

ATTACHMENT A

SECTION 1. Chapter 16.54 of the Cupertino Municipal Code is hereby repealed in its entirety and replaced with the following Chapter 16.54 to be entitled, numbered, and to read as follows: :

Chapter 16.54: Energy Code

Section

16.54.010 ~~Code~~ Adoption of the 2019 California Energy Code.

16.54.040 Local Amendments.

16.54.100 Scope.

16.54.110 Definition and Rules of Construction.

16.54.010 Adoption of the 2019 California Energy Code Adoption.

- A. The provisions of the ~~2016~~ 2019 California Energy Code, Part 6 of Title 24 of the California Code of Regulations, and each and all of the regulations, provisions, conditions and terms of the code are referred to as if fully set forth in this chapter, 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 Chapter. Notwithstanding the foregoing, the additions, deletions, and amendments hereinafter described shall not become operative until the California Energy Commission approval process is completed.
- a. In accordance with California Health and Safety Code Sections 17958.7 and 18941.5, 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 Chapter.
- b. 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 Chapter.
- B. One (1) copy of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and is made available for public inspection.

16.54.040 Local Amendments.

The following provisions of this Chapter shall constitute local amendments to the cross-referenced provisions of the 2019 California Energy Code and shall be deemed to amend the cross-referenced sections of said code with the respective provisions set forth in this Chapter.

16.54.100 Scope.

Amend Section 100.0(e)(2)(A) of the 2019 California Energy Code 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 All-Electric Building as defined in Section 100.1(b). For the purposes of All-Electric Building requirements, newly constructed buildings as defined in Section 100.1 shall not include newly constructed additions and tenant improvements in existing buildings.

Exception 1: Nonresidential F, H, and L Occupancies, or other similar research & development uses as determined by the building official, are exempt from the all-electric building provisions of this section. If this Exception applies, the applicant shall comply with the pre-wiring provision of Note 1 below.

Exception 2: "Essential Facilities," as defined by the California Building Code are exempt from the all-electric building provisions of this section. If this Exception applies, the applicant shall comply with the pre-wiring provision of Note 1 below.

Exception 3: Kitchens located within nonresidential buildings shall be exempt from the all-electric building provisions of this section. If this Exception applies, the applicant shall comply with the pre-wiring provision of Note 1 below.

Exception 4: If the applicant establishes that there is not an all-electric prescriptive compliance pathway for the building under the Energy Code, and that the building is not able to achieve the performance compliance standard applicable to the building under the Energy Code using commercially available technology and an approved calculation method, then the Building Official may grant a modification. If the Building Official grants a modification pursuant to this Exception, the applicant shall comply with the pre-wiring provision of Note 1 below.

Exception 5: Accessory Dwelling Units and Junior Accessory Dwelling Units shall be exempt from the all-electric building provisions of this section. For purposes of this exception, "Accessory Dwelling Unit" and "Junior Accessory Dwelling Unit" have the same definitions as set out in Government Code Sections 65852.2 and 65852.22, respectively.

Note 1: If natural gas appliances are used under Exception 1, 2, 3, and/or 4, each natural gas appliance location in such building must be electrically pre-wired for future electric appliance installation. Each such natural gas appliance location shall include the following:

- i. A dedicated circuit, phased appropriately, for each appliance. Each such circuit shall have a minimum amperage requirement for a comparable electric appliance (based on the manufacturer's recommendations), an electrical receptacle or junction box that is connected to the electric panel, conductors of adequate capacity within 3 feet of the appliance. Each such circuit shall be accessible with no obstructions;
- ii. Both ends of the unused conductor or conduit shall be labeled with the words "For Future Electric Appliance" and be electrically isolated;
- iii. A reserved circuit breaker space shall be installed in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled for each circuit, an example is as follows: "For Future Electric Range"; and
- iv. All electrical components, including conductors, receptacles, junction boxes, or blank covers, related to this section shall be installed in

accordance with the California Electrical Code.

Note 2: If a building is entitled to apply Exception 1, 2, 3, 4, and/or 5 the Building Official is authorized to approve alternative materials, design, and methods of construction or equipment per California Building Code Section 104.

Amend Section 100.0(e)(3)(A) of the 2019 California Energy Code to read as follows:

3. New Construction in existing buildings (additions, alterations and repairs).

A. Nonresidential, high-rise residential, and hotel/motel buildings. Section 141.0 applies to new construction in existing nonresidential, high-rise residential, and hotel/motel buildings. New construction in existing buildings includes additions, alterations and repairs. Section 141.0 specifies requirements that uniquely apply to additions, alterations or repairs to existing buildings, and specify which requirements in other sections also apply. For alterations that change the occupancy classification of the building, the requirements specific in Section 141.0 apply to the occupancy after alterations.

i. Nonresidential tenant improvements are not subject to the all-electric building requirement for new construction in section 100.0(e)2A.

