ORDINANCE NO 24-__

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF GOLETA, CALIFORNIA, AMENDING CHAPTER 15.12 ENTITLED "GREEN BUILDING CODE" OF THE GOLETA MUNICIPAL CODE TO ADOPT THE 2022 EDITION OF THE CALIFORNIA BUILDING AND ENERGY CODE AND LOCAL AMENDMENTS THERETO ("REACH CODE") AND DETERMINE THE ORDINANCE TO BE EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

WHEREAS, scientific evidence has established that greenhouse gas ("GHG") accumulation in the atmosphere as the result of human activity is the primary cause of the global climate crisis; and

WHEREAS, the Intergovernmental Panel on Climate Change estimates that global emissions need to be reduced by 45 percent from 2010 levels by 2030, and 100 percent by 2050 to prevent global catastrophe; and

WHEREAS, in 2016, the State of California enacted Senate Bill (SB) 32 to require GHG emissions to be reduced to 40 percent below 1990 levels by 2030 and in 2018 Governor Brown issued Executive Order B-55-18 establishing a statewide target of carbon neutrality by 2045; and

WHEREAS, transportation accounts for about 50 percent of California's GHG emissions, nearly 80 percent of nitrogen oxide pollution, and 90 percent of diesel particulate matter pollution; and

WHEREAS, human activities that release GHG gases into the atmosphere contribute to the increase of the worldwide average temperature, drought conditions, and length of fire seasons; and

WHEREAS, the climate change crisis is happening now, impacting California in unprecedented ways, and affecting the health and safety of the Goleta community; and

WHEREAS, in California alone, the initial impacts of climate change have resulted in unprecedented disasters with consequential human, economic, and environmental costs; and

WHEREAS, the City of Goleta ("City") is situated along a wildland-urban interface and as a result is extremely vulnerable to wildfires and firestorms; and

WHEREAS, we must accelerate our actions to mitigate and adapt to climate change, and more quickly move toward a low-carbon, sustainable and resilient future; and

WHEREAS, this ordinance amends Chapter 15 of the Goleta Municipal Code to adopt the 2022 Goleta Building and Safety Code and local amendments in order to add "REACH" codes that require electric vehicle charging systems for new residential and nonresidential buildings; and

WHEREAS, adoption of REACH codes support the Goleta City Council's Strategic Plan and climate action goals which aim to reduce communitywide GHG emissions; and

WHEREAS, Goleta's GHG emissions are disproportionately driven by transportation according to a GHG emissions inventory prepared by Central Coast Community Energy (3CE) based on 2020 data; and

WHEREAS, the Goleta community has access to 100% renewable, carbon-free electricity procured by 3CE; and

WHEREAS, various state orders and statutes are targeted to reduction of greenhouse gas emissions including Executive Order N-79-20 and the Advanced Clean Cars II program which prohibits the sale of internal combustion passenger vehicles beyond 2035, and the California Green Building Standards Code which contains mandatory green building provisions including electric vehicle ("EV") charger infrastructure, as well as a range of voluntary measures, known as CALGreen Voluntary Tier 1 and Tier 2; and

WHEREAS, California Health and Safety Code section 17958 requires cities to adopt building regulations that are substantially the same as those adopted by the California Building Standards Commission and contained in the California Building Standards; and

WHEREAS, California Health and Safety Code Sections 17958.5, 17958.7 and 18941.5 allow the City to make changes or modifications to the building standards contained in the California Building Standards based upon express findings that such changes or modifications are reasonably necessary because of local climactic, geological, or topographical conditions; and

WHEREAS, California Green Building Standards Code Section 101.7.1 provides that local climactic, geological, or topographical conditions include environmental conditions established by a city, county, or city and county through findings; and

WHEREAS, the provisions of this chapter are necessary to reduce the emissions of GHGs within the City with the intent to reduce the City's contributions to climate change and in turn reduce the impacts of climate change both locally and globally; and

WHEREAS, following adoption of this ordinance, these local amendments to the latest version of the 2022 California Green Building Code as revised by the California Building Standards Commission on or after July 2024 and as adopted into the 2022 Goleta Building and Safety Code will, in accordance with Public Resources Code Section 25402.1(h)(2) and Section 10-106 of the 2022 California Administrative Code (Title 24, Part 1), be submitted to the California Building Standards Commission for filing.

