article 16-56 of the Saratoga City Code concerning the Historical Building Code is hereby adopted as shown in Article 16-56 attached in Appendix A.

Article 16-57 of the Saratoga City Code concerning the Existing Building Code is hereby adopted as shown in Article 16-57 attached in Appendix A.

Section 3. California Environmental Quality Act.

Pursuant to the California Environmental Quality Act ("CEQA"), this action is exempt under California Code of Regulations, Title 14, Section 15308 (the modifications are exempt because they assure maintenance, restoration, enhancement, or protection of the environment) and Section 15061(b)(3) (the modifications are exempt because it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment).

Section 4. Severance Clause.

The City Council declares that each section, sub-section, paragraph, sub-paragraph, sentence, clause, and phrase of this ordinance is severable and independent of every other section, sub-section, sentence, clause, and phrase of this ordinance. If any section, sub-section, paragraph, sub-paragraph, sentence, clause, or phrase is held invalid, the City Council declares that it would have adopted the remaining provisions of this ordinance irrespective of the portion held invalid and further declares its express intent that the remaining portions of this ordinance should remain in effect after the invalid portion has been eliminated.

Section 5. Publication.

This ordinance or a comprehensive summary thereof shall be published in a newspaper of general circulation of the City of Saratoga within fifteen days after its adoption.

Section 6. Effective Date.

This ordinance shall take effect thirty days after adoption as provided by Government Code Section 36937.

The foregoing ordinance was introduced at the regular meeting of the City Council of the City of Saratoga held on November 20, 2019, and was adopted by the following vote on December 4, 2019:

COUNCIL MEMBERS:

AYES:

NAYS:

ABSENT:

ABSTAIN:

SIGNED:

E. Manny Capello
MAYOR OF THE CITY OF SARATOGA

ATTEST:

Debbie Bretschneider
CLERK OF THE CITY OF SARATOGA

APPROVED AS TO FORM:

RICHARD TAYLOR, CITY ATTORNEY

APPENDIX A

Article 16-15 – Building Code

16-15.010 Adoption of 2019 California Building Code.

(a) The 2019 California Building Code, Title 24, Part 2, Volume 1 and 2, including appendices F and I, referred to throughout this Chapter as the "Building Code," is hereby referred to and, except as to additions, deletions and amendments hereinafter described, such code is hereby adopted and made a part hereof, the same as if fully set forth in this Article, and shall be the Building Code of the City. In accordance with California Health and Safety Code Section 17958.7, express findings that modifications to the Building Code are reasonably necessary because of local climatic, geological, or topographical conditions are either already on file with the California Building Standards Commission or will be filed prior to the effective date of the ordinance codified in this Article.

(b) At least one true copy of the Building Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Building Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Building Code shall be available in the office of the City Clerk for public purchase.

(c) The additions, deletions and amendments set forth in this Article are made to the Building Code, as adopted by reference in Section 16-15.010(a).

16-15.025 Retention of plans.

Section 107.5 of the Building Code is amended to read:

107.5 Retention of plans. One set of reviewed plans and specifications shall be returned to the applicant and shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress. One set of reviewed plans, specifications, and computations shall be retained by the building official as part of his permanent records.

16-15.030 Expiration of permits.

Section 105.5 of the Building Code is amended to read:

105.5 Expiration of Permits.

(a) Every permit issued by the building official under the provisions of the Building Code shall expire by limitation and become null and void if any one of the following occurs:

- (1) The building or work authorized by such permit is not commenced within 180 days from the date of such permit; or
- (2) The building or work authorized by such permit is suspended or abandoned at

any time after the work is commenced for a period of 180 days; or

(3) The permittee fails or refuses to request an inspection required by Section 110 of the Building Code within any period of 180 consecutive days after the work authorized by the permit is commenced. If the building official conducts such inspection within such 180-day period but declines to approve such inspection without correction of specified items and subsequent re-inspection, then the building permit shall not expire if such correction is made and passes re-inspection within 30 days after the end of the 180-day period described in this subsection.

(b) After such expiration, such work can be recommenced only upon reinstatement or issuance of a new permit to do so. The plans and specifications for a reinstated permit or new permit shall comply with all provisions of the City building code in effect at the time of reinstatement or issuance of a new permit. A reinstatement or new permit may be issued as follows:

(1) Reinstatement. Expired Permits may be reinstated if an application for permit reinstatement within 180 days of expiration, provided no changes have been made or will be made in the original plans and specifications for such work, and provided further that such suspension or abandonment under (a)(2) above has not exceeded one year. The fee for issuance of a renewed permit shall be one-half of the full permit fees (based upon the fee schedule adopted by the City Council as of the time the reinstated permit is issued) if the reinstated permit is applied for within 180 days after expiration of the prior permit.

(2) New Permit. A new permit may be issued following expiration of a building permit as follows. An applicant may apply for a new permit at any time so long as any underlying Design Review Approval, Use Permit, or other required planning approval remains effective. The full permit fee shall apply to the new permit (based upon the fee schedule adopted by the City Council as of the time the new permit is issued).

(c) Notwithstanding the foregoing provisions, upon written request by the applicant showing, to the satisfaction of the building official, that the prior permit expired as a result of exceptional circumstances beyond the reasonable control of the applicant, the building official may waive or reduce the payment of a fee for issuance of the reinstated or new permit.

(d) The building official may decline to issue more than one reinstatement of a building permit if in the judgment of the building official the work authorized by the original permit is not being diligently prosecuted to completion. The building official may also condition any reinstatement to assure diligent prosecution to completion or to prevent a nuisance. The building official may approve no more than two reinstatements of a building permit.

- (e) The building official may at any time exercise discretion to find that a building, structure, or work for which a building permit has expired qualifies as an unsafe building, structure, or work and proceed to abate any nuisance associated therewith.
- (f) Where: (i) a building permit has expired; and (ii) the building, structure, or other work authorized by such permit has not been completed; and (iii) no reinstated permit has been obtained within 180 days after expiration, then said building, structure, or work shall be conclusively presumed to be unsafe; abandoned; a hazard to the public health, safety, and welfare; and a public nuisance.
- (g) The building official is authorized to exercise discretion to abate any public nuisance regarding any unsafe building, structure, or work (including but not limited to one resulting under the preceding paragraph) by repair, rehabilitation, demolition, or removal thereof by:
 - (1) Proceeding under the Building Code for the Abatement of Dangerous Buildings (Article 16-45); or
 - (2) Proceeding under the following alternative method of enforcement where a building, structure, or other work authorized by a building permit has not been completed within 36 months of the date of issuance of the original permit, the building official may abate such public nuisance by ordering and duly enforcing repair, rehabilitation, demolition, or removal of the building, structure, or other work; or construction of a fence or wall around the building, structure, or work so as to obscure it from view; or construction of other structures or blockades to prevent access to the building, structure, or other work by animals or humans.

16-15.040 Fees.

Subsection 109.2 of the Building Code is amended to read:

109.2 Fees. The City of Saratoga may prescribe fees to defray the cost of enforcement of rules and regulations promulgated by the Department of Housing and Community Development or set forth in the Building Code. The amount of such fees shall not exceed the amount reasonably necessary to administer or process permits, certificates, forms, or other documents or to defray the costs of enforcement and shall be established by resolution of the City Council. The payment of any fee shall not exempt any person from compliance with all other provisions of this code or the technical codes nor from any penalty prescribed by law.

Permit Fees. The amount of the fees to be paid for each permit shall be established by resolution of the City Council.

Investigation Fees. Whenever any work for which a permit is required by this code has

been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work. An investigation fee, in addition to the permit fee, shall be collected whether a permit is then or subsequently issued. The investigation fee shall be established by resolution of the City Council.

Plan Review Fees. When a plan or other data are required to be submitted by Section 107.1 of the Building Code, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be established by resolution of the City Council. Where plans are incomplete or changed to require additional plan review, an additional plan review fee shall be charged as established by resolution of the City Council.

Expiration of Plan Review. Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the building official. The building official may extend the time for action by the applicant for a period not exceeding 180 days on request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

Additional Fees. The City of Saratoga may prescribe any additional fees reasonably necessary to cover the cost of administering this Article. Such fees shall be set forth in the City of Saratoga Master Fee Schedule adopted by the City Council.

16-15.045 Roof coverings.