16.54.110 Definitions and Rules of Construction.

Amend Section 100.1(b) of the 2019 California Energy Code to add the following definition:

ALL-ELECTRIC BUILDING: is a building that has no natural gas or propane plumbing installed within the building, and that uses electricity as the sole source of energy for its space heating, water heating (including pools and spas), cooking appliances, and clothes drying appliances. All-Electric Buildings may include solar thermal pool heating.

SECTION 2. Chapter 16.58 of the Cupertino Municipal Code is hereby repealed in its entirety and replaced with the following Chapter 16.58 to be entitled, numbered, and to read as follows:

Chapter 16.58 Green Building Standards Code

Section

16.58.010 Adoption of the 2019 California Green Building Standards Code.

16.58.015 Adoption of Appendix Chapters.

~~16.58.020 — Reserved.~~

16.58.0420 Local amendments.

16.58.0530 Title.

16.58.0740 Scope.

16.58.100 Mandatory Requirements.

16.58.110 Project types.

16.58.120 Residential Projects

16.58.130 Residential New Construction – Equal to or less than nine (9) homes.

<u>16.58.140</u>	<u>Residential New Construction – Greater than nine (9) homes or more.</u>
<u>16.58.150</u>	<u>Major multi-family residential renovations/additions.</u>
<u>16.58.160</u>	<u>Non-residential new construction, small.</u>
<u>16.58.170</u>	<u>Non-residential new construction, medium.</u>
<u>16.58.180</u>	<u>Non-residential new construction, large.</u>
<u>16.58.190</u>	<u>Non-residential renovations/additions, minor.</u>
<u>16.58.200</u>	<u>Non-residential renovations/additions, major.</u>
<u>16.58.210</u>	<u>Mixed-Use.</u>
<u>16.58.220</u>	<u>Table 101.10</u>
<u>16.58.230</u>	<u>Alternate green building standards.</u>
<u>16.58.240</u>	<u>Verification.</u>
<u>16.58.260</u>	<u>Exemptions.</u>
<u>16.58.280</u>	<u>Definitions.</u>
<u>16.58.290</u>	<u>Tenant Improvements.</u>
<u>16.58.300</u>	<u>Compliance with local water-efficient landscape ordinance- Residential.</u>
<u>16.58.310</u>	<u>Compliance with local water-efficient landscape ordinance- Non-Residential.</u>
<u>16.58.400</u>	<u>Electric vehicle (EV) charging – Residential.</u>
<u>16.58.420</u>	<u>Electric vehicle (EV) charging – Non-Residential.</u>

16.58.010 Adoption of the 2019 California Green Building Standards Code Adoption.

- A. The provisions of the ~~2016~~ 2019 California Green Building Standards Code and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, 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 Chapter.
 - a. In accordance with California Health and Safety Code Sections 17958.7 and 18941.5, express findings that modifications to the California Green 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 Chapter.
- B. One (1) copy of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and is made available for public inspection.

16.58.015 Adoption of Appendix Chapters.

No Appendix Chapters from the ~~2016~~ 2019 California Green Building Standards Code have been adopted.

16.58.020 Reserved Local Amendments.

The following provisions of this Chapter shall constitute local amendments to the cross-referenced provisions of the ~~2016~~ 2019 California Green Building Standards Code, and shall be deemed to amend the cross-referenced sections of said Code with the respective provisions set forth in this Chapter.

16.58.030 Title.

Amend Section 101.1 of the 2019 California Green Building Standards Code to read as follows:

101.1 Title. These regulations shall be known as the California Green Building Standards Code as amended by the City of Cupertino and may be cited as such and will be referred to herein as “this code.” The California Green Building Standards Code as amended by the City of Cupertino is an amendment to Part 11 of 12 parts of the official compilation and publication of the adoption, amendment and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code.

16.58.040 Scope.

Amend Section 101.3 of the 2019 California Green Building Standards Code to read as follows:

101.3 Scope. The provisions of this code shall apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure, unless otherwise indicated in this code for the City of Cupertino.

The California Green Building Standards Code also is hereby amended to apply to additions, renovations and tenant improvements of privately-owned buildings and structures in accordance with the provisions of this Chapter.

It is not the intent that this code substitute or be identified as meeting the certification requirements of any private, third party green building program.

16.58.100 Mandatory Requirements.

Amend Section 101.10 of the 2019 California Green Building Standards Code to read as follows:

101.10 Mandatory requirements. This code contains mandatory green building measures. In addition, this Chapter contains required minimum green building measures as amended by the City of Cupertino. All new buildings and structures, additions, renovations and tenant improvements subject to requirements in Table 101.10 shall comply with the mandatory measures of the ~~2016~~ 2019 California Green Building Standards Code as adopted by the state in addition to local amendments included in this code, regardless of height or number of stories, unless specifically exempted by this code.

