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Project Title:	Local Ordinances Exceeding the 2019 Energy Code
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Document Title:	Ordinance NO 643
Description:	Complete text of City of Brisbane Ordinance No. 643 regarding code
	adoption including solar and electrification provisions
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Organization:	City of Brisbane
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ORDINANCE NO. 643

AN ORDINANCE OF THE CITY OF BRISBANE TO AMEND BRISBANE MUNICIPAL CODE TITLE 15, BUILDINGS AND CONSTRUCTION, CHAPTER 15.04, ADOPTION OF CONSTRUCTION CODES AND CHAPTER 15.44, FIRE PREVENTION CODE - ADOPTING THE 2019 CALIFORNIA BUILDING STANDARDS CODES (CBC) AND THE 2018 INTERNATIONAL PROPERTY MAINTENANCE CODE, WITH CERTAIN LOCAL MODIFICATIONS TO THE FIRE CODE; REPLACEMENT OF CHAPTER 15.81, ENERGY CONSERVATION AND GENERATION WITH ON-SITE ENERGY GENERATION AND ADDING CHAPTER 15.83, BUILDING ELECTRIFICATION THEREBY AMENDING THE CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS TO INCLUDE LOCAL MODIFICATIONS REQUIRING SOLAR PROVISIONS AND BUILDING ELECTRIFICATION PROVISIONS FOR NEW BUILDINGS; AND ADDING CHAPTER 15.84 ELECTRIC VEHICLE INFRASTRUCTURE

THE CITY COUNCIL OF THE CITY OF BRISBANE HEREBY ORDAINS AS FOLLOWS:

SECTION 1: The City Council finds and determines that:

- A. The actions contained in this ordinance comply with the California Environmental Quality Act (CEQA), being categorically exempt per CEQA Section 15308, Actions by Regulatory Agencies for Protection of the Environment.
- B. The 2019 Edition of the California Building Code (CBC) becomes effective state-wide on January 1, 2020 and City's adoption of the CBC is necessary in that it allows for enforcement of the CBC under existing and subsequently adopted enforcement provisions of the Brisbane Municipal Code.
- C. By reason of the following climatic, geographical, topographical, and community conditions, it is necessary to adopt certain local amendments to the California Fire Code in order to provide a high level of fire and life safety for all persons who live and work within the City of Brisbane and to adequately protect both public and private property within the City:
 - Certain hillside areas of the City are characterized by heavy vegetation and close proximity of structures to the vegetation and each other. These areas contain narrow, winding streets, with steep grades and congested parking and traffic, making access difficult for fire apparatus and equipment in the event of emergency. Numerous dwellings located within the upper hillsides can only be reached by means of private access ways which may not be adequately constructed or maintained for access by Fire Department vehicles.
 - There are several natural conditions that affect the risk of fire damage within the City, including the following:
 - Brisbane is located near the San Andreas Fault and is subject to seismic activity that could potentially ignite fires throughout the City.
 - Brisbane regularly experiences strong winds, with average velocities ranging from approximately 15 to 25 miles per hour and reaching high velocities of 50 miles per hour.

These winds may significantly contribute to the spread of fire and will increase the difficulty of fire suppression work.

- c. The hillside areas of the City are constructed on the east slope of San Bruno Mountain, immediately adjacent to a protected habitat conservation area which is subject to wildland fires. During recent years several wildland fires have threatened the safety of persons and property located near these areas.
- D. The City adopted a Climate Action Plan on September 17, 2015, which includes the goal of reducing carbon emissions from fossil fuels to help curb global warming. Methods include increasing substituting renewable energy for fossil fuel energy sources. The following are primary means to reduce fossil fuel emissions:
 - i. Building electrification versus use of fossil fuels.
 - ii. Power generation via solar energy.
 - iii. Reduction in the fossil fuel emissions from transportation
- E. Use of fossil fuel vehicles is a primary contributor to transportation emissions and availability of EV charging infrastructure is a critical component to EV adoption over the continued use of fossil fuel reliant vehicles. Additionally, provision of EV charging infrastructure is most cost effective as part of new development projects versus as building/site retrofit projects.
- F. The California Energy Code 2019 Edition, Title 24, Part 6 of the California Code of Regulations includes provisions which reduce building energy consumption. However additional measures are warranted based on the following:
 - 1. The amendment to include a local energy code is justified based on climatic conditions.
 - Energy efficient buildings promote public health and welfare by reducing carbon emissions and providing for lower cost and more sustainable buildings.
 - 3. Sea level rise as a result of global warming poses a threat to certain low lying lands since Brisbane is situated adjacent to the San Francisco Bay and installing solar for energy generation on non-residential buildings and requiring building electrification, instead of allowing the use of fossil fuels, will help curb greenhouse gas emissions, which contribute to global warming.
- G. The City of Menlo Park is within the same climate zone as the City of Brisbane and adopted building energy reach code Ordinance No. 1057, on September 24, 2019, referencing the State-wide Cost Effectiveness Studies and further referenced a memorandum by TRC to the California Energy Commission (CEC), dated August 13, 2019 entitled, "Interpretation of Cost Effectiveness Analysis as it Relates to Menlo Park Reach Code Proposal". That memorandum confirmed the applicability of the State-wide Cost Effectiveness Studies to the local ordinance provisions. The City of Menlo Park has subsequently provided that code to the California Energy Commission (CEC) for approval. Menlo Park's reach code serves as a model ordinance to Brisbane's building energy reach code, with the state's cost effectiveness studies included by reference, "2019 Cost-effectiveness Study: Low-Rise Residential New Construction", prepared by Frontier Energy, Inc and Misti Bruceri & Associates, LLC, dated July 17, 2019, and "2019 Nonresidential New Construction Reach Code Cost Effectiveness Study", prepared by TRC and EnergySoft, dated July 15, 2019. The Menlo Park model includes building electrification for residential and non-residential buildings and solar for non-residential buildings. The City of Menlo Park ordinance is used as a model for Brisbane's ordinance for the following reasons.

