

ORDINANCE ???

AN ORDINANCE OF THE CITY COUNCIL OF THE TOWN OF ATHERTON AMENDING CHAPTER 15.19 OF THE ATHERTON MUNICIPAL CODE BY ADOPTING THE 2022 CALIFORNIA GREEN BUILDING CODE BY REFERENCE, AS AMENDED BY LOCAL REACH STANDARDS WITH EXCEPTIONS

WHEREAS, the Town of Atherton ("Town") has adopted the 2019 California Green Building Code, and

WHEREAS, the California Building Standards Commission ("BSC") has updated the 2019 California Green Building Code, releasing the 2022 California Green Building Code, which takes effect on January 1, 2023; and

WHEREAS, the Town has an interest in protecting the environment by reducing fossil fuel use; and

WHEREAS, the Town wishes to reduce fossil fuel use by supporting Electric Vehicle ("EV") infrastructure; and

WHEREAS, the Town wishes to reduce fossil fuel use in residential and commercial new construction; and

WHEREAS, the Town reserves the authority to regulate building code within Town limits to provide for the welfare of its residents by reducing fossil fuel usage; and

WHEREAS, On November 3, 2021 a Study Session was held with representatives from Peninsula Clean Energy ("PCE") and TRC to discuss the options of an all-electric reach codes and EV Charging ordinance; and

WHEREAS, the City Council wishes to adopt All-Electric Reach Codes with exceptions,
The City Council of the Town of Atherton does hereby ordain as follows:

Section 1. PURPOSE AND AUTHORITY

The purpose of this amendment is to expand the Town's Green Building Code (Chapter 15.19) to adopt the most recent 2022 California Green Building Code and incorporate local All-Electric Reach Standards with exceptions, and EV Charging standards.

Section 2. AMENDMENTS TO ATHERTON MUNICIPAL CODE CHAPTER 15.19

Chapter 15.19 is amended to read:

15.19.010 Adoption of the California Green Building Code, 2022 Edition.

That certain document, one copy of which is on file in the office of the building official of the town, being marked and designated as the "2019 California Green Building Standards Code or CalGreen," as published by the California Building Standards Commission and identified as California Code of Regulations, Title 24, Part 11, is adopted as the green building code for the town regulating improving public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact

or positive environmental impact for all buildings and structures and each and all of the regulations, provisions, and penalties of such 2019 California Green Building Standards Code, are referred to, adopted and made a part of this chapter as if fully set out in this chapter, subject to the amendments, deletions and additions thereto, as provided in this chapter. Effective January 1, 2023, the 2022 Edition of the California Green Buildings Standards Code shall replace the 2019 version and be adopted unless amended, as set forth in this chapter. To the extent that language or standards in CALGreen are incongruent with the language in this chapter, the language in this chapter is controlling, to the extent permitted by California state law.

15.19.020 Permit fees.

Permit fees are established and amended by resolution of the city council.

15.19.030 All-Electric Reach Standards.

Part 11 – California Green Building Code (CALGreen)

CHAPTER 2 DEFINITIONS

ADDITION. An extension or increase in floor area of an existing building or structure.

ALL-ELECTRIC BUILDING. A building that contains no *combustion equipment* or plumbing for combustion equipment serving space heating (including fireplaces), water heating (including pools and spas), cooking appliances (including barbecues), and clothes drying, within the building or building property lines, and instead uses electric heating appliances for service.

ALTERATION OR ALTER. Any construction or renovation to an existing structure other than repair for the purpose of maintenance or addition.

COMBUSTION EQUIPMENT. Any equipment or appliance used for space heating, water heating, cooking, clothes drying and/or lighting that uses *fuel gas*.

ELECTRIC HEATING APPLIANCE. A device that produces heat energy to create a warm environment by the application of electric power to resistance elements, refrigerant compressors, or dissimilar material junctions, as defined in the California Mechanical Code.

FUEL GAS. A gas that is natural or manufactured, including liquefied petroleum, or a mixture thereof.

NEWLY CONSTRUCTED (or NEW CONSTRUCTION). A newly constructed building (or new construction) does not include additions, alterations, or repairs.

CHAPTER 4 – RESIDENTIAL MANDATORY MEASURES

Division 4.1 PLANNING AND DESIGN

SECTION 4.106 SITE DEVELOPMENT

4.106.5 All-electric buildings. New construction buildings and qualifying alteration projects

shall comply with Section 4.106.5.1 or 4.106.5.2 so that they do not use *combustion equipment* or are ready to accommodate installation of *electric heating appliances*.

4.106.5.1. New construction. All newly constructed buildings and Accessory Dwelling Units, Guest Houses and Pool Houses shall be *all-electric buildings*.