NOW THEREFORE THE CITY COUNCIL OF THE CITY OF GOLETA DOES HEREBY ORDAIN AS FOLLOWS:

<u>SECTION 1.</u> RECITALS.

The City Council hereby finds and determines that the foregoing recitals, which are incorporated herein by reference, are true and correct.

SECTION 2. PUBLIC HEALTH AND SAFETY FINDINGS.

Pursuant to California Health and Safety Code Sections 17958.5, 17958.7 and 18941.5, the local amendments to the 2022 Edition of the California Building and Energy Code are reasonably necessary due to local climactic, geological, or topographical conditions. The amendment is in the interests of public health and safety and general community welfare. The amended Chapter enhances long-term public health and welfare by contributing to the overall reduction of greenhouse gas (GHG) emissions and the reduction of emissions associated with personal vehicle transportation by improving access to electric vehicle charging. The burning of fossil fuels (gasoline, diesel) to power passenger vehicles is a significant contributor to greenhouse gas emissions and climate change, as well as air pollution. Emissions from transportation, mainly gas consumption by single-occupancy vehicles represented 55% of greenhouse gas emissions in the City of Goleta in 2020. The reduction of greenhouse gas emissions from the increased use of EVs, supported by critical charging infrastructure in new construction will reduce emissions from gaspowered passenger vehicles, and thus will help mitigate climate change and its negative effects such as extreme heat events, droughts, intense storms, and flooding in the region, thus making these amendments reasonably necessary because of local climactic, geological, and topographical reasons.

<u>SECTION 3.</u> ENVIRONMENTAL FINDINGS. The City Council hereby finds and determines that this ordinance has been assessed in accordance with the California Environmental Quality Act (Cal. Pub. Res. Code, § 21000 et seq.) ("CEQA") and the State CEQA Guidelines (14 Cal. Code Regs. § 15000 et seq.) and is categorically exempt from CEQA under CEQA Guidelines, § 15061(b)(3), which exempts from CEQA any project

where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment. Adoption of the proposed ordinance would not be an activity with potential to cause significant effect on the environment because the adoption and local amendments to the California Green Building Standards Code are enacted to provide more protection to the environment, and therefore is exempt from CEQA. Therefore, it can be seen with certainty that there is no possibility that the ordinance in question may have a significant effect on the environment; accordingly, the ordinance is categorically exempt from CEQA.

SECTION 4. CODE AMENDMENT.

Chapter 15.12 of Title 15 of the Goleta Municipal Code is hereby amended in its entirety to read as follows:

(Local amendments to the July 2024 version of the 2022 Edition of the California Building and Energy Code are denoted as underlined text and removals denoted as strikethroughs, both of which are as compared to the July 2024 version of the 2022 California Green Building Code):

Chapter 15.12 Green Building Code

15.12.010	Adoption of Green Building Code
15.12.020	Local Amendments to Definitions
15.12.030	Local Amendment Regarding Green Building Nonresidential
	Additions and Alterations
15.12.040	Local Amendment Regarding Residential Mandatory Measures
15.12.050	Local Amendment Regarding Nonresidential Mandatory Measure

15.12.010 Adoption of Green Building Code.

- A. The California Green Building Standards Code, 2022 Edition, Title 24, Part 11 of the California Code of Regulations, including the appendices, except as may be amended by this chapter, are hereby adopted by reference as the Green Building Code of the City.
- B. One copy of the California Green Building Standards Code shall be at all times maintained in the office of the Building Official for use and examination by the public. (Ord. 22-15 § 2; Ord. 19-15 § 2; Ord. 16-06 § 10; Ord. 13-05 § 10; Ord. 10-05 § 10)

15.12.020 Local Amendments to Definitions.

- A. The definitions contained Chapter 2, "Definitions" of the Green Building Code are adopted.
- B. Chapter 2 "Definitions," Section 202 of the Green Building Code is amended to include the following definitions:

ASSIGNED PARKING. Parking spaces in a residential parking facility that are assigned or designated for use by a specific living unit within the building or residence.

LEVEL 2 ELECTRIC VEHICLE (EV) CHARGING RECEPTACLE. A 208/240-volt 40-ampere minimum branch circuit and a receptacle.

UNASSIGNED OR COMMON USE PARKING. Parking spaces in a residential parking facility that are not reserved for or assigned to a specific living unit within the building or residence, including guest, staff, or other non-resident parking.

