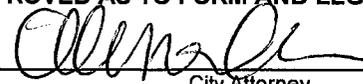


17 FEB 16 PM 2:01

APPROVED AS TO FORM AND LEGALITY

INTRODUCED BY COUNCILMEMBER \_\_\_\_\_

  
City Attorney

OAKLAND CITY COUNCIL  
ORDINANCE NO. ~~13419~~ **13419** C.M.S.

---

**ORDINANCE ADOPTING LOCAL AMENDMENTS TO SECTIONS 4.106.4 AND 5.106.5.3 OF THE 2016 EDITION OF THE CALIFORNIA GREEN BUILDING STANDARDS CODE AND AMENDING OAKLAND MUNICIPAL CODE CHAPTER 15.04 TO INCLUDE NEW REQUIREMENTS FOR PLUG-IN ELECTRIC VEHICLE INFRASTRUCTURE TO COMPLY WITH CHANGES TO STATE LAW AND ADOPTING CEQA EXEMPTION FINDINGS**

**WHEREAS**, in October 2010, the Oakland City Council adopted a local Green Building Ordinance, which required compliance with green building standards for most project types including residential new construction and additions and alterations, and non-residential new construction additions and alterations; and

**WHEREAS**, in 2009, Oakland City Council adopted community-wide greenhouse gas (GHG) emissions reduction goals of 36% below 2005 levels by 2020 and 83% below 2005 levels by 2050; and

**WHEREAS**, in December 2012, the Oakland City Council adopted an Energy and Climate Action Plan (ECAP) that established pathways to achieve the city's 2020 GHG emissions reduction target through multiple measures including reduced vehicle miles traveled and vehicle efficiency; and

**WHEREAS**, the 2012 ECAP includes Priority Action Item 37, "Plan for Electric Vehicle Infrastructure," which includes developing new processes to support local use of electric vehicles; and

**WHEREAS**, increasing the adoption and use of electric vehicles will help the City of Oakland meet its GHG and air quality goals; and

**WHEREAS**, as stated in the 2012 ECAP, it is critical to both the economic and environmental health of the City of Oakland that the City provide leadership to the public and private sectors in green building and alternative transportation; and

**WHEREAS**, the State of California has set a goal of placing 1.5 million zero-emission vehicles on California roads by 2025; and

**WHEREAS**, in 2013, the Bay Area Air Quality Management District published a *Bay Area PEV Readiness Plan*, which anticipates at least 246,900 electric vehicles on Bay Area roads by 2025; and

**WHEREAS**, every three years, the State of California Department of Housing and Community Development and the Building Standards Commission prepare a triennial update to the California Green Building Standards Code, known as CALGreen, which cities must either adopt and enforce "as-is" or adopt with local amendments to require more stringent standards when reasonably necessary based on local climatic, geological, and topographical conditions; and

**WHEREAS**, the California Green Building Standards Code is Part 11 of Title 24 of the California Code of Regulations, and the 2016 California Green Building Standards Code will go into effect on January 1, 2017; and

**WHEREAS**, Oakland's green building standards are contained in the Oakland Building Code. In this Ordinance, Oakland incorporates Sections 4.106.4 and 5.106.5.3 of the 2016 California Green Building Standards Code into the Oakland Building Code with local amendments, and amends the Oakland Municipal Code by adding sections 15.04.1205 through 15.04.1235; and

**WHEREAS**, California Health & Safety Code section 17958.7 provides that before making any changes or modifications to the California Building Standards Code and any other applicable provisions published by the State Building Standards Commission, including, but not limited to, green building standards, the governing body must make an express finding that each such change or modification is reasonably necessary because of specified local conditions, and the findings must be filed with the State Building Standards Commission before the local changes or modifications can go into effect; and

**WHEREAS**, pursuant to California Health & Safety Code section 17958.7, the City Council, in a separate companion resolution, has made express findings that said non-administrative amendments, which are equivalent to or more stringent than the 2016 California Green Building Standards Code requirements, are reasonably necessary because of local climatic, topographic, and geologic conditions; and

**WHEREAS**, as a coastal and major port city, Oakland is vulnerable to sea level rise, and human activities releasing greenhouse gases into the atmosphere cause increases in worldwide average temperature, which contribute to melting of glaciers and thermal expansion of ocean water, resulting in rising sea levels; and

**WHEREAS**, disadvantaged, low income, minority, and vulnerable populations in Oakland, particularly in the flatlands, experience increased levels of air pollution caused by vehicle emissions and suffer from poorer health outcomes due to that exposure as compared with the rest of the population, and are particularly at risk of experiencing adverse impacts of rising sea levels; and

**WHEREAS**, Oakland is already experiencing the repercussions of excessive GHG emissions as rising sea levels threaten the City's shoreline and infrastructure, have caused significant erosion and increased impacts to infrastructure during extreme tides, and have caused the City to expend funds to modify the infrastructure system; and