Tenant improvements shall not be considered new construction. The final determination whether a project meets the definition of substantial reconstruction/alteration shall be made by the local enforcing agency.

Exceptions:

1. Residential Buildings may contain non-electric cooking appliances and fireplaces.
2. Emergency Generators may utilize fuel gas.
3. If the applicant establishes that there is not an all-electric prescriptive compliance pathway for the building system under the California Building Energy Efficiency Standards, and that the building is not able to achieve the performance compliance Standard applicable to the building under the Energy Efficiency Standards using Commercially available technology and an approved calculation method, then the local enforcing agency may grant a modification. The applicant shall comply with Section 4.106.5.2.

Inactive *Fuel Gas Infrastructure* may be extended to spaces that are anticipated to qualify for the exceptions contained in this chapter. The inactive *Fuel Gas Infrastructure* shall not be activated, have a meter installed, or otherwise used unless the exemptions specified in this chapter have been confirmed as part of the issuance of a building permit. If the *Fuel Gas Infrastructure* is no longer serving one of the exceptions contained in this chapter, it shall either be capped, otherwise terminated, or removed by the entity previously entitled to the exemption, in a manner pursuant to all applicable Codes.

Town of Atherton shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code Section 104.

4.106.5.2 Requirements for *combustion equipment*.

Where *combustion equipment* is allowed per Exceptions under 4.106.5.1, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an *electrical heating appliance* in the following ways, as certified by a registered design professional or licensed electrical contractor:

1. Branch circuit wiring, electrically isolated and designed to serve all electrical heating appliances in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage, and an electrical receptacle or junction box within five feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and
2. Labeling of both ends of the unused conductors or conduit shall be with "For Future Electrical Appliance"; and

3. Reserved circuit breakers in the electrical panel for each branch circuit, appropriately labeled (i.e., "Reserved for Future Electric Range"), and positioned on the opposite end of the panel supply conductor connection; and
4. Connected subpanels, panelboards, switchboards, busbars, and transformers shall be sized to serve the future electrical heating appliances. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electric Code; and
5. Physical space for future electrical heating appliances, including equipment footprint, and if needed a pathway reserved for routing of ductwork to heat pump evaporator(s), shall be depicted on the construction drawings. The footprint necessary for future electrical heating appliances may overlap with non-structural partitions and with the location of currently designed combustion equipment.

CHAPTER 5 – NONRESIDENTIAL MANDATORY MEASURES

Division 5.1 PLANNING AND DESIGN

SECTION 5.106 - SITE DEVELOPMENT

5.106.13 All-electric buildings. New construction buildings shall comply with Section 5.106.13.1 or 5.106.13.2 so that they do not use *combustion equipment* or are ready to facilitate future electrification.

5.106.13.1. New construction. All newly constructed nonresidential buildings shall be *all-electric buildings*.

Tenant improvements shall not be considered new construction. The final determination whether a project meets the definition of substantial reconstruction/alteration shall be made by the local enforcing agency.

Exceptions:

1. Nonresidential buildings containing kitchens located in a place of public accommodation, as defined in the California Building Code Chapter 2, may apply to the local enforcing agency for a modification to install *commercial food heat-processing equipment* served by *fuel gas*. The local enforcing agency may grant the modification if they find:
 - a. The need cannot be achieved equivalently with an *electric heating appliance*; and
 - b. The applicant has installed energy efficient equipment based on Energy Star or California Energy Wise qualifications, as available.

The applicant shall comply with Section 5.106.13.2.

2. If the applicant establishes that there is not an all-electric prescriptive compliance pathway for the building system under the California Building Energy Efficiency Standards, and that the building is not able to achieve the performance compliance standard applicable to the

building under the Energy Efficiency Standards using commercially available technology and an approved calculation method, then the local enforcing agency may grant a modification. The applicant shall comply with Section 5.106.13.2

5.106.13.2. Requirements for *combustion equipment*.

Where *combustion equipment* is allowed per exceptions under Section 5.106.13.1, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an *electrical heating appliance* in the following ways, as certified by a registered design professional or licensed electrical contractor:

1. Branch circuit wiring, electrically isolated and designed to serve all electrical heating appliances in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage, and an electrical receptacle or junction box within five feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and
2. Labeling of both ends of the unused conductors or conduit shall be with "For Future Electrical Appliance"; and
3. Reserved circuit breakers in the electrical panel for each branch circuit, appropriately labeled (i.e., "Reserved for Future Electric Range"), and positioned on the opposite end of the panel supply conductor connection; and
4. Connected subpanels, panelboards, switchboards, busbars, and transformers shall be sized to serve the future electrical heating appliances. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electric Code; and
5. Physical space for future electrical heating appliances, including equipment footprint, and if needed a pathway reserved for routing of ductwork to heat pump evaporator(s), shall be depicted on the construction drawings. The footprint necessary for future electrical heating appliances may overlap with non-structural partitions and with the location of currently designed combustion equipment.