15.12.030 Local Amendment Regarding Green Building Additions and Alterations

A. Green Building Code Section 301.1.1, "Additions and alterations," is amended to read as follows:

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.

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. See Section 4.106.4.3 for application.

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.

15.12.040 Local Amendment Regarding Green Building Nonresidential Additions and Alterations

A. Green Building Code Section 301.3, "Nonresidential additions and alterations," is amended to read as follows:

[BSC-CG] The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of \$200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work.

A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings **[N]** or to additions and/or alterations **[A]**. When the code section applies to both, no banner will be used.

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. See Section 5.106.5.4 for application.

(a) **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.

15.12.050 Local Amendment Regarding Residential Mandatory Measures

A. Green Building Code Section 4.106.4, "Electric vehicle (EV) charging for new construction," is amended to read as follows:

4.106.4 Electric vehicle (EV) charging for new construction.

New construction shall comply with Section 4.106.4.1 or 4.106.4.2. Electric vehicle supply equipment (EVSE) shall comply with the California Electrical Code.

Exceptions:

- 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.

- Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities and without electrical panel upgrade or new panel installation. Detached ADUs, attached 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.
- B. Green Building Code Section 4.106.4.1, "One- and two-family dwellings and townhouses with attached private garages," is amended to read as follows:

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

- **4.106.4.1.1. New Construction.** Install one Level 2 EV Charging Receptacle in one parking space. If a second parking space is provided, it shall be provided with a Level 1 EV Charging Receptacle and a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter).
- **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.
- C. Portions of Green Building Code Section 4.106.4.2, "New multifamily dwellings, hotels and motels and new residential parking facilities," are amended to read as follows:

4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities.

When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Section 4.106.4.2.2 Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as an EV charging

space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

4.106.4.2.1

Reserved.

- 4.106.4.2.2 Multifamily dwellings-
 - 1. EV ready parking spaces with receptacles.
 - a. Multifamily parking facilities with assigned parking. Where dwelling units are provided with assigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an assigned parking space for each dwelling unit.
 - Where the total number of dwelling units exceeds the number of assigned parking spaces, all assigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.
 - b. Multifamily Parking Facilities with Unassigned or Common use Parking. Where dwelling units are provided with unassigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an unassigned parking space for each dwelling unit.
 - Where the total number of dwelling units exceeds the number of unassigned parking spaces, all unassigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.
 - c. Multifamily Parking Facilities with Assigned and Unassigned Parking. Where dwelling units are provided with both assigned and unassigned parking spaces, at least one low power Level 2 EV charging receptacle shall be provided for each assigned space, but not required for both

- d. Receptacle power source. EV charging receptacles in multifamily parking facilities at assigned parking spaces shall be provided with a dedicated branch circuit connected to the dwelling unit's electrical panel or directly connected to the dwelling unit's electric meter, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.
- **e. Receptacle configurations.** 208/240V EV charging receptacles shall comply with one of the following configurations:
 - 1. For 20-ampere receptacles, NEMA 6-20R
 - 2. For 30-ampere receptacles, NEMA 14-30R
 - 3. For 50-ampere receptacles, NEMA 14-50R
- 2. EV ready parking spaces with EV chargers.
 - a. Multifamily parking facilities with unassigned or common use parking. In addition to the low power Level 2 EV charging receptacle requirements of section 4.106.4.2.2 (1), twenty-five (25) percent of unassigned or common use parking spaces shall be equipped with Level 2 EV chargers and shall be made available for use by all residents or guests.
 - b. EV Charger Connectors. EV chargers shall be equipped with J1772 or J3400 connectors.
 - c. An automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS).

Electric vehicle charging stations required by <u>Section 4.106.4.2.2</u>, Item 2, with EV chargers installed shall comply with <u>Section 4.106.4.2.2.1.1</u>.

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels, and hotels shall not be required to comply with this section. See *California Building Code*, <u>Chapter 11B</u>, for applicable requirements.

