ORDINANCE NO. 20-____

AN ORDINANCE ESTABLISHING REACH CODES FOR THE CITY OF HAYWARD; AMENDING PART 6 (CALIFORNIA ENERGY CODE) AND PART 11 (CALIFORNIA GREEN BUILDING STANDARDS CODE) OF THE CALIFORNIA BUILDING STANDARDS CODE (TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS)

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

Section 1. In accordance with state law, effective January 1, 2020, Chapter 9 Article 1, the Building Code for the City of Hayward, is hereby amended as follows:

BUILDING CODE
OF THE CITY OF HAYWARD

SECTION 1.00
2019 CALIFORNIA BUILDING STANDARDS CODES, ADOPTION BY REFERENCE.

The *2019 California Energy Code (Part 6 of C.C.R. Title 24) and the 2019 California Green Building Standards Code (Part 11 of C.C.R. Title 24)*, published by the International Code Council, as amended by the State of California pursuant to Health and Safety Code section 17922, and as further modified by the amendments, additions, and deletions as set forth hereinafter, is hereby adopted by reference as the Building Code of the City of Hayward.

A printed copy of such *2019 California Building Codes* together with the State and local amendments thereto, is on file in the office of the building official, to which reference is hereby made for further particulars.

SECTION 2.00
SUMMARY OF LOCAL AMENDMENTS

CODE SECTION	Added to Code	Code Change	Deleted from Code	Notes / Justification
CEC 100.0(i)	X			Energy Reach Code - Purpose and Intent
CEC 100.1(b)		X		Adds definitions
CEC 150.0 (e through s)		X		Modifies mandatory features and devices
CEC 140.0(b)		X		Modifies mandatory measures for nonresidential, high-rise residential and hotel/motel buildings
CEC 140.1		X		Modifies energy budget requirements
CEC 140.2		X		Modifies prescriptive requirements for mixed fuel buildings.
CBC 202		X		Add definitions for EV charging
CBC 4.106.4		X		Modifies EV charging requirements for new construction
CBC 4.106.4.1		X		Modifies EV charging requirements for New one- and two-family dwellings and town- houses
CBC 4.106.4.2		X		Modifies EV charging requirements for New multi-family dwellings
CBC 5.106.5.3		X		Modifies EV charging requirements for new nonresidential buildings

Section 3. Purpose and Intent. It is the purpose and intent of this Ordinance to expressly enact local amendments to Sections 100.0, 100.1, 140.0, 140.1, 150.1, 200, 4.106, and 5.106 of the 2019 California Building Code applicable to new construction to provide standards for new buildings to improve community health and safety while reducing greenhouse gas emissions.

Section 4. Enactment of Local Amendments to The California Building Standards Code, Title 24, Parts 6 and 11 (Amendments to Chapter 9 of the Hayward Municipal Code). The local amendments to Sections 100.0, 100.1, 140.0, 140.1, 150.1, 200, 4.106, and 5.106 of the 2019 California Building Standards Code, Title 24, Parts 6 and 11, are hereby enacted. The local amendments being enacted amend Chapter 9 of the Hayward Municipal Code as follows (additions are shown in double underline and deletions are shown as ~~strikethrough~~). Sections of the California Building Standards Code that are not addressed are not modified.

SECTION 4.00
LOCAL AMENDMENTS TO THE CODE BY CHAPTER

CALIFORNIA BUILDING STANDARDS CODE TITLE 24 PART 6: ENERGY CODE LOCAL AMENDMENTS

Section 100.0 is modified to add a new section (i) as follows:

(i) Energy Reach Code - Purpose and Intent.

In addition to all requirements of the California Energy Code applicable to new construction, the following shall apply:

1. New low-rise residential buildings, other than Free Standing Accessory Dwelling Units that are no greater than 400 square feet, shall be an All-Electric Building as defined in Section 100.1(b).
2. New nonresidential buildings that are designed to utilize mixed-fuel (Fuel Gas in addition to electricity) shall be required to install solar panels on the entire Solar Zone, as defined in Section 110.10, and comply with either the prescriptive requirements of Section 140.2, as amended herein, or have compliance margins, as defined in Section 140.1, that meet or exceed the Standard Design Building by the amounts below:
   A. Office and retail occupancies: 15%
   B. Hotel/Motel and High-Rise Residential occupancies: 10%
   C. All other occupancies in buildings with both indoor lighting and mechanical systems: 10%
   D. All other occupancies in buildings with indoor lighting or mechanical systems but not both: 10%
3. If a Certified Energy Analyst prepares the Nonresidential Certificate of Compliance, the design shall be credited with one (1) percent of compliance margin, to the extent that the resultant energy budget is no greater than the energy budget for the Standard Building Design.