(a) Section 1505.1.3 of the Building Code is amended to read:

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

(b) Section 1505.1.4 of the 2019 California Building Code is amended to read:

Roofing coverings within the Wildland-Urban Interface Fire Area. The entire roof covering of every existing structure where more than 10 percent of the total roof area is replaced within any one-year period; the entire roof covering of every new structure; and any roof covering applied in the alteration, repair, or replacement of the roof of every existing structure shall be a fire-retardant roof covering that is at least Class A and must also comply with section 705A of the Building Code.

16-15.050 Underside of appendages.

Section 707A.9 of the Building Code is amended to read:

707A.9 Underside of appendages. The underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

1. Noncombustible material;
2. Ignition-resistant material;
3. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection;
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual; or
5. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3 or ASTM E2957.

Exception: Structural columns and beams do not require protection when they are constructed with sawn lumber or glue-laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks splined, tongue-and-groove, or set close together and well spiked.

16-15.055 Accessory structures.

Section 710A .3 is amended to read as follows:

710A.3 Where required. Accessory structures shall be constructed of noncombustible or ignition-resistant materials as described in Section 704A.2.

Sections 710A.3.1, 710A.3.2, and 710A.3.3 of the Building Code are deleted in their entirety.

16-15.060 Automatic Sprinkler Systems

Section 903.2 of the Building Code is amended to read:

903.2 Where required. An approved automatic fire sprinkler system in new and existing buildings and structures shall be provided in the locations described in this Section or in Sections 903.2.1 through 903.2.18 whichever is the more restrictive.

For the purposes of this section, firewalls and fire barriers used to separate building areas shall be constructed in accordance with the California Building Code and shall not be utilized as a means of area reduction for the purposes of circumventing automatic fire sprinkler system installation requirements.

1. An approved automatic sprinkler system shall be provided throughout all new buildings and structures.

Exceptions:

- a. When sprinklers are not required for Accessory Dwelling Units pursuant to section R313.2 of the Residential Code, they shall not be required here.
 - b. Buildings and structures that do not exceed 1,000 square feet of building area and that are not located in the Wildland-Urban Interface Fire Area.
 - c. Buildings and structures that are located in the Wildland-Urban Interface Fire Area and do not exceed 500 square feet of building area.
 - d. Group S-2 or U occupancies that are not located in the Wildland-Urban Interface and used exclusively for vehicle parking and meeting all of the following conditions:
 - i. Noncombustible construction
 - ii. Maximum building area not to exceed 5,000 square feet
 - iii. Structure is open on three (3) or more sides
 - iv. Minimum of 10 feet separation from existing buildings unless area is separated by fire walls complying with CBC 706.
2. An automatic sprinkler system shall be provided throughout existing buildings and structures when alterations or additions are made that create conditions described in Sections 903.2.1 through 903.2.18.
 3. An automatic sprinkler system shall be provided throughout existing buildings and structures, when additions are made that increase the building area to more than 3,600 square feet.

Exception:

One or more additions made to a building after January 1, 2011 that does not total more than 1,000 square feet of building area.

4. An automatic sprinkler system shall be provided throughout all new basements regardless of size and throughout existing basements that are expanded by more than 50%.
5. Any change in the character of occupancy or in use of any building with a building area equal to or greater than 3,600 square feet which, in the opinion of the fire code official or building official, would place the building into a more hazardous division of the same occupancy group or into a different group of occupancies and constitutes a greater degree of life safety¹ or increased fire risk², shall require the installation of an approved fire automatic fire sprinkler system.

¹ Life Safety – Increased occupant load, public assembly areas, public meeting areas, churches, indoor amusement attractions, buildings with complex exiting systems due to increased occupant loads, large schools/day-care facilities, large residential care facilities with non-ambulatory

² Fire Risks – High-piled combustible storage, woodworking operations, hazardous operations using hazardous materials, increased fuel loads (storage of moderate to highly combustible materials), increased sources of ignition (welding, automotive repair with the use of flammable liquids and open flames).

16-15.065 Concrete construction.

Section 1705.3 is amended to read:

1705.3 Concrete construction.

Special inspections and tests of concrete construction shall be performed by this section and Table 1705.3.

Exception: Special inspections and tests shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'_c , no greater than 2,500 pounds per square inch (psi) (17.2 Mpa).

16-15.070 Plain concrete in structures assigned to Seismic Design Category C, D, E or F.

Section 1905.1.7 ACI 318, Section 14.14 is amended to read:

Section 1905.1.7 ACI 318, Section 14.1.4. Delete ACI 3118, Section 14.1.4 and replace with the following:

14.1.4 - Plain concrete in structures assigned to Seismic Design Category C, D, E or F.

14.1.4.1 - Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:

- (a) Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.

Exception:

In detached one- and two-family dwellings three stories or less in height, the projection of the footing beyond the face of the supported member is permitted to exceed the footing thickness.

- (b) Plain concrete footing supporting walls are permitted, provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than 0.002 times the gross cross-sectional area of the footing. For footings that exceed 8" inches (203 mm) in thickness, A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

Exception:

In detached one- and two-family dwellings three stories or less in height and constructed with stud bearing walls, plain concrete footings with at least two continuous longitudinal reinforcing bars not smaller than No. 4 are permitted to have a total area of less than 0.002 times the gross cross-sectional area of the footing.

Article 16-18 – Residential Code

16-18.010 Adoption of 2019 California Residential Code.

(a) The 2019 California Residential Code, Title 24 part 2.5, referred to throughout this Chapter as the "Residential Code," is hereby referred to and, except as to additions, deletions, and amendments hereinafter described, such code is hereby adopted and made a part hereof, the same as if fully set forth in this article, and shall be the Residential Code of the City. In accordance with California Health and Safety Code Section 17958.7, express findings that modifications to the California Building Standards Code are reasonably necessary because of local climatic, geological, or topographical conditions are either already on file with the California Building Standards Commission or will be filed prior to the effective date of the ordinance codified in this Article.

(b) At least one true copy of the Residential Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Residential Building Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Residential Code shall be available in the office of the City Clerk for public purchase.

(c) The additions, deletions, and amendments set forth in this Article are made to the Residential Code, as adopted by reference in Section 16-18.010(a).

16-18.020 Enforcement of Title 24 of the California Code of Regulations.

Title 24 of the California Code of Regulations, also known as the California Building Standards Code, is in effect in the City of Saratoga as amended by this Article. The provisions of Title 24 that are not adopted by reference or amended by this Article are enforced by the City of Saratoga as laws of the State.

16-18.025 Automatic sprinklers.

Section R313.1 is amended to read:

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in all new townhouses and in existing townhouses when additions are made that increase the building area to more than 3,600 square feet.

Exception: One or more additions made to a building after January 1, 2011, that does not total more than 1,000 square feet of building area.

Section R313.2 is amended to read:

R313.2 One- and two-family dwellings automatic fire sprinkler systems. An

automatic residential fire sprinkler system shall be installed in one- and two-family dwellings as follows:

1. In all new one- and two-family dwellings and in existing one- and two-family dwellings when additions are made that increase the building area to more than 3,600 square feet whether by increasing the area of the primary residence or by creation of an attached Accessory Dwelling Unit.
2. In all existing one- and two-family dwellings that meet the definition of a “demolition” of the structure per City of Saratoga Municipal Code Section 15-06.195.
3. In all attached Accessory Dwelling Units, additions or alterations to an existing one- and two-family dwelling that have an existing fire sprinkler system.

Exceptions:

1. One or more additions made to a building after January 1, 2011, that does not total more than 1,000 square feet of building area and meets all access and water supply requirements of Chapter 5 and Appendix B and C of the 2019 California Fire Code.
2. Detached Accessory Dwelling Units, provided that all of the following are met:
 - 2.1 The unit meets the definition of an Accessory Dwelling Unit as defined in the Government Code Section 65852.2
 - 2.2 The existing primary residence does not have automatic fire sprinklers.
 - 2.3 The accessory detached dwelling unit does not exceed 1,200 square feet in size.
 - 2.4 The unit is on the same lot as the primary residence.
 - 2.5 The unit meets all access and water supply requirements of Chapter 5 and Appendix B and C of the 2019 California Fire Code.
3. In all new basements and in existing basements that are expanded by more than 50%.

16-18.030 Material and construction methods for exterior wildfire exposure.

Section **R337.7.9** “Underside of appendages” is amended as follows:

R337.7.9 Underside of appendages. The underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

1. Noncombustible material.
2. Ignition-resistant material.
3. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection.
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in either of the following:
 - 5.1 SFM Standard 12-7A-3; or

5.2 ASTM E2957;

Exception:

Structural columns and beams do not require protection when they are constructed with sawn lumber or glue-laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks splined, tongue-and-grove, or set close together and well spiked.