- 1. The City of Brisbane is within the same CEC climate zone.
- The building type assumptions for the City of Menlo Park are transferrable to Brisbane as the Menlo Park model accounts for buildings of different sizes.
- 3. The provisions of the ordinance can be readily implemented, given the prescriptive nature of the provisions affecting only new construction.
- 4. For projects where special circumstances warrant an exemption, an administrative exemption may be granted by the building official.
- H. In 2017, Brisbane adopted an energy reach code, which included cool roof and solar energy provisions for both residential and non-residential new development and the following is noted:
 - 1. Brisbane's previously adopted residential solar energy provisions have been superseded by the California Energy Code.
 - 2. Brisbane's non-residential solar energy provisions are equivalent to those now adopted by the City of Menlo Park and go together with the building electrification requirements. These provisions remain applicable to Brisbane.
 - 3. Brisbane's previously adopted cool roof provisions have been superseded by the increasing requirements for roof top solar power generation.

SECTION 2: Section 15.04.010 of the Brisbane Municipal Code is amended to read as follows:

15.04.010 - Purpose and authority.

The purpose of this chapter is to adopt by reference the 2019 Edition of the California Building Standards Code, Title 24 of the California Code of Regulations. This chapter is also adopted to provide minimum requirements and standards for the protection of the public safety, health, property and welfare of the City of Brisbane. This chapter is adopted under the authority of Government Code Section 38660 and Section 50022.2 and Health and Safety Code Section 18941.5.

SECTION 3: Section 15.04.040 of the Brisbane Municipal Code is amended to read as follows:

15.04.040 - Adoption of Construction Codes.

- A. Title 24 of the California Code of Regulations, 2019 Edition of the California Building Standards Code, is hereby adopted by reference and incorporated in this code, including the following parts:
 - 1. 2019 California Administrative Code, Title 24, Part 1.
 - 2019 California Building Code, Volumes 1 and 2, based on the 2018 International Building Code (ICC), Title 24, Part 2.
 - 2019 California Residential Code, based on the 2018 Edition International Residential Code (ICC), Title 24, together with those omission, amendments, exceptions and additions thereto as amended in Part 3 of the California Building Standards Code, California Code of Regulations Title 24.
 - 4. 2019 California Electrical Code, based on the 2017 Edition National Electric Code as published by the National Fire Protection Association (NFPA), Title 24, Part 3.

- 2019 California Mechanical Code, based on the 2018 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials (IAPMO), including all appendix chapters, Title 24, Part 4.
- 2019 California Plumbing Code, based upon the 2018 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials (IAPMO), including all appendix chapters, Title 24, Part 5.
- 2019 California Energy Code, Title 24, Part 6. 3. (See also, local Energy Code provisions in Chapter 15.81 and 15.83.)
- 8. 2019 California Historical Building Code, Title 24, Part 8.
- 9. For adoption of the 2019 California Fire Code, Title 24, Part 9, and modifications thereof, see Chapter 15.44 of this title.
- 2019 California Existing Building Code based on the 2018 International Existing Building Code Edition, published by the International Code Council, together with those omissions, amendments, exceptions and additions thereto as amended in Part 10 of the California Building Standards Code, California Code of Regulations Title 24.
- 11. 2019 California Green Building Standards Code, Title 24, Part 11.
- 12. 2019 California Referenced Standards Code, Title 24, Part 12.
- 2019 California Residential Code Appendix H Patio Covers, Appendix J Existing Building and Structures, Appendix K Sound Transmission, and Appendix V Swimming Pool Safety Act.
- 2019 California Building Code Appendix G Flood Resistant Construction, Appendix I Patio Covers, and Appendix J Grading.
- B. The 2018 International Property Maintenance Code is hereby adopted by reference and incorporated in this code.

SECTION 4: Chapter 15.44 Fire Prevention Code of the Brisbane Municipal Code is replaced in its entirety to read to read as follows:

Chapter 15.44 - FIRE PREVENTION CODE

15.44.010 - Adoption of fire prevention code.

The Fire Prevention Code for the City of Brisbane shall be the 2018 Edition of the International Fire Code and the 2019 Edition of the California Fire Code, including Appendices B, C, D, F, and L (collectively, hereinafter referred to as the "Fire Code"), as promulgated by the International Code Council, and the same is hereby adopted and incorporated herein by reference, subject to the modifications as contained in this Chapter 15.44. Two (2) copies of the fire code have been filed for use and examination by the public, one copy being located at Brisbane City Hall and the other copy being located at the fire administration office.

15.44.020 - Title of chapter.

This chapter shall be known as the "fire prevention code of the city" for the administration and enforcement of the fire code.

15.44.030 - Section 104.2 amended—Applications and permits.

Section 104.2 of the fire code is amended by adding the following paragraphs at the end of said section:

Except as otherwise determined by the Fire Marshall, plans submitted in support of an application for a building permit to construct all buildings or structures within the City of Brisbane shall be submitted to the Fire Department for review and approval to determine conformance with applicable fire and life safety requirements.