15.19.040 Electric Vehicle Standards.

Section 202 Definitions:

AFFORDABLE HOUSING. Residential buildings that entirely consist of units below market rate and whose rents or sales prices are governed by local agencies to be affordable based on area median income.

AUTOMATIC LOAD MANAGEMENT SYSTEM (ALMS). A control system designed to manage load across one or more electric vehicle supply equipment (EVSE), circuits, panels and to share electrical capacity and/or automatically manage power at each connection point. ALMS systems shall be designed to deliver no less than 3.3 kVa (208/240 volt, 16-ampere) to each EV Capable, EV Ready or EVCS space served by the ALMS, and meet the requirements of California Electrical Code Article 625. The connected amperage to the building site for the EV charging infrastructure shall not be lower than the required connected amperage per California

Green Building Standards Code, Title 24 Part 11.

DIRECT CURRENT FAST CHARGING (DCFC). A parking space provided with electrical infrastructure that meets the following conditions:

- i. A minimum of 48 kVa (480 volt, 100-ampere) capacity wiring.
- ii. Electric vehicle supply equipment (EVSE) located within three (3) feet of the parking space providing a minimum capacity of 80-ampere.

ELECTRIC VEHICLE CHARGING STATION (EVCS). A parking space that includes installation of electric vehicle supply equipment (EVSE) at an EV Ready space. An EVCS space may be used to satisfy EV Ready space requirements. EVSE shall be installed in accordance with the California Electrical Code, Article 625.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The electric vehicle charging connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

LEVEL 2 EV CAPABLE. A parking space provided with electrical infrastructure that meets the following requirements:

- i. Conduit that links a listed electrical panel with sufficient capacity to a junction box or receptacle located within three (3) feet of the parking space. The conduit shall be designed to accommodate at least 8.3 kVa (208/240 volt, 40-ampere) per parking. Conduit shall have a minimum nominal trade size of 1 inch inside diameter and may be sized for multiple circuits as allowed by the California Electrical Code. Conduits shall be installed at a minimum in spaces that will be inaccessible after construction, either trenched underground or where penetrations to walls, floors, or other partitions would otherwise be required for future installation of branch circuits, and such additional elements deemed necessary by the Building Official. Construction documents shall indicate future completion of conduit from the panel to the parking space, via the installed inaccessible conduit.
- ii. The electrical panel shall reserve a space for a 40-ampere overcurrent protective device space(s) for EV charging, labeled in the panel directory as "EV CAPABLE."
- iii. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.
- iv. The parking space shall contain signage with at least a 12" font adjacent to the parking space indicating the space is EV Capable.

LEVEL 1 EV READY. A parking space that is served by a complete electric circuit with the following requirements:

- i. A minimum of 2.2 kVa (110/120 volt, 20-ampere) capacity wiring.
- ii. A receptacle labeled "Electric Vehicle Outlet" or electric vehicle supply equipment located within three (3) feet of the parking space. If EVSE is provided the minimum capacity of the EVSE shall be 16-ampere.
- iii. Conduit oversized to accommodate future Level 2 EV Ready (208/240 volt, 40-ampere) at each parking space.

LEVEL 2 EV READY. A parking space that is served by a complete electric circuit with the following requirements:

- i. A minimum of 8.3 kVa (208/240 volt, 40-ampere) capacity wiring. A receptacle labeled "Electric Vehicle Outlet" or electric vehicle supply equipment located within three (3) feet of the parking space. If EVSE is provided the minimum capacity of the EVSE shall be 30-ampere.

LOW POWER LEVEL 2 EV READY. A parking space that is served by a complete electric circuit with the following requirements:

- i. A minimum of 4.1 kVA (208/240 Volt, 20-ampere) capacity wiring.
- ii. A receptacle labeled "Electric Vehicle Outlet" or electric vehicle supply equipment located within three (3) feet of the parking space. If EVSE is provided the minimum capacity of the EVSE shall be 16-ampere.
- iii. Conduit oversized to accommodate future Level 2 EV Ready (208/240 volt, 40-ampere) at each parking space.

OFF-STREET LOADING SPACES. An area, other than a public street, public way, or other property (and exclusive of off-street parking spaces), permanently reserved or set aside for the loading or unloading of motor vehicles, including ways of ingress and egress and maneuvering areas. Whenever the term "loading space" is used, it shall, unless the context clearly requires otherwise, be construed as meaning off-street loading space. This excludes designated passenger loading/unloading.