4.106.4.2.2.1.1 Electric vehicle charging stations (EVCS) spaces with EV chargers installed; dimensions and location.

EVCS spaces shall be designed to comply with the following:

- 1. The minimum length of each EVCS space shall be 18 feet (5486 mm).
- 2. The minimum width of each EVCS space shall be 9 feet (2743 mm).
- 3. One in every 25 EVCS 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 EVCS space is 12 feet (3658 mm). Surface slope for this EVCS space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction. These EVCS spaces shall also comply with at least one of the following:
 - a. The EVCS space shall be located adjacent to an accessible parking space meeting the requirements of the *California Building Code*, <u>Chapter 11A</u>, to allow use of the EV charger from the accessible parking space.
 - b. The EVCS space shall be located on an accessible route, as defined in the *California Building Code*, <u>Chapter 2</u>, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, <u>Chapter 11B</u>, are not required to comply with Section 4.106.4.2.2.1.1.

4.106.4.2.2.1.2 Accessible electric vehicle charging station spaces.

In addition to the requirements in Section 4.106.4.2.2.1.1, all EV chargers, where installed, shall comply with the accessibility provisions for EV chargers in the *California Building Code*, <u>Chapter 11B</u>. EV ready spaces and EVCS in multifamily developments shall comply with *California Building Code*, Chapter 11A, <u>Section 1109A</u>.

4.106.4.2.3

Reserved.

4.106.4.2.4

Reserved.

4.106.4.2.5 Electric vehicle ready space signage.

Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

4.106.4.2.6 Hotels and motels.

1. EV Ready Parking Spaces with Receptacles.

- a. **Hotels and Motels**. Forty (40) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles.
- b. **Receptacle Configurations.** 208/240V EV charging receptacles shall comply with one of the following configurations:
 - 1. For 20- ampere receptacles, NEMA 6-20R
 - 2. For 30- ampere receptacles, NEMA 14-30R
 - 3. For 50- ampere receptacles, NEMA 14-50R

2. EV Ready Parking Spaces with EV Chargers.

a. **Hotels and Motels.** Twenty-five (25) percent of the total number of parking spaces shall be equipped with Level 2 EV chargers.

b. **EV Charger Connectors**. EV chargers shall be equipped with J1772 or J3400 connectors.

An automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

D. Green Building Code Section 4.106.4.3, "Electric vehicle charging for additions and alterations of parking facilities serving existing multi-family buildings, hotels and motels," is amended to read as follows:

4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multi-family buildings, hotels and motels.

Existing buildings or parking facilities being modified by one of the following shall comply with Section 4.106.4.3. When EVSE is installed, accessible EVCS shall be provided in accordance with the California Building Code, Chapter 11B, Section 11B-228.3.

- 1. When the scope of construction work includes an increase or alteration to power supply to an electric service panel as part of a parking facility addition or alteration.
- 2. When a new photovoltaic system is installed covering existing parking spaces.
- 3. When additions or alterations to existing buildings are triggered pursuant to code Section 301.1 and the scope of work includes an increase in power supply to an electric service panel.
- 4. Addition of parking facilities or alterations that include breaking ground on existing parking surfaces. Green Building Code Section 301.1.1 states what is considered an alteration of an existing parking surface.

Exceptions:

- 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 4.106.4.3, 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.
 - d. Where demonstrated as impracticable excluding local utility service or utility infrastructure issues.
- 2. Remote parking facilities that do not have access to the building service panel.
- 3. Parking area lighting upgrades where no trenching is part of the scope of work.
- 4. Emergency repairs, including but not limited to water line break in parking facilities, natural disaster repairs, etc.
- 5. Alterations that solely add Level 1 EV charging receptacles or Level 1 EV chargers, and no other addition or alteration is performed within the parking facility.

4.106.4.3.1 Existing multifamily and hotel/motel buildings or parking areas without previously installed EV capable infrastructure.

When EV capable infrastructure does not exist at an existing parking facility or building, and the parking facility or building undergoes an addition or alteration listed in Section 4.106.4.3, each parking space added or altered shall have access to either a low power Level 2 EV charging receptacle or Level 2 EV charger, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.

4.106.4.3.2 Existing buildings or parking areas with previously installed EV capable infrastructure.

When EV capable infrastructure is available at an existing parking facility or building, and the parking facility or building is undergoing an addition or alteration listed in Section 4.106.4.3, each parking space added or altered shall have access to either a low power Level 2 EV charging receptacle or Level 2 EV charger, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency. Construction shall utilize the existing EV capable allocated power and infrastructure for the total number of actual parking spaces being added or altered. If the area being added or altered exceeds the existing EV capable capacity, allocated power and infrastructure, provide additional EV charging as needed to comply with this section.