No portion of any equipment intended to be covered by earth or by enclosure within permanent portions of a building or structure shall be enclosed until inspected and approved by the Fire Marshal, or appointed

Fire Department staff. An inspection shall be requested prior to covering or enclosing of any such equipment. Such request shall be made not less than forty-eight (48) hours prior to the estimated time of the desired inspection.

15.44.040 - Section 105.7.17 added-Permit fees.

Section 105.7.17 is added to the fire code, to read as follows:

105.7.17 Permit fees. The Fire Department shall be authorized to charge such fees and costs for services performed pursuant to the Fire Code as may be established from time to time by ordinance or resolution of the City Council.

15.44.050 - Section 503.2.5 amended—Dead ends.

Section 503.2.5 of the fire code is amended by adding the following paragraph to the end of said section: Dead-end fire apparatus access roads in excess of one hundred fifty feet (150') in length shall be provided with a minimum turnaround clear radius of fifty-two feet (52'), or other turnaround as approved by the Fire Marshal.

15.44.060 - Section 503.3 amended-Marking.

Section 503.3 of the fire code is amended by adding the following paragraph to the end of said section: Where fire lanes on private property have been designated by the Fire Marshal, curbs shall be painted red on the side or sides of the street or access route where parking is prohibited and no parking signs or other appropriate notice prohibiting obstructions, as approved by the Fire Marshal, shall be provided and maintained by the owner. No parking signs shall read as follows:

FIRE LANE NO PARKING OR STOPPING CVC SEC. 22500.1 PARKED VEHICLES MAY BE TOWED AT VEHICLE OWNER'S EXPENSE

15.44.070 - Section 507.5.7 added-Fire Hydrants and water supply.

Section 507.5.7 is added to the fire code, to read as follows:

507.5.7 Hydrants. All new fire hydrants shall be UL listed, or equivalent, wet barrel type having a minimum of two 2 $\frac{1}{2}$ " and one 4 $\frac{1}{2}$ " outlets, all equipped with national standard threads (Clow 860, or approved equivalent). The minimum fire service main size permitted is six inches (6").

15.44.080 - Section 903 amended—Automatic sprinkler systems.

Section 903 of the fire code is amended in its entirety to read as follows: 903 Automatic fire extinguishing systems.

(a) Notwithstanding any other provisions of this Code or any other code or ordinance of the City of Brisbane, automatic fire sprinkler systems, approved by the Fire Marshal, shall be installed in the following buildings and structures that are classified as new construction:

- For all occupancies except R-3 occupancies: Any new building or structure, regardless of size, except stand alone, uninhabitable buildings, garages and sheds having a floor area of less than 400 square feet.
- For all R-3 occupancies: Any new single-family or duplex structure, excluding any detached accessory structure that does not constitute habitable space having a floor area of less than 400 square feet.

(b) When additions or alterations made to an existing building fall within the requirements under Brisbane Municipal Code Section 15.08.140, an automatic fire sprinkler system shall be provided for the entire building.

(c) Other Areas. An automatic fire sprinkler system shall be installed in all garbage compartments, rubbish and linen chutes, linen rooms, incinerator compartments, dumb waiter shafts, and storage rooms when located in all occupancies except Group R, Division 3. An accessible indicating shut off valve shall also be installed.

(d) Condominium Conversions. An automatic fire sprinkler system shall be installed for all condominium conversions.

(e) Where automatic fire sprinkler systems are required to be installed, the following additional requirements shall also be satisfied, as applicable:

- A minimum of three (3) copies of plans and specifications for automatic sprinkler installations, plus water supply calculations, shall be provided to the Fire Department for review and approval prior to commencement of the installation work.
- 2. All required automatic sprinkler systems shall be approved by the Fire Department.
- All acceptance tests and such periodic tests as required by the Fire Marshall or pursuant to NFPA Pamphlets No. 13, 13D, 13R and/or Subchapter 5, Title 19, California Code of Regulations, shall be conducted and, where applicable, witnessed by a representative of the Fire Department.
- 4. An approved exterior visual fire alarm device may be required for buildings that have numerous fire department connections (FDC's). Type and locations will be determined by the Fire Department. Such visual alarm devices are not to replace the exterior audible device, but to assist fire suppression personnel as to location(s) of systems which require pumping operations.

15.44.090 - Section 5608.1 amended—Fireworks prohibited.

Section 5608.1 of the fire code is amended by adding the following paragraph to the end of the first paragraph:

The possession, storage, sale, use or discharge of fireworks including California State Fire Marshal approved "safe and sane" fireworks are prohibited within the City of Brisbane.

15.44.100 - Section 904.2 amended-Where required.

Section 904.2 of the fire code is amended by adding the following subsection after subsection 904.2.2 Commercial hood and duct systems:

904.2.3 Floor markings. The location(s) of all cooking appliances that are protected by an approved automatic fire extinguishing system shall be permanently identified either by a wall mounted "approved" appliance floor plan or marked on the floor in a manner approved by the Fire Marshal.

15.44.110 - Section 907.8.1 amended-Maintenance required.

Section 907.8.1 of the fire code is amended by adding the following paragraph at the end of said section: Owners and operators of group R-1 occupancies shall provide documentation to the Fire Department, such as annual inspection forms, which confirm that all smoke detection devices and equipment within apartment units are installed and are in good operating condition.

15.44.120 - Section 304.1.4 added-Removal of waste materials and combustible vegetation.