Section 100.1(b) is modified by adding the following definitions:

ALL-ELECTRIC BUILDING is a building that has no Fuel Gas plumbing installed within the building, and that uses electricity as the source of energy for its space heating, water heating, cooking, clothes drying, and fireplace appliances. An All-Electric Building may include solar thermal collectors. An All-Electric Building may include outdoor cooking appliances or backup power generation fueled by a free-standing Fuel Gas tank and which is not plumbed to a building, gas line or gas main. The term "Fuel Gas" shall be as defined in the California Mechanical and Plumbing Codes.

CERTIFIED ENERGY ANALYST is a person registered as a Certified Energy Analyst with the California Association of Building Energy Consultants as of the date of submission of a Certificate of Compliance as required under Section 10-103.

FREE STANDING ACCESSORY DWELLING UNIT is a detached building that is not intended for sale separate from the primary residence, on a lot that is zoned for single family or multifamily use, located on the same lot as an existing dwelling, and does not exceed 1,200 square feet of total floor area.

MIXED-FUEL BUILDING is a building that is plumbed for the use of Fuel Gas as fuel for space heating, water heating, cooking, clothes drying, and/or fireplace appliances.

Low-Rise Residential Buildings

Section 150.0 - Mandatory Features and Devices. Section 150.0 of the 2019 California Energy Code is amended to read as follows:

Low-rise residential buildings shall comply with the applicable requirements of Sections 150(a) through 150(~~r~~s**).**

NOTE: The requirements of Sections 150.0 (a) through (r) apply to newly constructed buildings. Sections 150.2(a) and 150.2(b) specify which requirements of Sections 150.0(a) through 150.0(r) also apply to additions or alterations. The local amendments to Sections 150.0(e), 150.0 (h), 150.0 (n), and 150.0 (s) do not apply to additions or alterations.

EXCEPTION 1 to Section 150.0. The local amendments to Sections 150.0(e), 150.0 (h), 150.0 (n), and 150.0 (s) do not apply to Free Standing ADUs less than 400 square feet.

EXCEPTION 2 to Section 150.0. If an applicant believes circumstances exist that make it infeasible to meet the local amendments to Sections 150.0(e), 150.0 (h), 150.0 (n), and 150.0 (s), the applicant may request an exemption from the Building Official. The applicant must still comply with the mandatory measures of the California Green Building Standards Code and can only receive an exemption from the Hayward amendments to the code. In applying for an exemption, the burden is on the applicant to show infeasibility. An exemption will be granted only in unusual circumstances where, due to exceptional characteristics of the structure, property, or business involved, a literal enforcement of this code will result in practical infeasibility, provided that no such exemption will be contrary to the intent of this code.

Section 150.0(e) Installation of fireplaces. Fireplaces shall be electric, not fueled by Fuel Gas.

Section 150.0(h) Space-conditioning equipment. Space-conditioning equipment shall be electric, not fueled by Fuel Gas.

Section 150.0(n) Water heating system. Water heating systems and equipment shall be electric, not fueled by Fuel Gas.

~~A. A dedicated 125 volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within 3 feet from the water heater and accessible to the water heater with no obstructions. In addition, all of the following:~~

~~i. Both ends of the unused conductor shall be labeled with the word "spare" and be electrically isolated; and~~

~~ii. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words "Future 240V Use"; and~~

~~B. A Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; and~~

C. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance, and

~~D. A gas supply line with a capacity of at least 200,000 Btu/hr.~~

~~4. Instantaneous water heaters with an input rating greater than 6.8 kBTU/hr (2kW) shall meet the requirements of Section 110.3(c)7.~~

…

Section 150.0 (s) Clothes Drying and Cooking.

1. Clothes Drying. Clothes dryers shall be electric, not fueled by Fuel Gas.
2. Cooking Range. Cooking appliances shall be electric, not fueled by Fuel Gas.

Nonresidential and High-Rise Residential Buildings

Mandatory Measures

SECTION 140.0(b) is modified as follows:

(b) The requirements of Sections 120.0 through 130.5 (mandatory measures for nonresidential, high-rise residential and hotel/motel buildings). and for all newly constructed mixed-fuel buildings:

1. The entire solar zone, as specified in Section 110.10, shall have a solar PV system installed that meets the minimum qualification requirements as specified in Joint Appendix JA11, subject to the exceptions in Section 110.10.

   EXCEPTION 1 to 140.0(b)1. The PV system may be sized to cover less than the entire Solar Zone provided that the system is sized to generate annual electrical output equal to the building's modelled annual electric load.