16.58.110 Project Types.

Add Section 101.10.1 of the 2019 California Green Building Standards Code to read as follows:

101.10.1 Project Types - as set forth in Table 101.10.

16.58.120 Residential projects.

Add Section 101.10.1.1 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1 Residential projects - as set forth in Table 101.10.

16.58.130 Residential New Construction – Equal to or less than nine (9) homes.

Add Section 101.10.1.1.1 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1.1 Residential new construction - Equal to or less than nine (9) homes - as set forth in Table 101.10.

16.58.140 Residential New Construction – Greater than nine (9) homes or more.

Add Section 101.10.1.1.2 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1.2 Residential new construction - Greater than nine (9) homes or more - as set forth in Table 101.10.

16.58.150 Major multi-family residential renovations/additions.

Add Section 101.10.1.1.3 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1.3 Major multi-family residential renovations/additions - as set forth in Table 101.10. Requirements shall only apply to the area of renovation/addition.

16.58.160 Non-residential new construction, small.

Add Section 101.10.1.1.4 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1.4 Non-residential new construction, small - as set forth in Table 101.10.

16.58.170 Non-residential new construction, medium.

Add Section 101.10.1.1.5 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1.5 Non-residential new construction, medium - as set forth in Table 101.10.

16.58.180 Non-residential new construction, large.

Add Section 101.10.1.1.6 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1.6 Non-residential new construction, large - as set forth in Table 101.10.

16.58.190 Non-residential renovations/additions, minor.

Add Section 101.10.1.1.7 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1.7 Non-residential renovations/additions, minor - as set forth in Table 101.10. Requirements shall only apply to the scope of work of renovation/addition.

16.58.200 Non-residential renovations/additions, major.

Add Section 101.10.1.1.8 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1.8 Non-residential renovations/additions, major - as set forth in Table 101.10. Requirements shall only apply to the area of renovation/addition.

16.58.210 Mixed-Use.

Add Section 101.10.1.1.9 of the 2019 California Green Building Standards Code to read as follows:

101.10.1.1.9 Mixed-Use - as set forth in Table 101.10.

16.58.220 Table 101.10–Added.

Add Table 101.10 of the 2019 California Green Building Standards Code to read as follows:

<i>Project Type</i>	<i>Minimum Green Building Requirement</i>	<i>Required Verification</i>
A. NEW CONSTRUCTION		
Residential		
Single Family and Multi-Family homes equal to or less than 9 homes:	<ul style="list-style-type: none">• CALGreen Building Code in accordance with CALGreen's minimum thresholds.	City Review
Single Family and Multi-Family homes greater than 9 homes:	<ul style="list-style-type: none">• GPR certified at minimum 50 points or• LEED Silver or• Alternate Reference Standard per Section 101.10.2	Third Party GPR or LEED certification as applicable Alternate Reference Standard: See Section 101.10.2
Non-Residential		

Small, less than 25,000 SF:	<ul style="list-style-type: none"> CALGreen Building Code * per Chapter 5 of the California Green Building Standards Code 	City Review
Mid-size, from 25,000 to 50,000 SF:	<ul style="list-style-type: none"> LEED Certified or Alternate Reference Standard per Section 101.10.2 	Third Party LEED Certification Alternate Reference Standard: See Section 101.10.2
Large, greater than 50,000 SF:	<ul style="list-style-type: none"> LEED Silver or Alternate Reference Standard per Section 101.10.2 	Third Party LEED Certification Alternate Reference Standard: See Section 101.10.2
B. RENOVATIONS AND ADDITIONS		
Residential		
Single-family	<ul style="list-style-type: none"> CALGreen Building Code in accordance with CALGreen's minimum thresholds. 	City Review
Multi-family (minor):	<ul style="list-style-type: none"> CALGreen Building Code in accordance with CALGreen's minimum thresholds. 	City Review
Multi-family (major): Renovations and/or additions with a Floor Area Ratio (FAR) increase $\geq 50\%$ and at least 35,000 square feet, and that replace or substantially alter the HVAC system and at least two of the following: building envelope, hot water system and lighting system.	<ul style="list-style-type: none"> GPR minimum 50 pts or LEED Certified or LEED EBOM Certified or Alternate Reference Standard per Section 101.10.2 	Third Party GPR or LEED Certification as applicable Alternate Reference Standard: See Section 101.10.2
Non-Residential		
Minor: Renovations and/or additions that do not meet the higher thresholds for "major renovations and additions" outlined as defined in (ii) below.	<ul style="list-style-type: none"> CALGreen Building Code in accordance with CALGreen's minimum thresholds. 	City Review
Major: Renovations and/or additions that comprise at least 35,000 square feet, and replace or substantially alter the HVAC system and two of the following: building envelope, hot water system, and lighting system.	<ul style="list-style-type: none"> LEED Certified (applicable only to the area of renovation/addition) or LEED EBOM Certified or Alternate Reference Standard per Section 101.10.2 	Third Party LEED Certification Alternate Reference Standard: See Section 101.10.2
Mixed-Use		

For new and renovation/addition projects with residential and non-residential components, the use shall comply by either:

1. Meeting the applicable requirements for each use; or
2. Meeting the applicable requirements for the use that comprises the majority of the project's square footage where uses are attached and/or combined in a building.