Exception:

When new parking facilities are added and ALMS is installed, the electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

4.106.4.4. Direct current fast charging stations. One DCFC may be substituted for up to five (5) EVCS or ten (10) low power level 2 EV Ready spaces to meet the requirements of 4.106.4.2 and 4.106.4.3. Where ALMS serve DCFC stations, the power demand from the DCFC shall be prioritized above Level 1 and Level 2 spaces.

15.12.060 Local Amendment Regarding Nonresidential Mandatory Measures

A. Green Building Code Section 5.106.5.3, "Electric vehicle (EV) charging," is amended to read as follows:

5.106.5.3 Electric vehicle (EV) charging.

[N] [BSC-CG] Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 EV capable spaces and Section 5.106.5.3.2 Electric vehicle charging stations and associated Table 5.106.5.3.1, or Section 5.106.5.3.6 Electric vehicle charging stations (EVCS)—Power allocation method and associated Table 5.106.5.3.6 and shall be provided in accordance with regulations in the <u>California Building</u> <u>Code</u> and the <u>California Electrical Code</u>.

Exceptions:

- 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. Alterations that solely add Level 1 EV charging receptacles or Level 1 EV chargers, and no other addition or alteration is performed.

5.106.5.3.1 EV capable spaces.

[N] EV capable spaces shall be provided in accordance with Table 5.106.5.3.1 and the following requirements:

- 1. Raceways complying with the California Electrical Code and no less than 1-inch (25 mm) diameter shall be provided and 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 EV capable space and into a suitable listed cabinet, box, enclosure or equivalent. A common raceway may be used to serve multiple EV capable spaces.
- 2. A service panel or subpanel(s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuit for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.
- The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
- 4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective device space(s) as "EV CAPABLE". The raceway

termination location shall be permanently and visibly marked as "EV CAPABLE."

Note: A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by an enforcement agency. See Vehicle Code Section 22511.2 for further details.

TABLE 5.106.5.3.1

FACILITY TYPE	NUMBER OF REQUIRED EV CAPABLE OR EVCS SPACES	NUMBER OF REQUIRED EV CAPABLE SPACES ¹	NUMBER OF REQUIRED EVCS ^{1,2}
Office & Retail	45% of actual parking spaces	11% of actual parking spaces	34% of actual parking spaces
All Other	45% of actual parking spaces	22% of actual parking spaces	23% of actual parking spaces

- 1. Calculation for spaces shall be rounded up to the nearest whole number.
- 2. At least one Level 2 EVSE shall be provided.

5.106.5.3.2 Electric vehicle charging stations (EVCS).

EV capable spaces shall be provided with electric vehicle supply equipment (EVSE) to create EVCS in the number indicated in Table 5.106.5.3.1. The EVCS required by Table 5.106.5.3.1 shall be provided with Level 2 EVSE or DCFC as permitted in Section 5.106.5.3.2.1. At least one Level 2 EVSE shall be provided.

One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.3.1 for each EV capable space is accumulatively supplied to the EV charger.

5.106.5.3.2.1 Receptacle Configurations. 208/240V EV charging receptacles

shall comply with one of the following configurations:

- 1. For 20-ampere receptacles, NEMA 6-20R.
- 2. For 30-ampere receptacles, NEMA 14-30R.

3. For 50-ampere receptacles, NEMA 14-50R.

<u>5.106.5.3.2.2 EV Charger Connectors.</u> EV chargers shall be equipped with SAE J1772 with a maximum output 240 Volts AC or SAE J3400 connectors. When using level 2 SAE J3400 SAE connectors, supplied by a 480 V 3-phase service, then at least 20 percent of the EV charger connectors shall be SAE J1772 with a maximum output 240 Volts AC.

5.106.5.3.2.13

The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE or EVCS with Level 2 EVSE by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

5.106.5.3.2.24

The installation of two low power Level 2 EV charging receptacles shall be permitted to reduce the minimum number of required EV capable spaces without EVSE in Table 5.106.5.3.1 by one.