Amend Section R337.10.3 to read as follows:

R337.10.3. Where required. Accessory structures shall be constructed of noncombustible or ignition-resistant materials as described in California Building Code Section 704A.2.

Section **R337.10.3.1** is deleted in its entirety

Section **R337.10.3.2** is deleted in its entirety.

Section **R337.10.3.3** is deleted in its entirety.

16-18.035 Seismic reinforcing.

Section R403.1.3 is amended to read:

R403.1.3 Seismic reinforcing. Concrete footings located in Seismic Design Categories D0, D1, and D2, as established in Table R301.2(1) of the Residential Building Code, shall have minimum reinforcement of at least two continuous longitudinal reinforcing bars, one top and one bottom and not smaller than No. 4 bars. Bottom reinforcement shall be located a minimum of 3 inches (76 mm) clear from the bottom of the footing.

In Seismic Design Categories D0, D1, and D2, where a construction joint is created between a concrete footing and a stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1,219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing, have a standard hook, and extend a minimum of 14 inches (357 mm) into the stem wall.

In Seismic Design Categories D0, D1, and D2, where a grouted masonry stem wall is supported on a concrete footing and stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1,219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing and have a standard hook.

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

Exception: In detached one- and two-family dwellings that are three stories or less in height and constructed with stud bearing walls, isolated plain concrete footings supporting columns or pedestals are permitted.

16-18.040 Limits on methods Gypsum Board (GB) and Portland Cement Plaster (PCP).

Table R602.10.3 (3) is amended as follows:

Add a new footnote “g” to the end of Table R602.10.3 (3), to read:

g. In Seismic Design Categories D0, D1, and D2, Method GB is not permitted, and the use of Method PCP is limited to one-story single-family dwellings and accessory structures.

Add the “g” footnote notation in Table R602.10.3 (3) to read:

Method GB^g

Section R602.10.4.5 is added to read:

R602.10.4.5 Limits on methods GB and PCP. In Seismic Design Categories D0, D1, and D2, Method GB is not permitted for use as intermittent braced wall panels, but gypsum board is permitted to be installed when required by this Section to be placed on the opposite side of the studs from other types of braced wall panel sheathing. In Seismic Design Categories D0, D1, and D2, the use of Method PCP is limited to one-story single family dwellings and accessory structures.

16-18.045 Roof classification.

Section R902.1.3 is amended to read:

R902.1.3 Roof coverings in all other areas. The entire roof covering of every existing structure where more than 10 percent of the total roof area is replaced within any one-year period; the entire roof covering of every new structure; and any roof covering applied in the alteration, repair, or replacement of the roof of every existing structure shall be a fire-retardant roof covering that is at least Class A.

Section R902.1.4. is amended to read:

R902.1.4 Roofing coverings within the Wildland-Urban Interface Fire Area. The entire roof covering of every existing structure where more than 10 percent of the total roof area is replaced within any one-year period; the entire roof covering of every new structure; and any roof covering applied in the alteration, repair, or replacement of the roof of every existing structure shall be a fire-retardant roof covering that is at least Class A.

Roofing requirements for structures located in a Wildland-Urban Interface Fire Area shall also comply with Section R337.5.

Article 16-20 – Fire Code

16-20.010 - Adoption of the 2019 California Fire Code and 2018 International Fire Code.

(a) The 2019 California Fire Code and the 2018 International Fire Code, including Appendix Chapters B, C and O are referred to and, except as to additions, deletions and amendments hereinafter noted, are adopted and made a part hereof, the same as if fully set forth in this Article. The California Fire Code and the International Fire Code as adopted herein are hereinafter referred to collectively as the "Fire Code." However, in accordance with California Government Code Section 50222.4, no penalty clauses are adopted by reference. In accordance with California Health and Safety Code Section 17958.7, express findings that modifications to the California Building Standards Code are reasonably necessary because of local climatic, geological or topographical conditions are either already on file with the California Building Standards Commission, or will be filed prior to the effective date of the ordinance codified in this Article.

(b) In accordance with California Government Code Section 50022.6, at least one true copy of the Fire Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Fire Code shall be kept for public inspection in the office of the City Building Official and the Chief. A reasonable supply of the Fire Code shall be available in the office of the City Clerk for public purchase.

16-20.015 - Enforcement of Title 24 of the California Code of Regulations

Title 24 of the California Code of Regulations, also known as the California Building Standards Code, is in effect in the City of Saratoga as amended by this Article. The provisions of Title 24 that are not adopted by reference or amended by this Article are enforced by the City of Saratoga as laws of the State.

16-20.020 - Fire Department and Chief.

Fire protection is provided in the City of Saratoga by the Santa Clara County Fire Department and the Saratoga Fire District. As used in the Fire Code, "Fire Department" refers to the Fire Department that provides fire protection to the relevant location, and "Chief" or "Fire Code Official" refers to the Chief of that Fire Department.

16-20.050 - Amendments to Chapter 1, Division II of the Fire Code; Administration.

Section 105.6.8 is amended to read as follows:

105.6.8 Compressed gases. An operational permit is required for the storage, use or handling at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed in Table 105.6.8.

Exceptions:

1. Vehicles equipped for and using compressed gas as a fuel for propelling the vehicle.

Section 105.6.30 of the 2019 California Fire Code is deleted in its entirety.

Section 105.6.52 is added to read as follows:

105.6.52 Day care facility. An operational permit is required to operate a business as a day care facility for more than 6 people.

Section **105.6.53** is added to read as follows:

105.6.53: Institutional. A permit is required to operate, maintain, or use any institutional type occupancy. For the purpose of this Section, an institution shall be, but is not limited to: hospitals, children's home, home or institution for insane or mentally retarded persons, home or institution for the care of aged or senile persons, sanitarium, nursing or convalescent home, certified family care homes, residential care homes for the elderly, out of home placement facilities, halfway house, and day care nurseries or similar facility of any capacity.

Section 105.6.54 is added to read as follows:

105.6.54: Lithium Batteries. An operational permit is required to collect or store more than 1,000 pounds (454 kg) of lithium batteries.

Section 105.6.55 is added to read as follows:

105.6.55: Additive Manufacturing. An operational permit is required to conduct additive manufacturing operations as covered in Section 321.3.

Section 105.7.4 is amended to read as follows:

105.7.4 Compressed Gases. A construction permit is required to install any piped distribution system for compressed gases, or to install a non-flammable medical gas manifold system. A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, close or substantially modify a compressed gas system.

Exceptions:

1. Routine maintenance.
2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

The permit applicant shall apply for approval to close storage, use or handling facilities at least 30 days prior to the termination of the storage, use or handling of compressed or liquefied gases. Such application shall include any change or alteration of the facility closure plan. This 30-day period may be

waived by the chief if there are special circumstances requiring such waiver.

Section 105.7.5 is amended to read as follows:

105.7.5 Cryogenic fluids. A construction permit is required for installation of or alteration to cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table 105.6.10. Maintenance performed in accordance with this code is not considered an alteration and does not require a construction permit.

Section 106.2.1 is added to read as follows:

106.2.1 Construction permit fees. Construction permit fees and plan review fees for fire hydrant systems, fire extinguishing systems and fire alarm systems shall be paid to the Santa Clara County Fire Department in accordance with the following table based on valuation. The valuation shall be limited to the value of the system for which the permit is being issued. Plan review fees are 65% of the Permit Fee amount. For the purposes of determining the total fee amount for each permit, the plan review fee shall be added to the Permit Fee.

TOTAL VALUATIONS	PERMIT FEE
\$1.00 TO \$500.00	\$23.50
\$501.00 TO \$2,000.00	\$23.50 for the first \$500.00 plus \$3.05 for each additional \$100.00, or fraction thereof, to and including \$2,000.00
\$2001.00 TO \$25,000.00	\$69.25 for the first \$2,000.00 plus \$14.00 for each additional \$1,000.00 or fraction thereof, to and including \$25,000.00
\$25,001.00 TO \$50,000.00	\$391.25 for the first \$25,000.00 plus \$4.00 for each additional \$1,000.00, or fraction thereof, to and including \$50,000.00
\$50,001.00 TO \$100,000.00	\$630.15 for the first \$50,000.00 plus \$13.60 for each additional \$1,000.00, or fraction thereof, to and including \$100,000.00
\$100,001.00 to \$500,000.00	\$986.75 for the first \$100,000.00 plus \$7.00 for each additional \$1,000.00, or fraction thereof, to and including \$500,000.00
\$500,001 to \$1,000,000.00	\$3,228.15 for the first \$500,000.00 plus \$5.35 for each additional \$1,000.00, or fraction thereof, to and including \$1,000,000.00
\$1,000,001 and up	\$5,604.00 for the first \$1,000,000.00 plus \$4.75 for each additional \$1,000.00, or fraction thereof
Additional re-inspections, in connection with the permits above, are to be paid at \$120.00 for each occurrence at the discretion of the fire code official.	
Cancelled inspections without advance notice are to be paid at \$120.00 for each occurrence.	