**WHEREAS**, use of zero-emission electric vehicles benefits the health, welfare, and resiliency of Oakland and its residents due to reduced dependence of fossil fuels, reduced air pollution, reduced GHG emissions, and an increase in private transportation funding that can "cycle back" into the Oakland community; and

**WHEREAS**, in recent years, electric vehicle ownership and use have become increasingly common in the Bay Area and in Oakland particularly, with many residents, visitors, and employees recognizing the environmental benefits and lifetime financial savings of driving electric vehicles; and

**WHEREAS**, electric vehicles depend upon convenient access to charging, and the ability to serve electric vehicles in existing buildings is commonly limited by the electrical system capacity of the building; and

**WHEREAS**, the most cost-effective time to prepare building infrastructure for electric vehicle charging is during initial construction or during major alterations that include electric service upgrades; and

**WHEREAS**, upgrading buildings after construction to service electric vehicles can result in costs up to three times the cost of installing "PEV-Ready" infrastructure at the time of initial construction or during certain major alterations; and

**WHEREAS**, the proposed Ordinance is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines sections 15378, 15061(b)(3) (General Rule), 15301 (Existing Facilities), 15303 (New Construction or Conversion of Small Structures), and 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning). Each of the foregoing provides a separate and independent basis for CEQA compliance and, when viewed collectively, provides an overall basis for CEQA compliance; and

**WHEREAS**, after a duly noticed public meeting on January 24, 2017, the Community and Economic Development Committee voted to recommend the proposal to the City Council; and

**WHEREAS**, the City Council held a duly noticed public hearing on February 7, 2017, to consider the proposed amendments and all interested parties were provided an ample opportunity to participate in said hearing and express their views; and

**WHEREAS**, based on all written and oral reports and presentations to Council, including the Agenda Report and each of the Attachments thereto, the City Council finds and determines that the proposed local amendments to Sections 4.106.4 and 5.106.5.3 of the California Green Building Standards Code set forth herein are (1) reasonably necessary because of local climatic, geological, and topographic conditions, and (2) cost effective and will result in the diminution of lifetime GHG emissions as those who live, work, and visit in Oakland are able to switch from conventional to electric vehicles; and

**NOW, THEREFORE, THE COUNCIL OF THE CITY OF THE OAKLAND DOES ORDAIN AS FOLLOWS:**

**SECTION 1. Recitals.** The City Council finds and determines the preceding recitals to be true and correct and an integral part of the Council's decision, and hereby adopts and incorporates them into this Ordinance.

**SECTION 2. California Environmental Quality Act.** The City Council independently finds and determines that this action is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines sections ~~15378, 15061(b)(3) (General Rule), 15301 (Existing Facilities), 15303 (New Construction or Conversion of Small Structures), and 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning)~~, each of which provides a separate and independent basis for CEQA clearance and when viewed collectively provide an overall basis for CEQA clearance. The Environmental Review Officer or designee shall file a Notice of Exemption with the appropriate agencies.

**SECTION 3. Purpose and Intent.** It is the purpose and intent of this Ordinance to expressly enact local amendments to Sections 4.106.4 and 5.106.5.3 of the 2016 California Green Building Standards Code to include increased requirements for electric vehicle readiness in both multifamily and nonresidential new construction, consistent with and exceeding the 2016 California Green Building Standards Code requirements, in order to preserve the public peace, health, safety, and general welfare of the citizens and residents of, and travelers through, the City of Oakland, as authorized by the California Health & Safety Code.

**SECTION 4. Enactment of Local Amendments to Sections 4.106.4 and 5.106.5.3 of the 2016 California Green Building Standards Code (Amendments to Chapter 15.04 of the Oakland Municipal Code).** The local amendments to Sections 4.106.4 and 5.106.5.3 of the 2016 California Green Building Standards Code are hereby enacted. The local amendments being enacted amend Oakland Municipal Code Chapter 15.04 to add Sections 15.04.3.11105 through 15.04.3.11135 as follows (additions are shown in double underline and deletions are shown as ~~strikethrough~~):

15.04.3.11105. In Section 4.106.4 of the California Green Building Standards Code, delete paragraph 2 under "Exemptions" in its entirety and replace with the following:

**Exemptions**

2. Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure 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 and \$400.00 per parking space. In such cases, buildings subject to Section 4.106 shall maximize the quantity of EV charging infrastructure, without exceeding the limit above. Cost per parking space shall be determined by dividing total cost by total number of EV and non-EV parking spaces.

15.04.3.11110. In Section 4.106.4.2 of the California Green Building Standards Code, delete subparagraph 4.106.4.2 in its entirety and replace with the following:

**4.106.4.2 New multifamily dwellings.**

Where 3 or more multifamily dwellings are constructed on a site, install at least the following levels of PEV infrastructure. All EV charging electric infrastructure and EVSE (when installed) shall be in accordance with the *California Electrical Code*.