5.106.5.3.2.4.1 Raceway Capacity Requirements. To allow for future upgrades to the electrical conductors serving low power Level 2 charging receptacles, the listed raceway serving such receptacles shall be sized to allow the installation of a dedicated 208/240-volt 40-ampere branch circuit. Where no raceway is used, the conductors shall be sized to accommodate a 208/240-volt 40-ampere receptacle.

5.106.5.3.3 Use of automatic load management systems (ALMS). ALMS shall be permitted for EVCS. When ALMS is installed, the required electrical load capacity specified in Section 5.106.5.3.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum of 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while

5.106.5.3.4 Accessible electric vehicle charging station (EVCS).

simultaneously charging multiple EVs.

When EVSE is installed, accessible EVCS shall be provided in accordance with the *California Building Code*, Chapter 11B, <u>Section 11B-228.3</u>.

5.106.5.3.5 Electric vehicle charging station signage.

Electric vehicle charging stations shall be identified by signage or pavement markings in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

5.106.5.3.6 Electric vehicle charging stations (EVCS)—power allocation method.

The power allocation method may be used as an alternative to the requirements in Section 5.106.5.3.1, Section 5.106.5.3.2 and associated Table 5.106.5.3.1. Use Table 5.106.5.3.6 to determine the total power in kVA required based on the total number of actual parking spaces.

Power allocation method shall include the following:

- Use any kVA combination of EV capable spaces, low power Level 2, Level 2 or DCFC EVSEs.
- 2. At least one Level 2 EVSE shall be provided.

TABLE 5.106.5.3.6

FACILITY TYPE	MINIMUM TOTAL kVA @ 6.6 kVA ¹	MAXIMUM kVA ALLOWED FOR EV CAPABLE SPACES ^{1,} 2	MINIMUM kVA REQUIRED IN ANY COMBINATION OF LOW POWER LEVEL 2, LEVEL 2, OR DCFC ^{1, 3,}
Office & Retail	45% of actual parking spaces x 6.6	11% of actual parking spaces x 6.6	34% of actual parking spaces x 6.6
All Other	45% of actual parking spaces x 6.6	22% of actual parking spaces x 6.6	23% of actual parking spaces x 6.6

- 1. Calculation for spaces shall be rounded up to the nearest whole number.
- 2. <u>If EV capable spaces are utilized, they shall meet the requirements of Section 5.106.5.3.1 EV capable spaces.</u>
- 3. Level 2 EVSE @ 6.6 kVA minimum.

5.106.5.3.6.1 Receptacle Configurations. 208/240V EV charging receptacles

shall comply with one of the following configurations:

- 1. For 20-ampere receptacles, NEMA 6-20R.
- 2. For 30-ampere receptacles, NEMA 14-30R.
- 3. For 50-ampere receptacles, NEMA 14-50R.
- <u>5.106.5.3.6.2 EV Charger Connectors.</u> EV chargers shall be equipped with SAE J1772 with a maximum output of 240 Volts AC or SAE J3400 connectors. When using level 2 SAE J3400 SAE connectors, supplied by a 480 V 3-phase service, then at least 20 percent of the EV charger connectors shall be SAE J1772 with a maximum output 240 Volts AC.
- 5.106.5.3.6.3 Raceway Capacity Requirements. To allow for future upgrades to the electrical conductors serving low power Level 2 charging receptacles, the listed raceway serving such receptacles shall be sized to allow the installation of a dedicated 208/240-volt 40-ampere branch circuit. Where no raceway is used, the conductors shall be sized to accommodate a 208/240-volt 40-ampere receptacle.
- B. Green Building Code Section 5.106.5.4, "Additions or alterations to existing buildings or parking facilities [A]," is amended to read as follows:
 - **[BSC-CG]** Existing buildings or parking facilities being modified by one of the following shall comply with Section 5.106.5.4.1 or 5.106.5.4.2. When EVSE is installed, accessible EVCS shall be provided in accordance with the California Building Code, Chapter 11B, Section 11B-228.3.
 - When the scope of construction work includes an increase <u>or alteration</u> into power supply to an electric service panel as part of a parking facility addition or alteration.
 - 2. When a new photovoltaic system is installed covering existing parking spaces.
 - 3. When additions or alterations to existing buildings are triggered pursuant to code Section 301.3 and the scope of work includes an increase in power supply to an electric service panel.
 - 4. Addition of parking facilities or alterations that include breaking ground on existing parking surfaces Green Building Code Section 301.1.1 states what is considered an alteration of an existing parking surface.