   EXCEPTION 2 to 140.0(b)1. Newly constructed all-electric buildings.

SECTION 140.1 is modified as follows:

SECTION 140.1 – PERFORMANCE APPROACH: ENERGY BUDGETS
A newly constructed All-Electric Building complies with the performance approach if the energy budget calculated for the Proposed Design Building under Subsection (b) is no greater than the energy budget calculated for the Standard Design Building under Subsection (a).

A newly constructed Mixed-Fuel Building complies with the performance approach if the energy budget calculated for the Proposed Design Building under Subsection (b) has a compliance margin, relative to the energy budget calculated for the Standard Design Building under Subsection (a), of at least the value specified for the corresponding occupancy type in Table 140.1-A below.

Table 140.1-A MIXED-FUEL BUILDING COMPLIANCE MARGINS

Occupancy Type	Compliance Margins
Office/Retail	+15%
Hotel/Motel and High-Rise Residential	+10%
All other occupancies in buildings with both indoor lighting and mechanical systems	+10%
All other occupancies in buildings with indoor lighting or mechanical systems but not both	+5%

(a) Energy Budget for the Standard Design Building. The energy budget for the Standard Design Building is determined by applying the mandatory and prescriptive requirements to the Proposed Design Building. The energy budget is the sum of the TDV energy for space-conditioning, indoor lighting, mechanical ventilation, service water heating, and covered process loads.

(b) Energy Budget for the Proposed Design Building. The energy budget for a Proposed Design Building is determined by calculating the TDV energy for the Proposed Design Building. The energy budget is the sum of the TDV energy for space-conditioning, indoor lighting, mechanical ventilation and service water heating and covered process loads.

(c) Calculation of Energy Budget. The TDV energy for both the Standard Design Building and the Proposed Design Building shall be computed by Compliance Software certified for this use by the Commission. The processes for Compliance Software approval by the Commission are documented in the ACM Approval Manual.

EXCEPTION 1 to Table 140.1-A. For newly constructed buildings, if the Certificate of Compliance is prepared and signed by a Certified Energy Analyst and the energy budget for the Proposed Design is no greater than the Standard Design Building, the required compliance margin is reduced by 1%.

EXCEPTION 2 to Table 140.1-A. If an applicant believes circumstances exist that make it infeasible to meet the requirements of Table 140.1-A, the applicant may request an exemption from the Building Official. The applicant must still comply with the mandatory measures of the California Green Building Code and can only receive an exemption from the Hayward amendments to the code. In applying for an exemption, the burden is on the applicant to show infeasibility. An exemption will be granted only in unusual circumstances where, due to exceptional characteristics of the structure, property, or business involved, a literal enforcement of this code will result in practical infeasibility, provided that no such exemption will be contrary to the intent of this code.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 140.2 is modified as follows:

To comply using the prescriptive approach, a building shall be designed with and shall have constructed and installed systems and components meeting the applicable requirements of Sections 140.3 through 140.9 and additionally the following measures as applicable intended to exceed the remaining prescriptive requirements:

(a) Mixed-Fuel Buildings of Hotel, Motels or High-Rise Multifamily Occupancies

1. Install fenestration with a solar heat gain coefficient no less than 0.45 in both common spaces and guest rooms.

2. Design Variable Air Volume (VAV) box minimum airflows to be equal to the zone ventilation minimums.
3. Include economizers and staged fan control in air handlers with a mechanical cooling capacity ≥ 33,000 Btu/h.
4. Reduce the lighting power density (Watts/ft2) by ten percent (10%) from that required from Table 140.6-C.
5. In common areas, improve lighting without claiming any Power Adjustment Factor credits:
   A. Control to daylight dimming plus off per Section 140.6(a)2.H; and
   B. Perform Institutional Tuning per Section 140.6(a)2.J
6. Install one drain water heat recovery device per every three guest rooms that is field verified as specified in the Reference Appendix RA3.6.9.

(b) All Other Nonresidential Mixed-Fuel Buildings

1. Install fenestration with a solar heat gain coefficient no greater than 0.22.
2. Limit the fenestration area on east-facing and west-facing walls to one-half of the average amount of north-facing and south-facing fenestration.
3. Design Variable Air Volume (VAV) box minimum airflows to be equal to the zone ventilation minimums where VAV systems are installed.
4. Include economizers and staged fan control in air handlers with a mechanical cooling capacity ≥ 33,000 Btu/h.
5. Reduce the lighting power density (Watts/ft^2) by ten percent (10%) from that required from Table 140.6-C.
6. Improve lighting without claiming any Power Adjustment Factor credits:
   A. Perform Institutional Tuning per Section 140.6(a)2.J, and
   B. In office spaces, control to daylight dimming plus off per Section 140.6(a)2.H, and
   C. Install Occupant Sensing Controls in Large Open Plan Offices per Section 140.6(a)2.I.