	<u>Full Circuit</u>	<u>Inaccessible Raceway Installed</u>	<u>Electric Panel Capacity</u>
<u>Greater than 20 parking spaces</u>	<u>10 percent of parking spaces (rounded up)</u>	<u>Remaining 90 percent of parking spaces</u>	<u>Sufficient to supply 20 percent of spaces</u>
<u>16-20 or more parking spaces</u>	<u>2 parking spaces</u>	<u>2 parking spaces</u>	<u>Sufficient to supply 4 parking spaces</u>
<u>11-15 parking spaces</u>	<u>2 parking spaces</u>	<u>1 parking spaces</u>	<u>Sufficient to supply 3 parking spaces</u>
<u>2-10 parking spaces</u>	<u>2 parking spaces</u>	<u>=</u>	<u>Sufficient to supply 2 parking spaces</u>
<u>1 parking space</u>	<u>1 parking space</u>	<u>=</u>	<u>Sufficient to supply 1 parking space</u>

**15.04.3.1115.** [Intentionally omitted.]

**15.04.3.11120.** In Section 4.106.4.2 of the California Green Building Standards Code, delete subparagraphs numbered 4.106.4.2.3, 4.106.4.2.4, 4.106.4.2.5 and 4.106.5.2.6 in their entirety and replace with the following:

**4.106.4.2.3 Full circuit.**

Required full circuits shall be installed with 40-Amp 208/240-Volt capacity including raceway, electrical panel capacity, overprotection devices, wire and termination point such as a receptacle at the time of construction. The termination point shall be in close proximity to the proposed EV charger location. Where a single EV parking space is required, the raceway shall not be less than trade size 1 (nominal 1-inch inside diameter).

**4.106.4.2.4 Inaccessible raceway.**

Construction documents shall indicate wiring schematics, raceway methods, the raceway termination point and proposed location of future EV spaces and EV chargers. 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 Electrical Panel Capacity.**

Electrical panels shall be installed with capacity to support one 40-Amp 208/240-Volt circuit for each parking space specified in 4.106.4.2 under “Electrical Panel Capacity”. Construction documents shall 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 40-Amps.

Note: Panel capacity to install full circuits at the time of original construction as well as capacity to support future addition of additional circuits shall count towards satisfying this requirement. This requirement does not preclude building owners from allocating the required capacity to increase the number of EVCS and provide less than 40-Amp per vehicle.

#### **4.106.4.2.6 Identification.**

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as “EV READY” for full circuits and otherwise “EV CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV READY” for full circuits and otherwise “EV CAPABLE”.

#### **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. Website: <http://www.dot.ca.gov/trafficops/policy/13-01.pdf>.
2. See Vehicle Code Section 22511 for EV charging space signage in off-street parking facilities and for use of EV charging spaces.
3. The Governor’s Office of Planning and Research (OPR) published a “Zero-Emission Vehicle Community Readiness Guidebook” which provides helpful information for local government, residents and businesses. Website: [https://www.opr.ca.gov/docs/ZEV\\_Guidebook.pdf](https://www.opr.ca.gov/docs/ZEV_Guidebook.pdf).

**15.04.3.11125.** In Section 4.106.4.2 of the California Green Building Standards Code, add new subsection 4.106.4.2.7:

#### **4.106.4.2.7 Chapter 11B Accessible EVCS requirements.**

Construction documents shall indicate how many accessible EVCS would be required under Title 24 Chapter 11B Table 11B-228.3.2.1, if applicable, in order to convert all EV capable and EV ready spaces required under 4.106 to EVCS. Construction documents shall also demonstrate that the facility is designed so that compliance with accessibility standards including 11B-812.5 accessible routes will be feasible for the required accessible EVCS at the time of EVCS installation. Surface slope for any area designated for accessible EVCS shall meet slope requirements in section 11B-812.3 at the time of original building construction and vertical clearance requirements in Section 11B-812-4.

**Note:** Section 11B-812 of the 2016 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-812.4 requires that “Parking spaces, access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489 mm) minimum.” Section 11B-812.3 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. Section 4.106.4.2.7 requires that developers meet certain aspects of accessibility requirements at the time of new construction.

**15.04.3.11130.** In Section 5.106.5.3 of the California Green Building Standards Code, delete

subparagraphs 5.106.5.3, 5.106.5.3.1, 5.106.5.3.2, 5.106.5.3.3 and 5.106.5.3.4 in their entirety and replace with the following:

**SECTION 5.106.5.3**

**SITE DEVELOPMENT**

**5.106.5.3 Electric vehicle (EV) charging.** Construction shall include EV charging electric infrastructure as specified in this section to facilitate future installation of EVSE. All EV charging electric infrastructure and EVSE (when installed) shall be in accordance with the California Electrical Code.