Section 304.1.4 is added to the fire code, to read as follows:

304.1.4 Removal of waste materials and combustible vegetation.

(a) Notice to Remove. The Bureau of Fire Prevention is authorized to notify the owner of any roof, court, yard, vacant lot or open space within the City of Brisbane or its jurisdiction, or the agent of such owner, to properly dispose of such wastepaper, hay, grass, straw, weeds, litter, combustible or flammable waste, waste petroleum products, vines and other growth or rubbish of any kind located on such owner's property which is dangerous to public safety, health or welfare or is deemed a fire hazard by the Department. Such notice shall inform the owner or the owner's agent that should the wastepaper, hay, grass, straw, weeds, litter, combustible or flammable waste, waste petroleum products, vines and other growth or rubbish of any kind not be removed as required, then it will be removed by the City and the cost of said removal shall in accordance with this chapter be assessed as a lien on the property to be collected with the next regular tax bill.

Such notice shall be by certified mail, addressed to said owner at the owner's last known address, as revealed by the tax rolls, and such additional address as may be known by the officer making the order.

(b) <u>Action Upon Non-compliance</u>. Upon failure, neglect or refusal of any owner or agent so notified to properly dispose of such wastepaper, hay, grass, straw, weeds, litter, combustible or flammable waste, waste petroleum products, vines or other growth or rubbish of any kind dangerous to the public health, safety and welfare within fifteen (15) days after receipt of written notice provided for in subsection (a) above, or within fifteen (15) days after the date of such notice in the event the same is returned to the Fire Prevention Bureau because of its inability to make delivery thereof provided the same was properly addressed to the last known address of such owner, as provided in subsection (a) of this section, or agent, the Fire Prevention Bureau is hereby authorized to refer this non-compliance to the City Manager to have the City pay for disposing of such wastepaper, hay, grass, straw, weeds, litter, combustible or flammable waste, waste petroleum products, vines and other growth or rubbish that endangers property or is liable to be fired.

(c) <u>Charge Included in Tax Bill.</u> When the City has effected the removal of dangerous or hazardous conditions from property as noted in subsection (a) or has paid for its removal, the actual cost thereof, plus accrued interest at the rate of ten percent (10%) per annum from the date of the completion of the work, if not paid for by such owner prior thereto, shall be charged to the owner of such property on the next regular tax bill forwarded to such owner, and said charge shall be due and payable by said owner at the time of payment of such bill.

(d) <u>Acreage Maintained</u>. Any person who owns, leases, controls, operates or maintains any building or structure in, upon, or adjoining any mountainous area or forest-covered lands, brush-covered lands or grass covered lands or any land or acreage covered with flammable material shall maintain around and adjacent to such building or structure a fire break for a distance of not less than thirty (30) feet or to the property line, whichever shall be less. Any person who owns open acreage shall maintain a thirty (30) foot fire break around the perimeter of his acreage as may be directed by the Fire Marshall.

(e) <u>Remedies Cumulative</u>. That the remedies set forth in this section are in addition to any other remedies available to the City as set forth in its ordinances and resolutions and the statutes of the State of California.

(f) <u>Other Regulations.</u> In addition to the remedies set forth herein, the City Council may adopt such other additional, appropriate resolutions and ordinances establishing procedures and regulations for the regulation, control and abatement of waste materials, weeds and other matters constituting a fire and/or safety hazard.

15.44.130 - Section 709 added-Roof coverings.

Section 709 is added to the fire code, to read as follows:

709 Roof coverings. Roof coverings on all buildings shall be fire retardant non-wood materials and shall comply with the standards of the California Building Code, Class A or B, prepared or built-up roofing. Re-roofing of existing buildings which occurs within any twelve (12) month period shall comply with the foregoing requirement if the re-roofing involves fifty percent (50%) or more of the roof area in the case of a non-wood roof or ten percent (10%) or more of the roof area in the case of a wood roof.

15.44.140 - Section 5301.1 amended-Scope.

Section 5301.1 of the fire code is amended by adding the following paragraph at the end of the first paragraph:

The storage of compressed natural gas is prohibited in all areas of the City except for the following subareas as identified in the General Plan for the City of Brisbane: Northeast Bayshore, Southeast Bayshore, Crocker Park, Beatty, and the Baylands when the storage container or tank is located at least 200 (two hundred) feet from the closest property line of a property occupied by a residence or school. Notwithstanding the foregoing, the Fire Marshal may grant a permit for storage of compressed natural gas in other areas of the City if the Fire Marshal determines, in each case, that the storage is required for the conduct of a lawful use upon the property, will not constitute a safety hazard, and will otherwise comply with all applicable provisions of this Code and all other ordinances, rules and regulations of the City. The Fire Marshal may impose such conditions and requirements upon the issuance of the permit as the Fire Marshal deems necessary or appropriate.

15.44.150 - Section 5601.2 amended-General.

Section 5601.2 of the fire code is amended by adding the following paragraph at the end of said section:

The storage of explosives and blasting agents is prohibited in all areas of the City, except that the Fire Marshal may grant a permit to allow such storage if the Fire Marshal determines, in each case, that the storage is required for the conduct of a lawful use upon the property, will not constitute a safety hazard, and will otherwise comply with all applicable provisions of this Code and all other ordinances, rules and regulations of the City. The Fire Marshal may impose such conditions and requirements upon the issuance of the permit as the Fire Marshal deems necessary or appropriate.

15.44.160 - Section 5704.1 amended-General.