Notes:

"Major" renovations and/or additions apply only to the area of the renovation/addition unless the LEED EBOM Certified option is selected.

*Chapter 5 of the California Green Building Standards Code (Cal Green Mandatory) requirements shall only be applied to elements included in the scope of a project, unless otherwise required by the California Green Building Standards Code.

16.58.230 Alternate green building standards.

Add Section 101.10.2 of the 2019 California Green Building Standards Code to read as follows:

101.10.2 Alternate green building standards. The applicant may request to apply an alternate green building standard for a project in lieu of the minimum standards per Table 101.10. In making a determination in response to an application under this section, the Building Official may allow an alternate standard if he/she finds that the proposed alternative standard complies with all of the following:

- A. Addresses a comprehensive scope of green building issues including energy efficiency, water efficiency, resource efficient materials, and healthy building practices;
- B. Applies standards that are, when taken as a whole, as stringent as the GPR and LEED standards;
- C. Includes a formalized certification process that incorporates third party verification; and
- D. The project will advance the purposes of this Chapter.

16.58.240 Verification

Amend Section 102.3 of the 2019 California Green Building Standards Code to read as follows:

102.3 Verification. Documentation of conformance for applicable green building measures shall be provided to the City of Cupertino. Verification that the project meets the applicable environmental standards occurs through either the Third Party process or City Review per the requirements in Table 101.10. The following lists the verification requirements for Third Party verification, and alternative methods:

- A. Third Party Certification. A project will be required to meet the Third Party certification process if the City determines that the project meets or exceeds the applicable thresholds listed in Table 101.10. The applicant shall submit all of the following to the City, in addition to other application requirements, to assist the City in determining compliance with the green building requirements:
 - a. Planning Application. A green building checklist that includes cross-references to appropriate locations in the construction documents for all prerequisites and selected points or credits that demonstrates that the proposed project meets the applicable minimum requirements.
 - b. Building Permit.

- i. Proof of project registration with administrating body of the applicable reference standard, and
- ii. A green building checklist that includes cross-references to appropriate locations in the construction documents for all prerequisites and selected points or credits; that demonstrate that the proposed project meets the applicable minimum requirements, and
- c. Green Building Deposit. The green building deposit in an amount that may be set from time to time by resolution of the City Council. The applicant may provide the deposit in the form of cash or in any other form that the City finds acceptable to meet the purposes of this Section. The full amount of the deposit shall be returned upon the certification document being provided per 102.3 (A)(c). If however, the project does not meet the requirements of this Chapter, as applied to the project, then the City shall retain the full amount of the deposit, and shall use the deposit solely to advance the purposes of this Chapter.
- d. Time Limit. Within 18 months of Final Occupancy - Provide certification document for LEED, GPR or alternate rating standard in a form accepted by the City per Table 101.10. The Building Official may grant a one-time 6-month extension.

16.58.260 Exemptions.

Added Section 102.3.1 of the 2019 California Green Building Standards Code to read as follows:

102.3.1 Exemptions. The Building Official shall determine the maximum feasible threshold of compliance reasonably achievable for the project. Projects that are exempted from the requirements of the California Green Building Standards Code as amended by the City of Cupertino shall meet the requirement in section A and at least one of the requirements in sections B-D:

- A. Projects that demonstrate that it is not feasible for the project to fully meet the green building requirements and that the purposes of this chapter will have been achieved to the maximum extent possible shall be exempted only for the specific rating system prerequisite that has been determined to be infeasible.
- B. Projects that demonstrate compliance with this code but which will conflict with the Cupertino General Plan and/or Municipal Code Ordinance, such as those requiring historic preservation as determined by the Director of Community Development; or
- C. Projects that demonstrate compliance with this code but which will conflict with the California Building Standards Code; or
- D. Projects with atypical energy-related design requirements and/or patterns of use that make compliance with the thresholds of this code infeasible.

16.58.280 Definitions.

Amend Section 202 of the 2019 California Green Building Standards Code to add or amend the following definitions:

- A. "Building Envelope" means the separation between the interior and the exterior environments of a building in order to provide structural integrity, moisture control, temperature control, and air pressure control. The principal physical components of the building envelope include the foundation, roof, walls, and windows.