Section 106.2.2 is added to read as follows:

106.2.2 Operational permit fees. Operational permit fees shall be paid to the Santa Clara County Fire Department as follows:

FACILITY TYPE		PERMIT FEE
1.	Institutional	
	A. More than 6 persons	\$75.00 - Annually
	B. Over 50 persons	\$100.00 - Annually

2.	Day Care Facilities	
	More than 6 clients	\$35.00 - Annually
3.	Places of Assembly	
	A. 50-300 persons	\$50.00 - Annually
	B. Over 300 persons	\$85.00 - Annually
4.	Temporary Membrane Structures, Tents and Canopies (Only those requiring permits in accordance with Section 105.6.47).	\$85.00 – Each occurrence

Section 107.5 is added to read as follows:

107.5 Final Inspection. No final inspection as to all or any portion of a development shall be deemed completed until the installation of the required fire protection facilities and access ways have been completed and approved. No final certificate of occupancy may be granted until the Fire Department issues notice of final clearance of such fire protection facilities and access ways to the Building Department.

Section 110.4 is amended to read as follows:

110.4 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 a misdemeanor punishable by a fine of not more than \$1000.00 dollars or by imprisonment not exceeding 365 days, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Section 110.4.1 is amended to read as follows:

110.4.1 Abatement of Violation. In addition to the imposition of the penalties herein described, the fire code official is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises.

110.5 is added to read as follows:

110.5 Abatement of Hazard. (a) The maintenance of real property in violation of this code, or of any order of the Fire Department pursuant hereto, is declared to be a public nuisance and is subject to abatement in accordance with Article 3-15 of the Saratoga Municipal Code.

(b) Notwithstanding paragraph (a) of this Section, if real property is maintained in violation of this code or any order of the Fire Department pursuant hereto and such violation constitutes, in the opinion of the Fire Chief, a fire hazard of such a nature that immediate action is required to protect the public health, safety and welfare, the Fire Department may apply the emergency nuisance abatement procedure set forth in Article 3-20 of the Saratoga Municipal Code and take all necessary and immediate steps to abate the hazard without prior notice to the owner or occupant of the property. In such an event, the Fire Chief shall perform the duties of the City Manager as described in said Article 3-20.

(c) The cost of any abatement may be collected through the levy of a special assessment in accordance

with the applicable provisions of Article 3-15 or Article 3-20 of the Saratoga Municipal Code. Such procedure is not intended to be exclusive and the City or the Fire Department may simultaneously or successively, exercise any other rights and remedies provided by law.

16-20.060 - Amendments to Chapter 2 of the Fire Code; Definitions

Chapter 2 DEFINITIONS

Amend Section 202 of the 2019 California Fire Code and 2018 International Fire Code with the following definitions added:

3D PRINTER. A machine used in the additive manufacturing process for fabricating objects through the deposition of a material using a print head, nozzle, or another printer technology.

ADDITIVE MANUFACTURING. A process of joining materials to make objects from 3D model data, usually layer upon layer, sometimes referred to as 3D printing. The Code recognizes two types of additive manufacturing:

1. Industrial additive manufacturing. 3D printing operations that typically utilize combustible powders or metals, an inert gas supply, a combustible dust collection system. or that create a hazardous (classified) location area or zone outside of the equipment.
2. Non-industrial additive manufacturing. 3D printing operations that do create a hazardous (classified) location area outside of the equipment, and do not utilize an inert gas supply or a combustible dust collection system.

16-20.070 - Amendments to Chapter 3 of the Fire Code; General Requirements.

315 GENERAL STORAGE

Add Section 315.8 and subsections 315.8.1 through 315.8.10 to read as follows:

315.8 Lithium Battery Storage and Handling. The storage and handling of lithium ion and lithium metal batteries or cells in quantities exceeding 1,000 pounds (4086 kg) shall comply with Section 315.8.1 through 315.8.10, and Chapter 32 where applicable.

315.8.1 Permits. Permits shall be required as set forth in Section 105.6.54.

315.8.2 Maximum quantity in a fire area. The aggregate amount of lithium batteries stored and handled in a single fire area shall not exceed 9,000 pounds (4086 kg).

315.8.3 Construction requirements. Fire areas shall be separated from each other by fire barriers having not less than 2-hour fire resistance rating constructed in accordance with Section 707 of the Building Code and horizontal assemblies constructed in accordance with Section 711 of the Building Code.

315.8.4 Number of fire areas. The maximum number of fire areas within a building shall be four.

315.8.5 Group H, Division 2 occupancy. Storage and handling of more than 9,000 pounds of lithium batteries per fire area shall be in an approved Group H, Division 2 occupancy constructed in accordance with the Building Code and provided throughout with approved automatic smoke detection and radiant-energy detection systems.

315.8.6 Automatic sprinkler system. Buildings containing fire areas used for lithium battery storage or handling shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The design of the sprinkler system within each fire area shall not be less than that required for Extra Hazard Group 2 with a minimum design area of 2,500 square feet. Where the storage arrangement is required by other provisions of this code to be provided with a higher level of sprinkler system protection, the higher level of sprinkler system protection shall be provided.

315.8.7 Automatic smoke detection system. An approved automatic smoke detection system that activates an approved occupant notification system shall be provided throughout each fire area in accordance with Section 907.

315.8.8 Radiant energy detection. An approved radiant-energy detection system that activates an approved occupant notification system shall be installed throughout each fire area in accordance with Section 907.

315.8.9 Collection containers. Containers used to collect or store lithium batteries shall be noncombustible and shall not have an individual capacity exceeding 30 gallons (113.6 L), or be approved for transportation in accordance with the Department of Transportation (DOT).

315.8.10 Storage configuration. Lithium batteries shall be considered a high-hazard commodity in accordance with Chapter 32 and where applicable, lithium battery storage shall comply with Chapter 32 in addition to Section 315.8.

SECTION 316 **HAZARDS TO FIREFIGHTERS**

Add Section 316.7 to read as follows:

316.7 Roof Guardrails at Interior Courts. Roof openings into interior courts that are bounded on all sides by building walls shall be protected with guardrails. The top of the guardrail shall not be less than 42 inches in height above the adjacent roof surface that can be walked on. Intermediate rails shall be designed and spaced such that a 12-inch diameter sphere cannot pass through.

Exception:

Where the roof opening is greater than 600 square feet in area.

Add Section 321 to read as follows:

SECTION 321 **ADDITIVE MANUFACTURING**

321.1 General. Additive manufacturing equipment and operations shall comply with Section 321.

321.1.1 Scope. Additive manufacturing shall comply with one of the following:

1. Non-industrial additive manufacturing shall comply with Section 321.2.
2. Industrial additive manufacturing shall comply with Section 321.3.

321.1.2 Installation, operation and maintenance. 3D printers and associated additive manufacturing equipment shall be installed, operated and maintained in accordance with this Code, the listing and the manufacturer's instructions.

321.1.3 Production materials. Only the production materials listed for use with the equipment and included in the manufacturer's instructions shall be used.

321.2 Non-industrial additive manufacturing. Non-industrial additive manufacturing equipment and operations shall comply with Section 321.2.1 through 321.2.4. Additive manufacturing equipment and operations that do not comply with Section 321.2 shall comply with Section 321.3.

321.2.1 Listing. 3D printers used in non-industrial additive manufacturing shall be listed and labeled in accordance with UL 60950-1, UL 62368-1 or UL 2011. The listing shall also verify:

1. The 3D printers are self-contained and utilize maximum 30 liter pre-packaged production materials.
2. The operation of the 3D printers shall not create a hazardous (classified) electrical area or outside of the unit.
3. If any hazardous (classified) electrical area or zone exists inside of the unit's outer enclosure, the area shall be protected by intrinsically safe electrical construction or other acceptable protection methods.
4. The 3D printers shall not utilize inert gas or an external combustible dust collection.