Section 5704.1 of the fire code is amended by adding the following paragraph at the end of said section:

The storage of flammable or combustible liquids in outside aboveground tanks is prohibited in all areas of the City except for the following subareas as identified in the General Plan for the City of Brisbane: Northeast Bayshore, Southeast Bayshore, Crocker Park, Beatty, and the Baylands when the storage container or tank is located at least 200 (two hundred) feet from the closest property line of a property occupied by a residence or school. Notwithstanding the foregoing, the Fire Marshal may grant a permit for such storage in other areas of the City if the Fire Marshal determines, in each case, that the storage is required for the conduct of a lawful use upon the property, will not constitute a safety hazard, and will otherwise comply with all applicable provisions of this Code and all other ordinances, rules and regulations of the City. The Fire Marshal may impose such conditions and requirements upon the issuance of the permit as the Fire Marshal deems necessary or appropriate.

15.44.170 - Section 6104.2 amended-Maximum capacity within established limits.

Section 6104.2 of the fire code is amended by adding the following paragraph at the end of the first paragraph of said section:

The aggregate storage of liquefied petroleum gas at any one installation in excess of five hundred (500) gallons (1893 L) is prohibited in all areas of the City except for the following subareas as identified in the General Plan for the City of Brisbane: Northeast Bayshore, Southeast Bayshore, Crocker Park, Beatty, and the Baylands when the storage container or tank is located at least 200 (two hundred) feet from the closest property line of a property occupied by a residence or school. Notwithstanding the foregoing, the Fire Marshal may grant a permit for such storage in other areas of the City if the Fire Marshal determines, in each case, that the storage is required for the conduct of a lawful use upon the property, will not constitute a safety hazard, and will otherwise comply with all applicable provisions of this Code and all other ordinances, rules and regulations of the City. The Fire Marshal may impose such conditions and requirements upon the issuance of the permit as the Fire Marshal deems necessary or appropriate.

15.44.180 - Section 914.3.9 added—Firefighter breathing air replenishment system.

Section 914 of the fire code is amended by adding the following paragraph:

Section 914.3.9 Firefighter breathing air replenishment system. All Group B and Group R occupancies, each having floors used for human occupancy located more than seventy-five feet (75') above the lowest level of fire department vehicular access, shall be equipped with an approved rescue air replenishment system as per Appendix L. Such a system shall provide an adequate pressurized fresh air supply through a permanent piping system for the replenishment of portable life sustaining air equipment carried by fire department, rescue, and other personnel in the performance of their duties. Location and specifications or

access stations to, and the installation of, such air replenishment systems shall be in accordance with the requirements of the fire chief.

15.44.190 - Section 903.2.21 added—Sprinkler protection of car stackers.

Section 903.2.21 of the fire code is added to read:

Sections 903.2.21 Purpose: To establish requirements for sprinkler protection of car stackers not specifically addressed in NFPA 13.

Section 903.2.21 - Car Stackers

Parking garage areas containing car stackers shall be protected by an automatic wet-pipe sprinkler system designed to Extra Hazard Group 1. In addition, non-extended coverage standard sidewall sprinklers listed for Ordinary Hazard shall be provided under each parking level, including the bottom level if the stacker is provided with a pit. Each sidewall sprinkler shall cover an area of 80 sq. ft. or less.

The area of application may be reduced from the required 2500 sq. ft. to as low as 1500 sq. ft. if

- 1-hour fire rated walls are provided to separate the car stacker areas from the standard parking stalls,
- 2. The car stacker areas are divided up into 1500 sq. ft. areas via 1-hour fire rated walls, and
- One-hour fire rated walls are provided to separate the car stacker areas from any other areas in the garage.

One-hour fired rated walls are not required in the driveway areas. For the hydraulic calculation, flow from all sprinklers, upright or pendent sprinklers at ceiling and all sidewall sprinklers at all levels, located in the area of application shall be included in the calculation.

15.44.200 - Section D102.2 added—Access to exterior door.

Section D102.2 of the fire code is added to read as follows:

Section D102.2 Fire department access shall extend to within 50 feet (15 m) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building.

15.44.210 - Section D102.3 added-Large building access.

Section amendment Appendix D Section D102.

Section D102.3 of the fire code is added to read as follows:

Large Buildings—Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 ft. (46 m) from fire department access roads as measured by an approved route around the exterior of the building or facility.

15.44.220 - Section D102.4 added—Access Road Clearance.

Section 4-3.124—Amendment Appendix D Section D102.

Section D102.4 is added to read as follows:

Fire department access roads shall have an unobstructed vertical clearance of not less than 13 ft. 6 in. (4.1 m.).

15.44.230 - Amendment to Appendix D of Section D102-Access Road Exceptions.

An Exception is added to Appendix D of Section D102 of the fire code to read as follows: Exception: When a fire department access road cannot be installed due to location on the property, topography, waterways, nonnegotiable grades, or other similar conditions the authority having jurisdiction shall be authorized to require fire protection features in addition to those already required.

15.44.240 - Amendment to Appendix D of Section D101-Definition-Fire Apparatus access road.

Appendix D of the Fire Code is amended by adding Section D101.2 to read as follows:

D101.2—Definition Fire Apparatus Access Road. A road that provides fire apparatus access from a fire station to at facility, building or portion thereof. This is a general term inclusive of all other terms such as but not limited to fire lane, public street, private street, parking lot lane, access roadway and driveway.

15.44.250 - Amendment of Appendix D, section D103.7 added-Marking.

Appendix D of the fire code is amended by adding Section D103.7 to read:

D103.7—Marking. Where fire lanes on private property have been designated by the Fire Marshall, curbs shall be painted red on the side or sides of the street or access route where parking is prohibited and no parking signs or other appropriate notice prohibiting obstructions, as approved by the Fire Marshall, shall be provided and maintained by the owner.