Exceptions:

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.
- d. Where demonstrated as impracticable excluding local utility service or utility infrastructure issues.
- 2. Remote parking facilities that do not have access to the building service panel.
- 3. Parking area lighting upgrades where no trenching is part of the scope of work.
- 4. Emergency repairs, including but not limited to water line break in parking facilities, natural disaster repairs, etc.

5.106.5.4.1 Existing buildings or parking areas without previously installed EV capable infrastructure [A].

When EV capable infrastructure does not exist at an existing parking facility or building, and the parking facility or building undergoes an addition or alteration listed in Section 5.106.5.4, construction shall include electric vehicle charging in compliance with either Section 5.106.5.3 and associated Table 5.106.5.3.1, or Section 5.106.5.3.6 and associated Table 5.106.5.3.6 for the total number of actual parking spaces being added or altered.

5.106.5.4.2 Existing buildings or parking areas with previously installed EV capable infrastructure [A].

When EV capable infrastructure is available at an existing parking facility or building, and the parking facility or building is undergoing an addition or alteration listed in Section 5.106.5.4, construction shall include electric vehicle charging in compliance with either Section 5.106.5.3 and associated Table 5.106.5.3.1, or Section 5.106.5.3.6 and associated Table 5.106.5.3.6 utilizing the existing EV capable allocated power and infrastructure for the total number of actual parking spaces being added or altered. If the area being added or altered exceeds the existing EV capable capacity, allocated power and infrastructure, provide additional EV charging as needed to comply with this section.

C. Green Building Code Section 5.106.5.5, "Electric vehicle (EV) charging: medium-duty and heavy-duty," is amended to read as follows:

5.106.5.5 Electric vehicle (EV) charging: medium-duty and heavy-duty.

[N] [BSG-CG] Construction shall comply with Section 5.106.5.5.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores, office buildings, and manufacturing facilities with planned off-street loading spaces shall also comply with Section 5.106.5.5.1 for future installation of medium- and heavy-duty EVSE.

Exceptions:

- 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 \$10,000 per parking space. EV infrastructure shall be provided up to the level that would not exceed this cost for utility service.

When EVSE(s) is/are installed, it shall be in accordance with the <u>California</u> <u>Building Code</u>, the <u>California Electrical Code</u> and as follows:

5.106.5.5.1 Electric vehicle charging readiness requirements for warehouses, grocery stores, office buildings, and manufacturing facilities and retail stores with planned off-street loading spaces.

[N] In order to avoid future demolition when adding EV supply and distribution equipment, spare raceway(s) or busway(s) and adequate capacity for transformer(s), service panel(s) or subpanel(s) shall be installed at the time of construction in accordance with the <u>California Electrical Code</u>. Construction plans and specifications shall include, but are not limited to, the following:

- 1. The transformer, main service equipment and subpanels shall meet the minimum power requirement in Table 5.106.5.5.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
- 2. The construction documents shall indicate one or more location(s) convenient to the planned off-street loading space(s) reserved for medium- and heavyduty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s), as shown in Table 5.106.5.5.1.
- Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium- and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipment for medium- and heavy-duty vehicles.
- 4. The raceway(s) or busway(s) shall be of sufficient size to carry the minimum additional system load to the future location of the charging for medium- and heavy-duty ZEVs as shown in Table 5.106.5.5.1.

TABLE 5.106.5.5.1

RACEWAY CONDUIT AND PANEL POWER REQUIREMENTS FOR MEDIUM-AND HEAVY-DUTY EVSE [N]

BUILDING TYPE	BUILDING SIZE (SQ. FT.)	NUMBER OF OFF- STREET LOADING SPACES	ADDITIONAL CAPACITY REQUIRED (KVA) FOR RACEWAY & BUSWAY AND TRANSFORMER & PANEL
Grocery	10,000 to	1 or 2	200
	90,000	3 or Greater	400

	Greater than 90,000	1 or Greater	400
	10,000 to 50,000	1 or 2	200
Manufacturing Facilities	10,000 to 50,000	3 or Greater	400
	Greater than 50,000	1 or Greater	400
Office Buildings	10,000 to 135,000	1 or 2	200
	10,000 to 135,000	3 or Greater	400
	Greater than 135,000	1 or Greater	400
	10,000 to	1 or 2	200
Retail	135,000	3 or Greater	400
INGIAII	Greater than 135,000	1 or Greater	400
Warehouse	20,000 to	1 or 2	200
	256,000	3 or Greater	400
	Greater than 256,000	1 or Greater	400

SECTION 2. SEVERABILITY.