321.2.2 Occupancies. Non-industrial additive manufacturing shall be permitted in all occupancy groups.

321.3 Industrial additive manufacturing. Industrial additive manufacturing equipment and operations shall comply with Section 321.3.1 through 321.3.13.

321.3.1 Permits required. Permits shall be obtained from the fire code official in accordance with Section 105.6.55 prior to engaging in industrial additive manufacturing operations.

321.3.2 Listing. 3D printers used in industrial additive manufacturing shall be listed and labeled in accordance with UL 2011 or approved for the application based on a field evaluation conducted by an approved agency.

321.3.3 Combustible dusts and metals. Industrial additive manufacturing operations that store, use or produce combustible dust, combustible particulate solids or combustible metals shall comply with Chapter 22 and this section.

321.3.4 Powder evaluation. Printing powders used in industrial additive manufacturing operations shall be tested for combustibility in accordance with NFPA 484 or NFPA 652 as applicable. A copy of test reports shall be provided to the fire code official upon request.

321.3.5 Combustible (non-metallic) dusts. Industrial additive manufacturing that uses operations that store, use or produce combustible (non-metallic) dusts shall comply with NFPA 654.

321.3.6 Combustible metals. Industrial additive manufacturing operations that store or use combustible metals shall also comply with NFPA 484.

321.3.7 Ancillary equipment. Ancillary equipment provided for recycling, sieving, vacuuming or handling combustible powders shall be designed and approved for such use.

321.3.8 Hazardous materials. Industrial additive manufacturing operations that store or use hazardous materials exceeding the maximum allowable quantity limits shall comply with Chapter 50.

321.3.9 Inert Gas. Additive manufacturing processes that utilize inert gases shall comply with Chapter 53. Ventilation or gas detection shall be provided in accordance with Section 5307.

321.3.10 Technical assistance. Where required by the fire code official, a report evaluating the acceptability of technologies, processes, products, facilities, materials and uses associated with the operation shall be provided in accordance with 104.7.2 and approved.

321.3.11 Performance based design alternative. Where approved by the fire code official, buildings and facilities where industrial additive manufacturing is performed shall be permitted to comply with the performance-based design options in Section 5001.3 as an alternative to compliance with the other requirements set forth in this Section.

321.3.12 Occupancies. Industrial additive manufacturing shall only be conducted in the occupancy groups associated with manufacturing operations. The occupancy may be required by the fire code official to comply with Chapter 50 maximum allowable quantity tables. Where approved, the requirements in Sections 321.2.5 and 321.3.6 shall be permitted to provide the technical basis for determining compliance with Table 5003.1.1(1), footnote q.

321.3.13 Safety Certification. The equipment, process, training procedures and occupancy associated with industrial additive manufacturing may be required by the fire code official to receive a safety certification from Underwriter's Laboratory or equivalent.

16-20.090 - Amendments to Chapter 5 of the Fire Code; Fire Service Features.

SECTION 503 FIRE APPARATUS ACCESS ROADS

Amend Section 503.1 to read as follows:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 and as per fire department access road standards.

Amend Section 503.1.1 to read as follows:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements for this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exceptions:

1. In other than R-3 or U occupancies, when the building is equipped throughout with an approved automatic sprinkler system, installed in accordance with Section 903.3.1.1 the

dimension may be increased to a maximum of 300 feet when approved by the fire code official.

2. When there are not more than two Group R-3 or accessory Group U occupancies, the dimension may be increased to a maximum of 200 feet.
3. When apparatus roads cannot be installed because of topography, waterways, nonnegotiable grades or other similar conditions, an approved alternative means of fire protection shall be provided.

Amend Section 503.2.1 to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, or as required by fire department access road standards, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of 13 feet 6 inches (4115 mm).

Exception:

When there are not more than two Group R, Division 3, or Group U occupancies, the access road width may be modified by the fire code official.

Amend Section 503.2.2 to read as follows:

503.2.2 Authority. The fire code official shall have the authority to require or permit modifications to the required access widths and/or vertical clearance where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

SECTION 504 ACCESS TO BUILDING OPENINGS AND ROOFS

Add Section 504.5 to read as follows:

504.5 Access Control Devices. When access control devices including bars, grates, gates, electric or magnetic locks or similar devices, which would inhibit rapid fire department emergency access to or within the building are installed, such devices shall be approved by the fire code official. All electrically powered access control devices shall be provided with an approved means for deactivation or unlocking from a single location or otherwise approved by the fire code official.

Access control devices shall also comply with Chapter 10 Means of Egress.

SECTION 510 EMERGENCY RESPONDER RADIO COVERAGE

Amend Section 510.1 to read as follows:

510.1 Emergency responder radio coverage in new buildings. Approved radio coverage for emergency responders shall be provided within all buildings meeting any one of the following conditions:

1. There are more than 3 stories above grade plane (as defined by the Building Code Section 202);
2. The total building area is 30,000 square feet or more;
3. The total basement area is 5,000 square feet or more;

4. Where required by the fire code official and radio coverage signal strength levels are not consistent with the minimum levels set forth in Section 510.4.1

Exceptions:

1. Where approved by the fire code official, a wired communication system in accordance with Section 907.2.12.2 shall be permitted to be installed or maintained in lieu of an approved radio coverage system.
2. Where it is determined by the fire code official that the radio coverage system is not needed.
3. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the fire code official shall have the authority to accept an automatically activated emergency responder radio coverage system.
4. Buildings and areas of buildings that have minimum radio coverage signal strength levels of the Silicon Valley Regional Interoperability Authority (SVRIA) P25 Phase 2 700 MHz Digital Trunked Radio System within the building in accordance with Section 510.4.1 without the use of an indoor radio coverage system.

The radio coverage system shall be installed and maintained in accordance with Sections 510.4 through 510.6.4 of this code and with the applicable provisions of NFPA 1221, Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems.

The coverage shall be based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems.

Add Section 510.1.1 to read as follows:

510.1.1 Obstruction by new buildings. No obstruction of the public safety system backhaul shall be allowed without an approved mitigating plan.

Delete Section 510.2 in its entirety.

Amend Section 510.3 to read as follows:

510.3 Permit required. A construction permit, for the installation of, or modification of, emergency responder radio coverage systems and related equipment is required as specified in Section 105.7.6. Maintenance performed in accordance with this code is not considered a modification and does not require a permit. A frequency change made to an existing system is considered to be new construction and will require a construction permit.

Amend Section 510.4 to read as follows:

510.4 Technical requirements. Systems, components and equipment required to provide the emergency responder radio coverage system shall comply with the current Emergency Responders Radio Coverage Systems Standard Details & Specification enforced by the Santa Clara County Fire Department.

Amend Section 510.4.1.1 to read as follows:

510.4.1.1 Minimum signal strength into the building. The minimum inbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the fire code official. The inbound signal level shall be sufficient to provide not less than a Delivered Audio Quality (DAQ) of 3.0 for analog communications and DAQ of 3.4 for digital communications systems or an equivalent Signal-to-Interference-Plus-Noise Ratio (SINR) applicable to the technology.

Amend Section 510.4.1.2 to read as follows:

510.4.1.2 Minimum signal strength out of the building. The minimum outbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the fire code official. The outbound signal level shall be sufficient to provide not less than a DAQ of 3.0 for analog communications and DAQ of 3.4 for digital communications systems or an equivalent SINR applicable to the technology.

Amend Section 510.5 to read as follows:

510.5 Installation requirement. The installation of the emergency responder radio coverage system shall be in accordance with NFPA 1221 and the current Emergency Responder Radio Coverage Systems Standard Details & Specification enforced by the Santa Clara County Fire Department.

Amend Section 510.5.1 as follows:

510.5.1 Approval prior to installation. Amplification systems capable of operating on frequencies licensed to any public safety agency by the FCC or other radio licensing authority shall not be installed without prior coordination and approval of the fire code official and the agency FCC license holder or systems administrator.

Amend the First Paragraph of Section 510.5.3 to read as follows:

510.5.3 Acceptance test procedure. Where an emergency responder radio coverage system is required, and upon completion of installation, the building owner shall have the radio system tested to verify that two-way coverage on each floor of the building is not less than 95 percent. Final system acceptance will require ERRCS power level and DAQ testing with agency FCC license holder, systems administrators, or designee.

16-20.100 - Amendments to Chapter 6 of the Fire Code; Building Services and Systems.