- B. "Decision maker" means the person or entity with final approval authority over the underlying project.
- C. "Green Building Checklist" means a checklist, typically with prerequisites and credits and/or points that is developed by the administrators of green building certification systems and used to determine whether a development project can achieve certification.
- D. "Green Point Rated (GPR)" means a residential green building rating system developed by Build It Green. Projects can use any of the adopted GPR checklists that most appropriately apply to the project type proposed.
- E. "Leadership in Energy and Environmental Design (LEED)" means a green building rating system developed by the U.S. Green Building Council for residential and non-residential projects. Projects can use any of the adopted LEED checklists that most appropriately apply to the project type proposed.
- F. "Minimum Green Building Requirement" means the minimum green building requirement that applies to a particular project, as listed in column 2 of Table 101.10.
- G. "Required Verification" means the standards that correspond to the requirements of a particular green building rating system and project type, as listed in column 3 of Table 101.10, for which verification procedures are fully set forth in Section 102.3.
- H. "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.
- I. "EV Capable" 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. Raceways linking the electrical panel and parking space only need to be installed in spaces that will be inaccessible in the future, either trenched underground or where penetrations to walls, floors, or other partitions would otherwise be required for future installation of branch circuits. Raceways must be at least 1" in diameter and may be sized for multiple circuits as allowed by the California Electrical Code. The panel circuit directory shall identify the overcurrent protective device space(s) reserved for EV charging as "EV CAPABLE." Construction documents shall indicate future completion of raceway from the panel to the parking space, via the installed inaccessible raceways.
- J. "Level 1 EV Ready Circuit" 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, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE).
- K. "Level 2 EV Ready Circuit" means a parking space served by a complete electric circuit with 208/240 volt, 40-ampere capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE) with a minimum output of 30 amperes.
- L. "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.
- M. "Automatic Load Management Systems (ALMS)" means a control system which allows multiple Level 2 EV chargers to share a circuit or panel and automatically reduce power at each charger, providing the opportunity to reduce electrical infrastructure costs and/or provide demand response capability. ALMS is only allowed for Level 2 EVCS, Level 2 EV Ready, and Level 1 EV Ready Circuits. ALMS systems must be designed to deliver at least

1.4kW per charger. The connected amperage on-site shall not be lower than the required connected amperage per Part 11, 2019 California Green Building Code for the relevant building types.

- N. "Affordable Housing" means residential buildings that entirely consist of units below market rate and whose rents or sales prices are determined by local agencies to be affordable based on area median income.

16.58.290 Tenant Improvements.

Amend Section 103.1.1 of the 2019 California Green Building Standards Code to read as follows:

303.1.1 Tenant improvements. Except as specified herein, the provisions of this code shall apply to the applicable tenant or occupant improvements to a project.

16.58.300 Compliance with local water-efficient landscape ordinance- Residential.

Add Section 4.304.1.1 of the 2019 California Green Building Standards Code to read as follows:

4.304.1.1 Compliance with local water-efficient landscape ordinance. Residential projects must comply with the City of Cupertino's Landscape Ordinance, pursuant to Chapter 14.15 of the Cupertino Municipal Code.

16.58.310 Compliance with local water-efficient landscape ordinance- Non-Residential.

Add Section 5.304.1.1 of the 2019 California Green Building Standards Code to read as follows:

5.304.1.1 Compliance with local water-efficient landscape ordinance. Non-residential projects must comply with the City of Cupertino's Landscape Ordinance, pursuant to Chapter 14.15 of the Cupertino Municipal Code.

16.58.400 ~~Section 4.106.8~~ Electric vehicle (EV) Charging - Residential..

Amend Add and amend Section 4.106.84 of the 2019 California Green Building Standards Code to read as follows:

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 and 4.106.4.2 to facilitate future installation and use of EV chargers.

Exceptions:

- ~~1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infra-structure are not feasible based upon one or more of the following conditions:~~
 - ~~1.1 Where there is no commercial power supply~~
 - ~~1.2 Where there is evidence substantiating that meeting the requirements will alter the local utility infra-structure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than \$400.00 per~~

~~dwelling unit.~~

1. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

Amend Section 4.106.4.1 of the 2019 California Green Building Standards Code to read as follows:

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

~~For each dwelling unit, install a Level 2 EV Ready Circuit and Level 1 EV Ready Circuit. 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.~~

Exception: For each dwelling unit with only one parking space, install a Level 2 EV Ready Circuit.

Amend Section 4.106.4.1.1 of the 2019 California Green Building Standards Code to read as follows:

4.106.4.1.1 Identification. ~~The service panel or sub-panel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as “Level 2 EV CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV CAPABLE”. “Level 2 EV-Ready”.~~

Amend Section 4.106.4.2 of the 2019 California Green Building Standards Code to read as follows:

4.106.4.2 New multifamily dwellings. ~~If residential parking is available, ten (10) present in total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. The following requirements apply to all new multifamily dwellings:~~

1. For multifamily buildings with less than or equal to 20 dwelling units, one parking space per dwelling unit with parking shall be provided with a Level 2 EV Ready Circuit.
2. When more than 20 multifamily dwelling units are constructed on a building site:
 - a. 25% of the dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Circuit. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number.
 - b. In addition, each remaining dwelling unit with parking space(s) shall be provided with at least a Level 1 EV Ready Circuit.