CALIFORNIA BUILDING CODE TITLE 24 PART 11: GREEN BUILDING STANDARDS LOCAL AMENDMENTS

Section 202 - Definitions:

EV Capable: A parking space linked to a listed electrical panel with sufficient capacity to provide at least 208/240 volts and 40 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.

Level 1 EV Ready Space: 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).

Level 2 EV Ready Space: 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.

Electric Vehicle Charging Station (EVCS): A parking space that includes installation of electric vehicle supply equipment (EVSE) with a minimum capacity of 30 amperes connected to a Level 2 EV Ready Space. EVCS installation may be used to satisfy a Level 2 EV Ready Space requirement.

Automatic Load Management Systems (ALMS): (ALMS) A control system which allows multiple EV chargers or EV-Ready electric vehicle outlets 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 systems must be designed to deliver at least 1.4kW per charger to each EV Capable, EV Ready, or EVCS space served by ALMS. 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.

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SECTION 4
RESIDENTIAL MANDATORY MEASURES

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. ~~Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.~~

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:~~
   Where there is no commercial power supply.

   ~~1.1. 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.~~
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities, unless the electrical panel is upgraded, or a new panel is installed in which case only the electrical capacity requirements apply.
   3. Spaces accessible only by automated mechanical car parking systems are excepted from providing EV charging infrastructure.
4.

4.106.4.1 New one- and two-family dwellings and town- houses with attached private garages.
For each dwelling unit, install two Level 2 EV Ready Spaces ~~a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV char- ger. 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 Space.

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 Space".

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 Space.

2. When more than 20 multifamily dwelling units are constructed on a building site~~, provided for all types~~:

    a. 75% of the dwelling units with parking ~~facilities,~~ space(s) shall be provided with at least one Level 2 EV Ready Space ~~spaces) capable of supporting future EVSE~~. 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 2 EV Capable 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. The requirements apply to multifamily buildings with parking spaces including: a) assigned or leased to individual dwelling units, and b) unassigned residential parking.
3. 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 2 EV Ready Spaces.

4. 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 Spaces, the applicant shall provide EV infrastructure up to a level that would not exceed this cost for utility service or on-site transformer capacity.

4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. Refer to local authority having jurisdiction for parking dimension requirements. ~~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).~~

~~1. 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.~~

~~**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 pro- vide 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.~~

SECTION 5
NONRESIDENTIAL MANDATORY MEASURES

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:~~

Exception: Where there is no commercial power supply.

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

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 30% shall be at least Level 2 EV Capable.

Calculations for the required minimum number of spaces equipped with Level 2 EVCS, Level 2 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 2 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 2 V 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.

5.106.5.3.2 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, 15% of the available parking spaces on site shall be equipped with Level 2 EVCS;

   Calculations for the required minimum number of spaces equipped with 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 15 EV Ready spaces after a minimum of 15 Level 2 EV Ready spaces are installed.

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 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.
5. 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 Spaces, the applicant shall provide EV infrastructure up to a level that would not exceed this cost for utility service or on-site transformer capacity.

~~**5.106.5.3.1 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.

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 mini- mum 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.

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.

~~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 total[1]

~~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".

~~**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.~~

SECTION 5. Severability. The provisions of this Ordinance are severable, and if any clause, sentence, paragraph, provision, or part of this Ordinance, or the application of this Ordinance to any person, is held to be invalid or preempted by state or federal law, such holding shall not impair or invalidate the remainder of this Ordinance. If any provision of this Ordinance is held to be inapplicable, the provisions of this Ordinance shall nonetheless continue to apply with respect to all other covered development projects and applicants. It is hereby declared to be the legislative intent of the City Council that this Ordinance would have been adopted had such provisions not been included or such persons or circumstances been expressly excluded from its coverage.

INTRODUCED at a regular meeting of the City Council of the City of Hayward, held the 3rd day of March, 2020, by Council Member _____.

ADOPTED at a regular meeting of the City Council of the City of Hayward held the 17th day of March, 2020, by the following votes of members of said City Council.

AYES: COUNCIL MEMBERS:
MAYOR:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

APPROVED: _____
Mayor of the City of Hayward

DATE: _____

ATTEST: _____
City Clerk of the City of Hayward

APPROVED AS TO FORM:

_____
City Attorney of the City of Hayward