15.44.260 - Violations of fire code-Penalties.

The violation of any of the provisions of the fire code adopted by this chapter, or any permit issued thereunder, shall constitute a misdemeanor, punishable by the fines, penalties and enforcement provisions set forth in Chapters 1.14, 1.16 and 1.18 of this code.

SECTION 5: Chapter 15.81, "Energy Conservation and Generation" is replaced in its entirety to read as follows:

Chapter 15.81 - On-Site Energy Generation

15.81.010 - Title.

This chapter shall be known as the City of Brisbane On-site Energy Generation Ordinance.

15.81.020 - Authority.

The building official or the building official's designee shall have the authority to enforce the provisions of this chapter.

15.81.030 - Coordination with state energy regulations.

This chapter does not replace the most recent edition of the Building Energy Efficiency Standards for Residential and Non-residential Buildings, Title 24, Part 6 of the California Code of Regulation as adopted by the City in <u>Chapter 15.04</u> of this Title,("Energy Code"). This <u>Chapter 15.81</u> amends the energy code to place additional provisions on new residential and nonpresidential development projects. To the extent the provisions of this chapter conflict with any current or subsequently adopted provisions of the energy code, then the most energy conserving provisions shall supersede and control.

15.81.040 - Definitions.

Definitions of terms are as provided in the energy code.

15.81.050 - Solar installation-Local amendment to state energy code.

Subchapter 2 of the Energy Code—All Occupancies—Mandatory Requirements for the Manufacture, Construction and Installation of Systems, Equipment, and Building Components is amended to include:

Solar photovoltaic systems shall be installed on both non-residential and residential building types as follows:

A. New Non-residential and High Rise Residential buildings:

- 1. Buildings with less than 10,000 square feet of gross floor area shall provide a minimum of a 3 kilowatt photovoltaic system.
- Buildings with 10,000 square feet or more of gross floor area shall provide a minimum of a 5 kilowatt photovoltaic system.
- 3. Exception: As an alternative to a solar photovoltaic system listed above, a solar hot water system (solar thermal) may be substituted for all or part of the photovoltaic system, upon submittal of written documentation demonstrating at least the equivalent energy savings to the otherwise required photovoltaic system, subject to approval by the Building Official.

B. New Single Family and Low-Rise Residential Buildings shall comply with the requirements of Title 24, Part 6 of the California Code of Regulation, Section 150.1(c)14, as adopted by the City in <u>Chapter 15.04</u>:

C. New Mixed-use Buildings:

 Mixed-use buildings shall provide the minimum sized photovoltaic system for both the residential and non-residential components of the building (i.e.: residential and non-residential minimum requirements are considered additive).

15.81.060 - Infeasibility exemption.

If an applicant believes that circumstances exist that make it infeasible to meet the requirements of this chapter, the applicant may request an exemption via written request to the building official. In applying for the exemption, the burden is on the applicant to demonstrate infeasibility to the satisfaction of the building official. Infeasibility exemption may be granted on the basis of site specific cost effectiveness study information or other site or project specific factors.

SECTION 6: Chapter 15.83, "Building Electrification" is added to read as follows:

Chapter 15.83 Building Electrification

15.83.010 - Title.

This chapter shall be known as the City of Brisbane Building Electrification Ordinance.

15.83.020 - Authority.

The building official or the building official's designee shall have the authority to enforce the provisions of this chapter.

15.83.025 - Coordination with state energy regulations.

This chapter does not replace the most recent edition of the Building Energy Efficiency Standards for Residential and Non-residential Buildings, Title 24, Part 6 of the California Code of Regulation as adopted by the City in <u>Chapter 15.04</u> of this Title,("Energy Code"). This <u>Chapter 15.83</u> amends the energy code to place additional provisions on new residential and nonresidential development projects. To the extent the provisions of this chapter conflict with any current or subsequently adopted provisions of the energy code, then the most energy conserving provisions shall supersede and control.

15.83.030 - Purpose.

The purpose of this chapter is to reduce greenhouse gas emissions through the electrification of new buildings and reduction in the use of fossil fuels.

15.83.040 - Application.

This chapter applies to the permitting of all new residential and new non-residential development projects. It does not apply to portable equipment, such as barbeques, with gas supplied by a self-contained, portable fuel tank.

15.83.050 - Definitions:

For the purposes of this chapter, the following definitions shall apply:

- A. Appliance: "Appliance" means an installed, energy using device or equipment used for basic residential or non-residential task, such as cooking range, refrigerator and dishwasher.
- B. All Electric Building: "All Electric Building" means a building requiring power that has no natural gas, propane or other fossil fuel plumbing installed within the building and instead uses

electricity as the source for its building systems and appliances, such as space heating and/or cooling, water heating, cooking appliances and clothes drying appliances. All electric buildings may include solar thermal water heating.

- C. Building System: "Building System" means the building's installed air conditioning, space heating, lighting, water heating and similar equipment to be utilized throughout the building.
- D. Life Science Building: "Life Science Building" means a building where research, experiments and measurement in medical and life sciences are performed and/or stored requiring examination of fine details. The building may include a combination of scientific work areas and the supporting offices.

15.83.060 Building Requirements-this section shall be effective January 1, 2021.

- A. New residential development. New residential construction shall comply with the following provisions:
 - 1. Electric Building Standards:

a. New residential buildings shall be all electric.

2. Exception:

a. Residences may include non-electric cooking appliances and fireplaces. Where a non-electric cooking appliance is to be used, the appliance location shall also be prewired for future electric appliance installation, with electrical capacity and the reserved circuit breaker space for each appliance identified.