Exception: For all multifamily Affordable Housing, 10% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Circuit. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. The remaining dwelling units with parking space(s) shall each be provided with at least a Level 1 EV Ready Circuit.

Notes:

- ~~1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.~~
- ~~2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.~~
1. ALMS may be installed to decrease electrical service and transformer costs associated with EV Charging Equipment subject to review of the authority having jurisdiction.
2. Installation of Level 2 EV Ready Circuits above the minimum number required level may offset the minimum number Level 1 EV Ready Circuits required on a 1:1 basis.
3. The requirements apply to multifamily buildings with parking spaces including: a) assigned or leased to individual dwelling units, and b) unassigned residential parking.
4. Local jurisdictions may consider allowing exceptions through their local process, on a case by case basis, if a building permit applicant provides documentation detailing that the increased cost of utility service or on-site transformer capacity would exceed an average of \$4,500 among parking spaces with Level 2 EV Ready Circuits and Level 1 EV Ready Circuits. If costs are found to exceed this level, the applicant shall provide EV infrastructure up to a level that would not exceed this cost for utility service or on-site transformer capacity.
5. In order to adhere to accessibility requirements in accordance with California Building Code Chapters 11A and/or 11B, it is recommended that all accessible parking spaces for covered newly constructed multifamily dwellings are provided with Level 1 or Level 2 EV Ready Circuits.

Amend Section 4.106.4.2.2 of the 2019 California Green Building Standards Code to read as follows:

4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. Applicants shall size EV spaces as specified by the Building Official.—The EV spaces shall be designed to comply with the following:

- ~~1. The minimum length of each EV space shall be 18 feet (5486 mm).~~
- ~~2. The minimum width of each EV space shall be 9 feet (2743 mm).~~
- ~~3. One in every 25 EV spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).~~
 - ~~a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.~~

Delete Section 4.106.4.2.3 of the 2019 California Green Building Standards Code in its entirety.

Delete Section 4.106.4.2.4 of the 2019 California Green Building Standards Code in its entirety

Delete Section 4.106.4.2.5 of the 2019 California Green Building Standards Code in its entirety.

~~**4.106.4.2.3 Single EV space required.** Install a listed raceway capable of accommodating a 208/240-volt dedicated 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 enclosure in close proximity to the proposed location of the EV spaces. Construction documents shall identify the raceway termination point. 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 over-current protective device.~~

~~**4.106.4.2.4 Multiple EV spaces required.** Construction raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify 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 the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.~~

~~**4.106.4.2.5 Identification.** The service panel or sub-panel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.~~

~~**A4.106.8 Electric vehicle (EV) charging.** Dwellings shall comply with the following requirements for the future installation of Electric Vehicle Supply Equipment (EVSE).~~

~~**A4.106.8.1 New one- and two-family dwellings.** Install a dedicated branch circuit sufficient to provide adequate electrical capacity to serve a Level 2 EVSE. Also, install a listed raceway or pre-wiring from the dedicated branch circuit to the designated electric vehicle parking stall. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. Raceways are required to be continuous at enclosed or concealed areas and spaces. A raceway may terminate in an attic or other approved location when it can be demonstrated that the area is accessible and no removal of materials is necessary to complete the final installation. Pre-wiring shall include the installation of appropriately sized conductors and adequate electrical capacity to serve a Level 2 EVSE.~~

~~**Exception:** Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 Electric Vehicle Supply Equipment (EVSE).~~

~~**Note:** Utilities and local enforcing agencies may have additional requirements for metering and EVSE installation, and should be consulted during the project design and installation.~~

~~**A4.106.8.1.1 Labeling requirement.** A label stating "EV CAPABLE" shall be posted in a conspicuous place at the service panel or subpanel and next to the raceway or pre-wiring termination point.~~

~~**A4.106.8.2 New Multifamily dwellings.** At least 5 percent of the total parking spaces, but not~~

~~less than one, shall be capable of supporting future electric vehicle supply equipment (EVSE).~~

~~A4.106.8.2.1 Single charging space required.~~—When only a single charging space is required, install a dedicated branch circuit sufficient to provide adequate electrical capacity to serve a Level 2 EVSE. Also, install a listed raceway or pre-wiring from the dedicated branch circuit to the designated electric vehicle parking stall. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. Pre-wiring shall include the installation of appropriately sized conductors and adequate electrical capacity to serve a Level 2 EVSE.

~~Exception:~~ Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 Electric Vehicle Supply Equipment (EVSE).