SECTION 603 FUEL-FIRED APPLIANCES

Amend Section 603.4.2.1.1 as follows and delete the exception:

603.4.2.1.1 Prohibited locations. The storage or use of portable outdoor gas-fired heating appliances is prohibited in any of the following locations:

1. Inside of any occupancy where connected to the fuel gas container.
2. Inside of tents, canopies and membrane structures.
3. On exterior balconies- and rooftops in other than R-3 occupancies.

SECTION 604 ELECTRICAL EQUIPMENT, WIRING AND HAZARDS

Add Section 604.12 to read:

604.12 Immersion Heaters. All electrical immersion heaters used in dip tanks, sinks, vats and similar operations shall be provided with approved over-temperature controls and low liquid level electrical disconnects. Manual reset of required protection devices shall be provided.

16-20.110 - Amendments to Chapter 8 of the Fire Code; Interior Finish, Decorative Materials and Furnishings.

SECTION 806 NATURAL DECORATIVE VEGETATION IN NEW AND EXISTING BUILDINGS

Amend the first paragraph of Section 806.1.1 to read as follows:

806.1.1 Restricted occupancies. The display of natural cut trees and other decorative vegetation shall be in accordance with the California Code of Regulations, Title 19, Division 1, Section 3.08 and Sections 806.1 through 806.4.

16-20.120 - Amendments to Chapter 9 of the Fire Code; Fire Protection and Life Safety Systems.

SECTION 901 GENERAL

Amend Section 901.6.3 to read:

901.6.3 Records. Records of all system inspections, tests and maintenance required by the referenced standard shall be maintained on the premises for a minimum of five years. Inspections and tests performed on fire alarm systems shall be documented on NFPA 72 forms.

SECTION 903 AUTOMATIC SPRINKLER SYSTEMS

Amend Section 903.2 to read:

903.2 Where required. An approved automatic fire sprinkler system in new and existing buildings and structures shall be provided in the locations described in this Section or in Sections 903.2.1 through 903.2.18 whichever is the more restrictive.

For the purposes of this section, firewalls and fire barriers used to separate building areas shall be constructed in accordance with the California Building Code and shall not be utilized as a means of area reduction for the purposes of circumventing automatic fire sprinkler system installation requirements.

1. An approved automatic sprinkler system shall be provided throughout all new buildings and structures.

Exceptions:

- a. When sprinklers are not required for Accessory Dwelling Units pursuant to section R313.2 of the Residential Code, they shall not be required here.
 - b. Buildings and structures that do not exceed 1,000 square feet of building area and that are not located in the Wildland-Urban Interface Fire Area.
 - c. Buildings and structures that are located in the Wildland-Urban Interface Fire Area and do not exceed 500 square feet of building area.
 - d. Group S-2 or U occupancies that are not located in the Wildland-Urban Interface and used exclusively for vehicle parking and meeting all of the following conditions:
 - i. Noncombustible construction
 - ii. Maximum building area not to exceed 5,000 square feet
 - iii. Structure is open on three (3) or more sides
 - iv. Minimum of 10 feet separation from existing buildings unless area is separated by fire walls complying with CBC 706.
2. An automatic sprinkler system shall be provided throughout existing buildings and structures when alterations or additions are made that create conditions described in Sections 903.2.1 through 903.2.18.
 3. An automatic sprinkler system shall be provided throughout existing buildings and structures, when additions are made that increase the building area to more than 3,600 square feet.

Exception:

One or more additions made to a building after January 1, 2011 that does not total more than 1,000 square feet of building area.

4. An automatic sprinkler system shall be provided throughout all new basements regardless of size and throughout existing basements that are expanded by more than 50%.
5. Any change in the character of occupancy or in use of any building with a building area equal to or greater than 3,600 square feet which, in the opinion of the fire code official or building official, would place the building into a more hazardous division of the same occupancy group or into a different group of occupancies and constitutes a greater degree of life safety¹ or increased fire risk², shall require the installation of an approved fire automatic fire sprinkler system.

¹ Life Safety – Increased occupant load, public assembly areas, public meeting areas, churches, indoor amusement attractions, buildings with complex exiting systems due to increased occupant loads, large schools/day-care facilities, large residential care facilities with non-ambulatory

² Fire Risks – High-piled combustible storage, woodworking operations, hazardous operations using hazardous materials, increased fuel loads (storage of moderate to highly combustible

materials), increased sources of ignition (welding, automotive repair with the use of flammable liquids and open flames).

Amend Section 903.2.18 to delete the Exception:

SECTION 909 SMOKE CONTROL SYSTEMS

Amend Section 909.20.1 to read as follows:

909.20.1 Schedule. A routine maintenance and operational testing program shall be initiated immediately after the smoke control system has passed the acceptance tests. A written schedule for routine maintenance and operational testing shall be established and both shall occur at least annually.

16-20.130 Amendments to Chapter 11 of the Fire Code; Construction Requirements for Existing Buildings.

Delete Chapter 11 of the 2018 International Fire Code in its entirety.

16-20.140 – Amendments to Chapter 33 of the Fire Code; Fire Safety During Construction and Demolition.

SECTION 3304 PRECAUTIONS AGAINST FIRE

Add Section 3304.9 to read as follows:

3304.9 Fire Walls. When firewalls are required, in combustible construction the wall construction shall be completed (with all openings protected) immediately after the building is sufficiently weather-protected at the location of the wall(s).

SECTION 3311 MEANS OF EGRESS

Amend Section 3311.1 to read as follows:

3311.1 Stairways Required. Each level above the first story in multi-story buildings that require two exit stairways shall be provided with at least two usable exit stairways after the floor decking is installed. Exit stairs in new and in existing, occupied buildings shall be lighted and maintained clear of debris and construction materials at all times.

Exception:

For multi-story buildings, one of the required exit stairs may be obstructed on not more than two contiguous floor levels for the purposes of stairway construction (i.e., installation of gypsum board, painting, flooring, etc.).

Add Section 3311.1.1 to read as follows:

Section 3311.1.1 Required Means Of Egress. All buildings under construction shall have at least one unobstructed means of egress. All means of egress shall be identified in the pre-fire plan see Section 3308.3.

16-20.150 - Amendments to Chapter 49 of the Fire Code; Requirements For Wildland-Urban Interface Fire Areas.

SECTION 4902 DEFINITIONS

Amend Section 4902 to amend the following definition as follows:

Wildland-Urban Interface Fire Area: A geographical area identified by the state as a “Fire Hazard Severity Zone” in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. The Wildland-Urban Interface Fire Area shall be defined as all areas within the City of Saratoga as set forth and delineated on the map entitled "Wildland-Urban Interface Fire Area" which map and all notations, references, data and other information shown thereon are hereby adopted and made a part of this chapter. The map properly attested, shall be on file in the Office of the City Clerk of the City of Saratoga.

SECTION 4906 HAZARDOUS VEGETATION AND FUEL MANAGEMENT

Amend Section 4906.2 to read as follows:

4906.2 Application. Buildings and structures located in the following areas shall maintain the required hazardous vegetation and fuel management:

1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Areas (SRA) including:
 - 1.1. Moderate Fire Hazard Severity Zones
 - 1.2. High Fire Hazard Severity Zones
 - 1.3. Very-high Fire Hazard Severity Zones
2. Land designated as a Very-high Fire Hazard Severity Zone or as a Wildland Urban Interface Fire Area by the City of Saratoga.

SECTION 4907 DEFENSIBLE SPACE

Amend Section 4907.1 to read as follows:

4907.1 General. Defensible space will be maintained around all buildings and structures in Sate Responsibility Area (SRA) as required in Public Resources Code 4290 and “SRA Fire Safe Regulations” California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270.

Buildings and structures within the Very-High Fire Hazard Severity Zones of a Local Responsibility Area (LRA) shall maintain defensible space as outlined in Government Code 51175 – 51189 and any local ordinance of the authority having jurisdiction.

Persons owning, leasing, controlling, operating or maintaining buildings or structures in the locally adopted Wildland-Urban Interface Fire Area but that are not within the Very-High Fire Hazard Severity Zone and persons owning, leasing or controlling land adjacent to such buildings or structures, shall at all times:

1. Maintain an effective defensible space by removing and clearing away flammable vegetation and combustible growth from areas within 30 feet (9144 mm) of such buildings or structures.

Exception: Single specimens of trees, ornamental shrubbery or similar plants used as ground covers, provided that they do not form a means of rapidly transmitting fire from the native growth to any structure.