The applicant may submit a written request for a financial hardship exception, subject to Building Official approval. In such cases, it shall be demonstrated that the costs, including short and long term operating costs, would be more expensive under the ordinance provisions.

B. New non-residential development. New non-residential construction shall comply with the following provisions:

- 1. Electric Building Standards:
 - a. New non-residential buildings shall be all electric.
- 2. Exceptions: The following exceptions apply:
 - a. Life science buildings.
 - b. Other building types where it can be demonstrated in writing, subject to Building Official approval, that non-electric building components are essential as a core component of the intended building use, such as a barbeque-themed restaurant, pizza oven, etc. and the use could not reasonably be accommodated by electric building systems or appliances.

c. The applicant may submit a written request for a financial hardship exception, subject to Building Official approval. In such cases, it shall be demonstrated that the costs, including short and long term operating costs, would be more expensive under the ordinance provisions.

SECTION 7: Chapter 15.84 "Electric Vehicle Infrastructure" is added to read as follows:

Chapter 15.84 – Electric Vehicle Infrastructure

15.84.010 - Title.

This chapter shall be known as the City of Brisbane Electric Vehicle Infrastructure Ordinance.

15.84.020 - Authority.

The building official or the building official's designee shall have the authority to enforce the provisions of this chapter.

15.84.030 - Purpose.

The purpose of this chapter is to provide for electric vehicle charging infrastructure as part of new development projects.

15.84.040 - Application.

This chapter applies to the permitting of all new residential and new non-residential development projects.

15.84.050 - Coordination with state codes

This chapter does not replace the most recent edition of the California Building Code, Title 24, as adopted by the City in Chapter 15.04 of this Code. This chapter 15.84 amends the state code, to place additional requirements on new residential and nonresidential development projects. To the extent the provisions of this chapter conflict with any current or subsequently adopted state code provisions, then the most energy conserving provisions shall supersede and control.

15.84.060 - Definitions:

For the purposes of this chapter, the following definitions shall apply:

- A. EV Capable Parking Space: "EV Capable Parking Space" means a parking space linked to a listed electrical panel with sufficient capacity to provide at least 110/120 volts and 20 amperes to the parking space. The following shall be addressed in designating an EV Capable Parking Space:
 - a. Where, following construction, a parking space would not otherwise be readily linked (or accessible) to the electrical panel, raceways linking the electrical panel and the parking

space shall be required in order to be considered EV capable. Determination of linked or accessibility shall be at the discretion of the Building Official.

- b. Inaccessibility (not considered EV Capable) generally includes such cases as, where underground trenching would be required or where penetrations to walls, floors, or other partitions would be required for future installation of branch circuits.
- c. The panel circuit directory shall identify the overcurrent protective device space(s) reserved for EV charging as "EV CAPABLE."
- d. Raceways shall be at least 1" in diameter and may be sized for multiple circuits as allowed by the California Electrical Code. Construction documents shall indicate future completion of raceway from the panel to the parking space, via the installed inaccessible raceways.
- B. Level 1 EV Ready Circuit Parking Space: "Level 1 EV Ready Circuit Parking Space" means a parking space served by a complete electric circuit with a minimum of 110/120 volt, 20-ampere capacity including electrical panel capacity, overprotection device. The following shall be addressed in designating a Level 1 EV Ready Circuit Parking Space:
 - 1. Raceways shall be a minimum 1" diameter and may be sized for multiple circuits as allowed by the California Electrical Code.
 - 2. Wiring shall be included and either
 - i. A receptacle labelled "Electric Vehicle Outlet" with at least a 1/2" font adjacent to the parking space, or
 - ii. Electric vehicle supply equipment (EVSE).
- C. Level 2 EV Ready Circuit Parking Space: "Level 2 EV Ready Circuit Parking Space" means a parking space served by a complete electric circuit with 208/240 volt, 40-ampere capacity including electrical panel capacity, overprotection device. The following shall be addressed in designating a Level 2 EV Ready Circuit Parking Space:
 - 1. It is to be a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code.
 - 2. Wiring shall be included and either:
 - A receptacle labelled "Electric Vehicle Outlet" with at least a ¹/₂" font adjacent to the parking space, or
 - Electric vehicle supply equipment (EVSE) with a minimum output of 30 amperes.
- D. Electric Vehicle Charging Station (EVCS): "Electric Vehicle Charging Station (EVCS)" means a parking space that includes installation of electric vehicle supply equipment (EVSE) with a minimum output of 30 amperes connected to a Level 2 EV Ready Circuit. EVCS installation may be used to satisfy a Level 2 EV Ready Circuit requirement.
- **E.** New Development or New Construction: "New development or new construction" means construction or reconstruction of a principal structure on a site, to which the parking standards provided in Chapter 17.34 would be applied. Based on the Building Official's determination, it

may include buildings that have been substantially demolished and reconstructed consistent with Chapter 17.38 – Nonconforming Uses and Structures.

F. Parking Space: "Parking Space" means an area designed and marked for parking an automobile and recognized by the Building Official towards meeting the minimum parking standards for a site as set forth in Chapter 17.34.