~~A4.106.8.2.2 Multiple charging spaces required.~~—When multiple charging spaces are required, install a dedicated branch circuit sufficient to provide adequate electrical capacity to serve a Level 2 EVSE. Also, install a listed raceway or pre-wiring from the dedicated branch circuit to all designated EVSE spaces. Plans shall be provided to include the location(s) and type of the EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to simultaneously charge all the electrical vehicles (EV) at all designated EV charging spaces at their full rated amperage. Plan design shall be based upon Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction. Pre-wiring shall include the installation of appropriately sized conductors and adequate electrical capacity to serve a Level 2 EVSE.

~~Note:~~ Utilities and local enforcing agencies may have additional requirements for metering and EVSE installation, and should be consulted during the project design and installation.

~~A4.106.8.2.3 Labeling requirement.~~ A label stating "EV CAPABLE" shall be posted in a conspicuous place at the service panel or subpanel and next to the dedicated EV charging spaces.

~~A.4.106.8.3 Alternative Means for Electric Vehicle (EV) Charging for Residential buildings.~~ The provisions of Section A4.106.8.1 and A4.106.8.2 are not intended to prevent the use of any alternative means of achieving the standards for electric vehicle charging, provided that any such alternative is approved by the Building Official based on findings that the proposed alternative is satisfactory and complies with the intent of the provisions and is at least as equivalent as the prescribed requirements.

16.58.420 Section 5.106.5.3 Electric vehicle (EV) charging – Non-Residential.

~~Add and amend~~ Amend Section 5.106.5.3 of the 2019 California Green Building Standards Code to read as follows: ~~to read as—~~

5.106.5.3 Electric vehicle (EV) charging. [N] New construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate future installation and use of EV chargers. ~~of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the California Building Code, the California Electrical Code and as follows:~~

Exceptions:

1. Where there is no commercial power supply.
2. Nonresidential tenant improvements.

Amend Section 5.106.5.3.1 of the 2019 California Green Building Standards Code to read as follows:

5.106.5.3.1 Office buildings: In nonresidential new construction buildings designated primarily for office use with parking:

1. When 10 or more parking spaces are constructed, 20% of the available parking spaces on site shall be equipped with Level 2 EVCS;
2. An additional 10% shall be provided with at least Level 1 EV Ready Circuits; and
3. An additional 30% shall be at least EV Capable.

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.

Construction plans and specifications shall demonstrate that all raceways shall be a minimum of 1" and sufficient for installation of EVCS at all required Level 1 EV Ready and EV Capable spaces; Electrical calculations shall substantiate the design of the electrical system to include the rating of equipment and any on-site distribution transformers, and have sufficient capacity to simultaneously charge EVs at all required EV spaces including Level 1 EV Ready and EV Capable spaces; and service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.

Notes:

1. ALMS may be installed to increase the number of EV chargers or the amperage or voltage beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without ALMS.

~~**5.106.5.3.1—Single charging space requirements.** [N] When only a single charging space is required per Table 5.106.5.3.3, a raceway is required to be installed at the time of construction and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following:~~

- ~~1. The type and location of the EVSE.~~
- ~~2. A listed raceway capable of accommodating a 208/240-volt dedicated branch circuit.~~
- ~~3. The raceway shall not be less than trade size 1."~~
- ~~4. The raceway shall originate at a service panel or a subpanel serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into a listed suitable cabinet, box, enclosure or equivalent.~~
- ~~5. The service panel or subpanel shall have sufficient capacity to accommodate a minimum 40-ampere dedicated branch circuit for the future installation of the EVSE.~~

Amend Section 5.106.5.3.2 of the 2019 California Green Building Standards Code to read as follows:

5.106.5.3.2 Other nonresidential buildings: In nonresidential new construction buildings that are not designated primarily for office use, such as retail or institutional uses:

1. When 10 or more parking spaces are constructed, 6% of the available parking spaces on site shall be equipped with Level 2 EVCS;
2. An additional 5% shall be at least Level 1 EV Ready.

Calculations for the required minimum number of spaces equipped with Level 2 EVCS and Level 2 EV Ready spaces shall be rounded up to the nearest whole number

Exception: 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.

~~**5.106.5.3.2 Multiple charging space requirements.** When multiple charging spaces are required per Table 5.106.5.3.3 raceway(s) is/are required to be installed at the time of construction and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following:~~

- ~~1. The type and location of the EVSE.~~
- ~~2. The raceway(s) shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into listed suitable cabinet(s), box(es), enclosure(s) or equivalent.~~
- ~~3. Plan design shall be based upon 40-ampere minimum branch circuits.~~
- ~~4. Electrical calculations shall substantiate the design of the electrical system, to include the rating of equipment and any on-site distribution~~
- ~~5. transformers and have sufficient capacity to simultaneously charge all required EVs at its full rated amperage.~~
- ~~6. The service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.~~

Amend Section 5.106.5.3.3 of the 2019 California Green Building Standards Code to read as follows:

5.106.5.3.3 Clean Air Vehicle Parking Designation. EVCS qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.

Notes:

1. The California Department of Transportation adopts and publishes the California Manual on Uniform Traffic Control Devices (California MUTCD) to provide uniform standards and specifications for all official traffic control

devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives number 13-01. www.dot.ca.gov/hq/traffops/policy/13-01.pdf.