2. Maintain additional effective defensible space by removing brush, flammable vegetation and combustible growth located 30 feet to 100 feet (9144 mm to 30480 mm) when required by the fire code official due to steepness of terrain or other conditions that would cause a defensible space of only 30 feet (9144 mm) to be insufficient.

Exception: Grass and other vegetation located more than 30 feet (9144 mm) from buildings or structures and less than 18 inches (457 mm) in height above the ground need not be removed where necessary to stabilize the soil and prevent erosion.

3. Remove portions of trees, which extend within 10 feet (3048 mm) of the outlet of a chimney.
4. Maintain trees adjacent to or overhanging a building free of deadwood; and
5. Maintain the roof of a structure free of leaves, needles or other dead vegetative growth.
6. Defensible space shall also be provided around water tank structures, water supply pumps and pump houses.
7. Remove flammable vegetation a minimum of 10 feet around liquefied petroleum gas tanks/containers.
8. Firewood and combustible materials shall not be stored in unenclosed spaces beneath buildings or structures, or on decks or under eaves, canopies or other projections or overhangs. The storage of firewood and combustible material within the defensible space shall be located a minimum of 30 feet (6096 mm) from structures and separated from the crown of trees by a minimum horizontal distance of 15 feet (4572 mm).

Exception: Firewood and combustible materials not for consumption on the premises shall be stored as approved by the fire code official.

9. Clear areas within 10 feet (3048 mm) of fire apparatus access roads and driveways of non-fire-resistive vegetation growth.

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

Add Section 4907.2 to read as follows:

4907.2 Corrective Actions. The executive body is authorized to instruct the fire code official to give

notice to the owner of the property upon which conditions regulated by Section 4907.1 exist to correct such conditions. If the owner fails to correct such conditions the executive body is authorized to cause the same to be done and make the expense of such correction a lien upon the property where such conditions exists.

Add Section 4908 to read as follows:

SECTION 4908 **FIRE PROTECTION PLAN**

4908.1 General. When required by the code official, a fire protection plan shall be prepared.

4908.2 Content. The plan shall be based upon a site-specific wildfire risk assessment that includes considerations of location, topography, aspect, flammable vegetation, climatic conditions and fire history. The plan shall address water supply, access, building ignition and fire-resistance factors, fire protection systems and equipment, defensible space and vegetation management.

4908.3 Cost. The cost of fire protection plan preparation and review shall be the responsibility of the applicant.

4908.4 Plan Retention. The fire protection plan shall be retained by the fire code official.

Add Section 4909 to read as follows:

SECTION 4909 **WATER SUPPLY**

4909.1 General. Buildings and structures, or portions thereof, hereafter constructed or relocated into or within the Wildland-Urban Interface Fire Area shall be provided with fire protection water supplies in accordance with Chapter 5 and Section 4909.2.

Exception:

Buildings containing only private garages, carports, sheds and agricultural buildings with a building area of not more than 500 square feet (56 m²).

4909.2 Standby Power. Standby power shall be provided to pumps, controllers and related electrical equipment so that stationary water supply facilities within the wildland-urban interface area that are dependent on electrical power can provide the required water supply. The standby power system shall be in accordance with the Electrical Code. The standby power source shall be capable of providing power for a minimum of two hours.

Exceptions:

1. When approved by the code official, a standby power supply is not required where the primary power service to the stationary water supply facility is underground.
2. A standby power supply is not required where the stationary water supply facility serves no more than one single-family dwelling.

Add Section 4910 to read as follows:

SECTION 4910 IGNITION SOURCE CONTROL

4910.1 Fireworks. Fireworks shall not be used or possessed in the Wildland-Urban Interface Fire Area.

16-20.170 - Amendments to Chapter 56 of the Fire Code; Explosives and Fireworks.

Amend Section 5601.1.3 to read as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling, and use of fireworks, including those fireworks classified as Safe and Sane by the California State Fire Marshal, are prohibited.

Exception: The use of fireworks for fireworks displays as allowed in Section 5608.

16-20.180 - Amendments to Chapter 57 of the Fire Code; Flammable and Combustible Liquids.

SECTION 5704 STORAGE

Amend section 5704.2.7.5.8 to read as follows, and delete the exception:

5704.2.7.5.8 Overfill Prevention. An approved means or method in accordance with Section 5704.2.9.7.5 shall be provided to prevent the overfill of all Class I, II and IIIA liquid storage tanks. Storage tanks in refineries, bulk plants or terminals regulated by Sections 5706.4 or 5706.7 shall have overfill protection in accordance with API 2350.

An approved means or method in accordance with Section 5704.2.9.7.5 shall be provided to prevent the overfilling of Class IIIB liquid storage tanks connected to fuel-burning equipment inside buildings.

Add section 5704.2.7.5.9 to read as follows:

5704.2.7.5.9 Automatic Filling of Tanks. Systems that automatically fill flammable or combustible liquid tanks shall be equipped with overfill protection, approved by the fire code official, that sends an alarm signal to a constantly attended location and immediately stops the filling of the tank. The alarm signal and automatic shutoff shall be tested on an annual basis and records of such testing shall be maintained on-site for a period of five (5) years.

Amend Section 5704.2.9.6.1 to read as follows:

5704.2.9.6.1 Location where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks outside of building is prohibited in all locations of the City of Saratoga which are residential or congested commercial areas as determined by the fire code official.

Amend Section 5706.2.4.4 to read as follows:

5706.2.4.4 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks is prohibited in all locations of the City of Saratoga which are residential or congested commercial areas as determined by the fire code official.

Amend Section 5707.3.3 to read as follows:

5707.3.3 Site plan. A site plan shall be developed for each location at which mobile fueling occurs. The site plan shall be in sufficient detail to indicate: all buildings, structures, lot lines, property lines and appurtenances on site and their use and function; all uses adjacent to the lot lines of the site; fueling locations, the locations of all storm drain openings and adjacent waterways or wetlands; information regarding slope, natural drainage, curbing, impounding and how a spill will be kept on the site property; and the scale of the site plan.

16-20.190 - Amendments to Chapter 58 of the Fire Code; Flammable Gases and Flammable Cryogenic Fluids.

Amend Section 5806.2 to read as follows:

5806.2 Limitations. The storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited in all location of the City of Saratoga which are residential or congested commercial areas as determined by the fire code official.

SECTION 5809 MOBILE GASEOUS FUELING OF HYDROGEN-FUELED VEHICLES

Amend Section 5809.3.4 to read as follows:

5809.3.4 Site plan. For other than emergency roadside service, a site plan shall be developed for each location at which mobile gaseous hydrogen fueling occurs. The site plan shall be in sufficient detail to indicate; all buildings, structures, lot lines, property lines and appurtenances on site and their use and function, and the scale of the site plan.

16-20.200 - Amendments to Chapter 61 of the Fire Code; Liquefied Petroleum Gases

SECTION 6104 LOCATION OF LP-GAS CONTAINERS

Amend Section 6104.2 to read as follows:

6104.2 Maximum capacity within established limits. The storage of liquefied petroleum gas (LPG) is restricted in all locations within the City of Saratoga that are residential or congested commercial areas as determined by the fire code official.

Exception: LPG may be used for industrial operations or when natural gas would not provide a viable substitute for LPG. Portable containers for temporary heating and/or cooking uses may be permitted if stored and handled in accordance with this code. Facilities in commercial areas for refueling portable or mobile LPG containers may be approved by the fire code official on a case by case basis.

Article 16-25 – Plumbing Code

16-25.010 Adoption of the 2019 California Plumbing Code.

(a) The 2019 California Plumbing Code, Title 24, Part 5, including Appendix Chapters A, B, C, D, H, and I only, hereinafter referred to as the "Plumbing Code," is referred to and such code is adopted and made a part hereof, the same as if fully set forth in this Article, and shall be the Plumbing Code of the City.

(b) At least one true copy of the Plumbing Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Plumbing Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Plumbing Code shall be available in the office of the City Clerk for public purchase.

Article 16-30 – Mechanical Code

16-30.010 Adoption of the 2019 California Mechanical Code.

(a) The 2019 California Mechanical Code, Title 24, Part 4, including all appendices, hereinafter referred to as the "Mechanical Code," is referred to and such code is adopted and made a part hereof, the same as if fully set forth in this Article, and shall be the Mechanical Code of the City.

(b) At least one true copy of the Mechanical Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Mechanical Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Mechanical Code shall be available in the office of the City Clerk for public purchase.

Article 16-35 Electrical Code

16-35.010 Adoption of the 2019 California Electrical Code.