If any word, phrase, sentence, part, section, subsection, or other portion of this Chapter, or any application thereof to any person or circumstance is declared void, unconstitutional, or invalid for any reason, then such word, phrase, sentence, part, section, subsection, or other portion, or the prescribed application thereof, shall be severable, and the remaining provisions of this Chapter, and all applications thereof, not having been declared void, unconstitutional or invalid, shall remain in full force and effect. The City Council hereby declares that it would have passed this title, and each section, subsection, sentence, clause, and phrase of this Chapter, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases is declared invalid or unconstitutional.

SECTION 3. CERTIFICATION

The City Clerk shall certify to the adoption of this ordinance and, within 15 days after its adoption, shall cause it to be published in accord with California Law.

SECTION 4. EFFECTIVE DATE.			
This ordinance shall take effect on July	1, 2024 follow	ving adoption b	y the City Council.
INTRODUCED ON the day of	, 2024.		
PASSED, APPROVED, AND ADOPTE	D this	day of	2024.
		DOTTE MAYO	
	PAULA PEI	ROTTE, MAYO	ĸ
ATTEST:	APPROVED	AS TO FORM	1:
DEBORAH S. LOPEZ CITY CLERK	MEGAN GA		

STATE OF CALIFORNIA) COUNTY OF SANTA BARBARA) ss CITY OF GOLETA)	5 .
foregoing Ordinance No. 24 was	City of Goleta, California, do hereby certify that the introduced on, and adopted at a regular y of Goleta, California, held on the, by the
AYES:	
NOES:	
ABSENT:	
ABSTENTIONS:	
	(SEAL)
	DEBORAH S. LOPEZ CITY CLERK

ATTACHMENT 2

Definitions Reference Document

<u>Common Definitions – 2022 California Green Building Code</u>

The most commonly used definitions are set forth below:

AUTOMATIC LOAD MANAGEMENT SYSTEM (ALMS). [BSC-CG, DSA-SS and HCD] A system designed to manage load across one or more electric vehicle supply equipment (EVSE) to share electrical capacity and/or automatically manage power at each connection point.

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

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

ELECTRIC VEHICLE (EV) CAPABLE SPACE. [BSC-CG, DSA-SS and HCD] A vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways, both underground and/or surface mounted, to support EV charging.

ELECTRIC VEHICLE (EV) CHARGER. [BSC-CG, HCD] Off-board charging equipment used to charge an electric vehicle.

ELECTRIC VEHICLE CHARGING SPACE (EV SPACE). [HCD] A space intended for future installation of EV charging equipment and charging of electric vehicles.

ELECTRIC VEHICLE CHARGING STATION (EVCS). [BSC-CG, DSA-SS, HCD] One or more electric vehicle charging spaces served by EVSE or receptacle(s).

ELECTRIC VEHICLE (EV) READY SPACE. [HCD] A vehicle space which is provided with a branch circuit; any necessary raceways, both underground and/or surface mounted; to accommodate EV charging, terminating in a receptacle or a charger.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). [BSC-CG, DSA-SS and HCD] The conductors, including the ungrounded, grounded and equipment grounding conductors and the electric vehicle connectors, attachment plugs, personnel protection system, 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 1 ELECTRIC VEHICLE (EV) CHARGING RECEPTACLE. [DSA-SS] A 120-volt 20-ampere minimum branch circuit and a receptacle.

LEVEL 2 ELECTRIC VEHICLE (EV) CHARGER. [BSC-CG, HCD] A 208/240-volt 30-ampere minimum electric vehicle charger connected to the premises electrical system capable of charging electric vehicles.

LEVEL 2 ELECTRIC VEHICLE SUPPLY EQUIPMENT. [BSC-CG, DSA-SS, HCD] The 208/240-volt 40-ampere branch circuit, and 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.

LOW POWER LEVEL 2 ELECTRIC VEHICLE (EV) CHARGING RECEPTACLE. [BSC-CG, DSA-SS, HCD] A 208/240-volt 20-ampere minimum branch circuit and a receptacle.