SECTION 301 GENERAL

301.1 Scope.

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration. (No change to existing California amendment.)

The mandatory provisions of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings.

The mandatory provisions of Section 5.106.5.3 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing nonresidential buildings.

NOTE: Repairs including, but not limited to, resurfacing, restriping, and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

DIVISION 4.1, PLANNING AND DESIGN

SECTION 4.106 SITE DEVELOPMENT

4.106.4 Electric vehicle (EV) charging. Residential construction shall comply with Section

4.106.4.1 or 4.106.4.2, and 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

Exceptions:

1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
 - 1.1. Where there is no local utility power supply, or the local utility is unable to supply adequate power.
 - 1.2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may increase construction cost by an average of \$4,500 per parking space for market rate housing or \$400 per parking space for affordable housing. EV infrastructure shall be provided up to the level that would not exceed this cost for utility service.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities and without electrical panel upgrade or new panel installation. ADUs and JADUs without additional parking but with electrical panel upgrades or new panels must have reserved breakers and electrical capacity according to the requirements of 4.106.4.1.

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

4.106.4.1.1 New Construction. One parking space provided shall be a *Level 2 EV Ready* space. If a second parking space is provided, it shall be provided with a *Level 1 EV Ready* space.

4.106.4.1.2. Existing Building. Parking additions or electrical panel upgrades must have reserved breaker spaces and electrical capacity according to the requirements of 4.106.4.1.1.

NONRESIDENTIAL MANDATORY MEASURES

SECTION 5.106

SITE DEVELOPMENT

5.106.5.3 Electric vehicle (EV) charging. Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3 and shall be provided in accordance with regulations in the *California Building Code* and the *California Electrical Code*. Accessible EVCS shall be provided in accordance with the *California Building Code Chapter 11B Section 11B-228.3*. For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s). Calculation for spaces shall be rounded up to the nearest whole number.

Exceptions:

1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:

- a. Where there is no local utility power supply.
- b. Where the local utility is unable to supply adequate power.
- c. Where there is evidence suitable to the local enforcement agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may increase construction cost by an average of \$4,500 per parking space. EV infrastructure shall be provided up to the level that would not exceed this cost for utility service.

2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section.

5.106.5.3.1 Nonresidential Occupancy Class B Offices – Shared Parking Space.

5.106.5.3.1.1 New Construction. Twenty percent (20%) of parking spaces shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Thirty percent (30%) of parking spaces provided shall be Level 2 EV Capable.

5.106.5.3.1.2 Existing Buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS with Level 2 EV Ready. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

5.106.5.3.3 All Other Nonresidential Occupancies – Shared Parking Facilities.

5.106.5.3.3.1 New Construction. Ten percent (10%) of parking spaces provided shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Ten percent (10%) of parking spaces provided shall be Level 2 EV Capable.

5.106.5.3.3.2 Existing Buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS with Level 2 EV Ready. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

5.106.5.3.4 Direct current fast charging stations. One DCFC may be substituted for up to five (5) EVCS to meet the requirements of 5.106.5.3.1, 5.106.5.3.2, and 5.106.5.3.3. Where ALMS serve DCFC stations, the power demand from the DCFC shall be prioritized above Level 1 and

Level 2 spaces.

5.106.5.4 Electric vehicle charging readiness. Construction shall comply with Section 5.106.5.4.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores with planned off-street loading spaces shall also comply with Section 5.106.5.4.1 for future installation of medium- and heavy-duty EVSE. Accessible EVCS shall be provided in accordance with the *California Building Code Chapter 11B Section 11B-228.3*. For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

Exceptions:

1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:

- a. Where there is no local utility power supply.
- b. Where the local utility is unable to supply adequate power.
- c. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may increase construction cost by an average of \$4,500 per parking space. EV infrastructure shall be provided up to the level that would not exceed this cost for utility service.

Section 3. SEVERABILITY

If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid, the remainder of the Ordinance and the application of such provision to other persons or circumstances shall not be affected thereby. To the extent that prior Town ordinances governed any portion of this Ordinance held invalid, such prior Town ordinances shall again become effective if any portion of this Ordinance is held invalid.

Section 4: EFFECTIVE DATE

This Ordinance shall be posted in at least three public places according to law and shall take effect and be in force on January 1, 2023.

Introduced on the ____ day of _____, 2022.

Passed and adopted as an ordinance of the City Council of the Town of Atherton at a regular meeting thereof held on the ____ day of _____, 2022 by the following vote:

Ayes:

Noes:

Abstentions:

Mayor Rick DeGolia

ATTEST:

Anthony Suber, City Clerk/ACM