(a) The 2016 California Electrical Code, Title 24, Part 3, hereinafter referred to as the "Electrical Code," is referred to and such code is adopted and made a part hereof, the same as if fully set forth in this Article and shall be the Electrical Code of the City.

(b) At least one true copy of the Electrical Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Electrical Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Electrical Code shall be available in the office of the City Clerk for public purchase.

Article 16-49 – Green Building Standards Code

16-49.010 Adoption of the 2019 California Green Building Standards Code.

(a) The 2019 California Green Building Standards Code, Title 24, Part 11, hereinafter referred to as the "Green Building Standards Code," referred to and, except as to additions, deletions and amendments hereinafter described, such code is hereby adopted and made a part hereof, the same as if fully set forth in this Article, and shall be the Green Building Standards Code of the City. In accordance with California Health and Safety Code Section 17958.7, express findings that modifications to the Building Code are reasonably necessary because of local climatic, geological, or topographical conditions are either already on file with the California Building Standards Commission or will be filed prior to the effective date of the ordinance codified in this Article.

(b) At least one true copy of the Green Building Standards Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Green Building Standards Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Green Building Standards Code shall be available in the office of the City Clerk for public purchase.

(c) The additions, deletions and amendments set forth in this Article are made to the Green Building Standards Code, as adopted by reference in Section 16-49.010(a).

16-49.020 Electric Vehicle Charging Requirements.

Amend Section 4.106.4.1 to read as follows:

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages.

For each dwelling unit a wired National Electrical Manufacturers Association (NEMA) outlet supplied by a 40-ampere minimum dedicated branch circuit shall be installed specifically for supplying electrical power for an Electric Vehicle Charger.

For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

One of the required circuits or raceways must be installed inside the garage and the second circuit or raceway must be installed outside of the garage.

Amend Section 4.106.1.1 to read as follows:

4.106.4.1.1 Identification The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as “EV CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV CAPABLE.”

Article 16-51 – Energy Code

16-51.010 Adoption of the 2019 California Energy Code.

(a) The 2019 California Energy Code, Title 24, Part 6, hereinafter referred to as “the Energy Code,” is referred to and, except as to additions, deletions and amendments hereinafter described, such code is hereby adopted and made a part hereof, the same as if fully set forth in this Article, and shall be the Energy Code of the City. Notwithstanding the foregoing, the additions, deletions, and amendments hereinafter described shall not take effect until the California Energy Commission approval process is completed.

(i) In accordance with California Health and Safety Code Section 17958.7, express findings that modifications to the Energy Code are reasonably necessary because of local climatic, geological, or topographical conditions are either already on file with the California Building Standards Commission or will be filed prior to the effective date of the ordinance codified in this Article.

(ii) Pursuant to California Public Resources Code Section 25402.1(h)(2), the City Council’s findings that modifications to the Energy Code are cost-effective and will require the diminution of energy consumption levels permitted by the Energy Code are either already on file with the California Energy Commission or will be filed prior to the effective date of the ordinance codified in this Article.

(b) At least one true copy of the Energy Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Energy Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Energy Code shall be available in the office of the City Clerk for public purchase.

The additions, deletions and amendments set forth in this Article are made to the California Energy Code, as adopted by reference in Section 16-51.010.

16-51.015 – Electric Water and Space Heating Requirement.

Amend Section 100.0(e)2A to read as follows:

2. Newly constructed buildings.

A. All newly constructed buildings. Sections 110.0 through 110.12 apply to all newly constructed buildings within the scope of Section 100.0(a). In addition, newly constructed buildings shall meet the requirements of Subsections B, C, D or E, as applicable; and shall be an Electrically Heated Building as defined in Section 100.1(b).

Exceptions:

1. Public agency-owned and operated emergency centers are not required to be built as Electrically Heated Buildings. To take advantage of this exception, an applicant shall provide third party verification that All-Electric space- and water-heating is not cost effective and feasible.
2. All newly constructed Accessory Dwelling Units.

Note: In such exception situations, the Building Official shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code Section 104

Add Section 100.0(e)(2)(F) to read as follows:

F. Electric-Readiness. If natural gas powered cooking appliances, fireplaces, or clothes drying appliances are used in an Electrically Heated Building, the location of such natural gas appliance shall include the following:

1. Clothes Drying:

- i. A dedicated 240-volt, 30-amp or greater electrical receptacle that is connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions;
- ii. Both ends of the conductor shall be labeled with the words "For Future Heat Pump Clothes Drying" and be electrically isolated; and
- iii. A reserved double-pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit above and labeled with the words "Future Heat Pump Clothes Drying";
- iv. Other electrical components, including conductors, receptacles, or blank covers, related to this section shall be installed in accordance with the California Electrical Code.

Exception to 100.0(e)(2)(F)(1): if gas or propane plumbing is not installed for clothes drying, these requirements do not apply.

2. Cooktop or Range

- i. A dedicated 240-volt, 30-amp or greater electrical receptacle that is connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions;
- ii. Both ends of the unused conductor shall be labeled with the words "For Future Electric Range" and be electrically isolated;

- iii. A reserved double-pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words “For Future Electric Range;” and
- iv. Other electrical components, including conductors, receptacles, or blank covers, related to this section shall be installed in accordance with the California Electrical Code.

Exception to 100.0(e)(2)(F)(2): if gas or propane plumbing is not installed for a cooktop or range, these requirements do not apply.

3. Stand Alone Cooking Oven

- i. A dedicated 240-volt, 30 amp or greater receptacle that is connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions;
- ii. Both ends of the conductor shall be labeled with the word “For Future Electric Oven” and be electrically isolated; and
- iii. A double-pole circuit breaker in the electrical panel labeled with the words “For Future Electric Oven”.

Exception to 100.0(e)(2)(F)(3): if gas or propane plumbing is not installed for a stand-alone cooking oven, these requirements do not apply.

4. Other Gas Equipment: For other equipment that is connected to natural gas or propane plumbing, the location of the appliance shall be pre-wired for future electric equipment.

Exception to 100.0(e)(2)(F)(4): if gas or propane plumbing is not installed for other gas equipment, these requirements do not apply.

Amend Section 100.1(b) to add the following definition:

Electrically Heated Building: is a building that uses an electric heat pump(s) for space heating and an electric heat pump water heater(s), and that does not use natural gas for either space or water heating. The cooking appliances, fireplaces, and clothes drying appliances may utilize natural gas but the locations of these appliances must additionally be wired for future use of electric appliances pursuant to section 100.0(c)(2)(F). Electrically Heated Buildings may include thermal solar pool heating.

Amend the first paragraph of Section 110.2 to read as follows:

Certification by manufacturers. Any space-conditioning equipment listed in this section, meeting the requirements of section 100.0(e)2A, may be installed only if the manufacturer has certified to the Commission that the equipment complies with all the applicable requirements of this section.

Amend Section 110.3(a) to read as follows:

(a) **Certification by manufacturers.** Any service water-heating system or equipment, meeting the requirements of section 100.0(e)2A₂ may be installed only if the manufacturer has certified that the system or equipment complies with all of the requirements of this subsection for that system or equipment.

Article 16-55 – Referenced Standards Code

16-55.010 Adoption of the 2019 California Referenced Standards Code

(a) The 2019 California Referenced Standards Code, Title 24, Part 12, hereinafter referred to as the “Standards Code,” is referred to and such code is adopted and made a part hereof, the same as if fully set forth in this Article and shall be the Standards Code of the City.

(b) At least one true copy of the Standards Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Standards Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Referenced Standards Code shall be available in the office of the City Clerk for public purchase.

Article 16-56 – Historical Building Code

16-56.010 Adoption of the 2019 California Historical Building Code

(a) The 2019 California Historical Building Code, Title 24, Part 8, hereinafter referred to as the “Historical Building Code,” is referred to and such code is adopted and made a part hereof, the same as if fully set forth in this Article and shall be the Historical Building Code of the City.

(b) At least one true copy of the Historical Building Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Historical Building Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Historical Building Code shall be available in the office of the City Clerk for public purchase.

Article 16-57 – Existing Building Code

16-56.010 Adoption of the 2019 California Existing Building Code

(a) The 2019 California Existing Building Code, Title 24, Part 10, hereinafter referred to as the “Existing Building Code,” is referred to and such code is adopted and made a part hereof, the same as if fully set forth in this Article and shall be the Existing Building Code of the City.

(b) At least one true copy of the Existing Building Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Historical Building Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Existing

Building Code shall be available in the office of the City Clerk for public purchase.

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