2. See Vehicle Code Section 22511 for EV charging spaces signage in off-street parking facilities and for use of EV charging spaces.
3. The Governor's Office of Planning and Research published a Zero-Emission Vehicle Community Readiness Guidebook which provides helpful information for local governments, residents and businesses. www.opr.ca.gov/docs/ZEV_Guidebook.pdf.
4. Section 11B-812 of the 2019 California Building Code requires that a facility providing EVCS for public and common use also provide one or more accessible EVCS as specified in Table 11B-228.3.2.1. Chapter 11B applies to certain facilities including, but not limited to, public accommodations and publicly funded housing (see section 1.9 of Part 2 of the California Building Code). Section 11B-812 requires that "Parking spaces, access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489 mm) minimum." It also requires that parking spaces and access aisles meet maximum slope requirements of 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction at the time of new building construction or renovation. Section 11B-812.5 contains accessible route requirements.
5. It is encouraged that shared parking, EV Ready are designated as "EV preferred."

~~5.106.5.3.3 — EV charging space calculation.~~ [N] ~~Table 5.106.5.3.3 shall be used to determine if single or multiple charging space requirements apply for the future installation of EVSE.~~

~~Exceptions: On a case-by-case basis where the local enforcing agency has determined EV charging and infrastructure is not feasible based upon one or more of the following conditions:~~

- ~~1. Where there is insufficient electrical supply~~
- ~~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 5.106.5.3, may adversely impact the construction cost of the project.~~

Delete Table 5.106.5.3.3 of the 2019 California Green Building Standards Code in its entirety.

~~TABLE 5.106.5.3.3~~

TOTAL NUMBER OF ACTUAL PARKING SPACES	NUMBER OF REQUIRED EV CHARGING SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 and over	6 percent of total¹

~~1. Calculation for spaces shall be rounded up to the nearest whole number.~~

5.106.5.3.4 [N] Identification. ~~The service panel or subpanel(s) circuit directory shall identify the reserved overcurrent protective device space(s) for future EV charging as “EV_CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV_CAPABLE Ready”.~~

~~Delete Section 5.106.5.3.5 of the 2019 California Green Building Standards Code in its entirety.~~

~~5.106.5.3.5 [N] Future charging spaces qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.~~

~~A.5.106.5.3 New non-residential buildings.~~ ~~At least 10 percent of the total parking spaces, but not less than one, shall be capable of supporting installation of future electric vehicle supply equipment (EVSE).~~

~~A5.106.5.3.1 Single charging space requirements.~~ ~~When only a single charging space is required, install a dedicated branch circuit sufficient to provide adequate electrical capacity to serve a Level 2 EVSE. Also, install a listed raceway or pre-wiring from the dedicated branch circuit to the designated electric vehicle parking stall. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. Pre-wiring shall include the installation of appropriately sized conductors and adequate electrical capacity to serve a Level 2 EVSE.~~

~~Exception:~~ ~~Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 Electric Vehicle Supply Equipment (EVSE).~~

~~A5.106.5.3.2 Multiple charging spaces required.~~ ~~When multiple charging spaces are required, plans shall include the location(s) and type of the EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to simultaneously charge all the electrical vehicles (EV) at all designated EV charging spaces at their full rated amperage. Plan design shall be based upon Level 2 EVSE at its maximum operating ampacity. Provide raceways from the electrical service panel to the designated parking~~

~~areas which are required to be installed at the time of construction. Pre-wiring shall include the installation of appropriately sized conductors and adequate electrical capacity to serve a Level 2 EVSE.~~

~~**Note:** Utilities and local enforcing agencies may have additional requirements for metering and EVSE installation, and should be consulted during the project design and installation.~~

~~**A5.106.5.3.3 Tier 1.** Not adopted.~~

~~**A5.106.5.3.4 Tier 2.** Not adopted.~~

~~**A5.106.5.3.5 Labeling requirement.** A label stating "EV CAPABLE" shall be posted in a conspicuous place at the service panel or subpanel and next to the dedicated EV charging spaces.~~

~~**A.5.106.5.4 Alternative Means for Electric Vehicle (EV) Charging for Non-residential buildings.** The provisions of Section A.5.106.5.3 are not intended to prevent the use of any alternative means of achieving the standards for electric vehicle charging, provided that any such alternative is approved by the Building Official based on findings that the proposed alternative is satisfactory and complies with the intent of the provisions and is at least as equivalent as the prescribed requirements.~~

~~(Ord. 14-2117, § 2, 2014)~~

1189868.2