15.84.070 Residential Requirements

New residential construction shall comply with the following provisions:

- B. New single family residences, duplexes and townhouses.
 - 3. EV Standards:
 - a. For each dwelling unit, where two or more parking spaces are required, at least one Level 2 EV Ready Circuit and one Level 1 EV Ready Circuit is to be installed.
 - b. Where only one parking space is required per unit, per Chapter 17.34, only one Level 2 EV Ready Circuit shall be required.
 - 4. **Exceptions:** The following exceptions apply, subject to Building Official approval:
 - d. A reduction in the EV standards may be allowed, if requested in writing by the applicant based on demonstration that the provisions of this section would render the development project infeasible due to associated utility costs. Documentation is to take into account short term and long term cost analysis to the satisfaction of the Building Official.
- C. New multifamily dwellings. The following provisions apply to multifamily developments whether parking spaces are assigned or unassigned to individual units:
 - 1. EV Standards:
 - A minimum of one Level 2 EV Ready Circuit Parking Space per unit shall be provided.
 - A minimum of 50 percent of required guest spaces shall be Electric Vehicle Charging Station (EVCS) Parking Spaces
 - 2. Exceptions: The following exceptions apply, subject to Building Official approval:
 - a. Where less than one parking space per unit is required per Chapter 17.34, the provision of Level 2 EV Ready Circuit Parking Space shall apply only to the parking required per Chapter 17.34. This section does not alter the required minimum number of parking spaces as provided in Chapter 17.34.
 - b. When more than 20 multifamily dwelling units are constructed on a building site, load balancing systems may be installed. In such cases, the panel capacity must average a minimum of 16 amperes per EV space. Load balancing systems may

be installed to increase the number of EV chargers or the amperage or voltage beyond the minimum required.

c. A reduction in the EV standards may be allowed, if requested in writing by the applicant based on demonstration that the provisions of this section would render the development project infeasible due to associated utility costs. However, the maximum feasible amount of EV infrastructure shall be provided. Documentation is to take into account short term and long term cost analysis to the satisfaction of the Building Official.

15.84.080 Non-Residential Requirements

New nonresidential construction shall comply with the following provisions:

A. Building Uses with Lower Parking Turnover Rates: For buildings designed for primarily low parking turnover uses, such as Administrative Office, R&D, Industrial, Hotels and School Uses, the following provisions apply to construction of new buildings, as determined by the Building Official. These building uses typically have longer average parking durations as compared to those included in Section 17.84.080.B.

3. EV Standards:

- a. A total of 50% of the parking spaces required per Chapter 17.34 shall be EV, as follows:
 - When 10 or more parking spaces are required to be constructed, 15% of the required parking spaces on site shall be equipped with Level 2 EVCS;
 - An additional 10% shall be provided with at least Level 2 EV Ready Circuits; and
 - iii. An additional 25% shall be at least Level 1 EV Capable.
- a. Rounding: Calculations for the required minimum number of spaces equipped with Level 2 EVCS, Level 1 EV Ready spaces and EV Capable spaces shall all be rounded up to the nearest whole number
- 4. Exceptions: The following exceptions apply, subject to Building Official approval:
 - a. A reduction in the EV standards may be allowed, if requested in writing by the applicant based on demonstration that the provisions of this section would render the development project infeasible due to associated utility costs. However, the maximum feasible amount of EV infrastructure shall be provided. Documentation is to take into account short term and long term cost analysis to the satisfaction of the Building Official.
 - b. The Building Official may apply EV Space Standards provided in Section 15.84.080.B to uses listed in this section where the applicant has adequately demonstrated that the specific use applied for fits with the Higher Parking Turnover Rates.
- **B.** Building Uses with Higher Parking Turnover Rates: The following provisions apply to construction of new buildings designed for the primary uses of restaurant, retail, meeting halls, gyms, commercial recreation, professional office and similar, as determined by the Building Official. These building uses typically have shorter average parking durations as compared to those included in Section 17.84.080.A.

1. EV Standards:

- b. A total of 25% of the parking spaces required per Chapter 17.34 shall be EV, as follows:
 - i. When 10 or more parking spaces are required to be constructed, 15% of the required parking spaces on site shall be equipped with Level 2 EVCS;
 - ii. An additional 10% shall be at least Level 1 EV Ready.
 - a. Rounding: Calculations for the required minimum number of spaces equipped with Level 2 EVCS and Level 1 EV Ready spaces shall be rounded up to the nearest whole number.
- 2. Exceptions: The following exceptions apply, subject to Building Official approval:
- a. A reduction in the EV standards may be allowed, if requested in writing by the applicant based on demonstration that the provisions of this section would render the development project infeasible due to associated utility costs. However, the maximum feasible amount of EV infrastructure shall be provided. Documentation is to take into account short term and long term cost analysis to the satisfaction of the Building Official.
- b. Installation of each Direct Current Fast Charger with the capacity to provide at least 80 kW output may substitute for 6 Level 2 EVCS and 5 EV Ready spaces after a minimum of 6 Level 2 EVCS and 5 Level 1 EV Ready spaces are installed.

SECTION 8: If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council of the City of Brisbane hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases may be held invalid or unconstitutional.

SECTION 9: This Ordinance shall be in full force and effect on January 1, 2020 after its passage and adoption, except that the provisions of Section 7 pertaining to Building Electrification shall be in effect following approval by the California Energy Commission.

Madison Davis, Mavor

* * *

The above and foregoing Ordinance was regularly introduced and after the waiting time required by law, was thereafter passed and adopted at a regular meeting of the City Council of the City of Brisbane held on the twelfth day of December 2019, by the following vote:

AYES: Councilmembers Conway, Cunningham, Lentz, O'Connell and Mayor Davis NOES: None ABSENT: None

ATTEST:

Ingrid Padilla, City Clerk

APPROVED AS TO FORM:

D

City Attorney