	<b><u>Full Circuit</u></b>	<b><u>Inaccessible Raceway Installed</u></b>	<b><u>Electric Panel Capacity</u></b>
<b><u>Greater than 20 parking spaces</u></b>	<u>10 percent of parking spaces (rounded up)</u>	<u>10 percent of parking spaces (rounded up)</u>	<u>Sufficient to supply 20 percent of parking spaces</u>
<b><u>16-20 or more parking spaces</u></b>	<u>2 parking spaces</u>	<u>2 parking spaces</u>	<u>Sufficient to supply 4 parking spaces</u>
<b><u>11-15 parking spaces</u></b>	<u>2 parking spaces</u>	<u>1 parking spaces</u>	<u>Sufficient to supply 3 parking spaces</u>
<b><u>2-10 parking spaces</u></b>	<u>2 parking spaces</u>	<u>=</u>	<u>Sufficient to supply 2 parking spaces</u>
<b><u>1 parking space</u></b>	<u>1 parking space</u>	<u>=</u>	<u>Sufficient to supply 1 parking space</u>

**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 substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the developer by more than \$400.00 per parking space. In such cases, buildings subject to Section 5.106.5.3 shall maximize the quantity of EV infrastructure, without exceeding the limit above. Cost shall be determined by dividing total cost by total number of EV and non-EV parking spaces.

**5.106.5.3.1 Full circuit.**

Required full circuits shall be installed with 40-Amp 208/240-Volt capacity including raceway, electrical panel capacity, overprotection devices, wire and termination point such as a receptacle at the time of construction. The termination point shall be in close proximity to the proposed EV charger location. Where a single EV parking space is required, the raceway shall not be less than trade size 1 (nominal 1-inch inside diameter).

**5.106.5.3.2 Inaccessible raceway.**

Construction documents shall indicate wiring schematics, raceway methods, the raceway termination point and proposed location of future EV spaces and EV chargers. 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.

#### **5.106.5.3.3 Electrical Panel Capacity.**

Electrical panels shall be installed with capacity to support one 40-Amp 208/240-Volt circuit for each parking space specified in 5.106.5.3 under “Electrical Panel Capacity”. Construction documents shall 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 40-Amps.

**Note:** Panel capacity to install full circuits at the time of original construction as well as capacity to support future addition of additional circuits shall count towards satisfying this requirement. This requirement does not preclude building owners from allocating the required capacity to increase the number of EVCS and provide less than 40-Amp per vehicle.

#### **5.106.5.3.4 Identification.**

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as “EV READY” for full circuits and otherwise “EV CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV READY” for full circuits and otherwise “EV CAPABLE”.

**15.04.3.11135.** In Section 5.106.5.3 of the California Green Building Standards Code, add new subsection 5.106.5.3.6:

#### **5.106.5.3.6 Chapter 11B Accessible EVCS requirements.**

Construction documents shall indicate how many accessible EVCS would be required under Title 24 Chapter 11B Table 11B-228.3.2.1, if applicable, in order to convert all EV capable and EV ready spaces required under 5.106.5.3 to EVCS. Construction documents shall also demonstrate that the facility is designed so that compliance with accessibility standards including 11B-812.5 accessible routes will be feasible for the required accessible EVCS at the time of EVCS installation. Surface slope for any area designated for accessible EVCS shall meet slope requirements in section 11B-812.3 at the time of original building construction and vertical clearance requirements in Section 11B-812.4.

**Note:** Section 11B-812 of the 2016 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-812.4 requires that “Parking spaces, access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489 mm) minimum.” Section 11B-812.3 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. Section 5.106.5.3.5 requires that developers meet certain aspects of accessibility requirements at the time of new construction.

**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.

**SECTION 6. Effective and Operative Dates.** This Ordinance shall become effective on and after its adoption by sufficient affirmative votes of the Council of the City of Oakland, as provided in the Charter of the City of Oakland, Section 216. This Ordinance shall take effect and be in full force on and after the date the amendment documents are filed with the California Building Standards Commission. The Ordinance shall not apply to building/construction related permits already issued and not yet expired.

**SECTION 7. Directions to the Building Official.** Upon final passage of this Ordinance, the Building Official is hereby directed to transmit this Ordinance, along with the companion Resolution, to the State Building Standards Commission pursuant to the applicable provisions of State law.

FEB 21 2017

IN COUNCIL, OAKLAND, CALIFORNIA, \_\_\_\_\_

**PASSED BY THE FOLLOWING VOTE:**

AYES- BROOKS, CAMPBELL WASHINGTON, GALLO, GUILLEN, KALB, KAPLAN, REID, AND PRESIDENT GIBSON MCELHANEY — 8

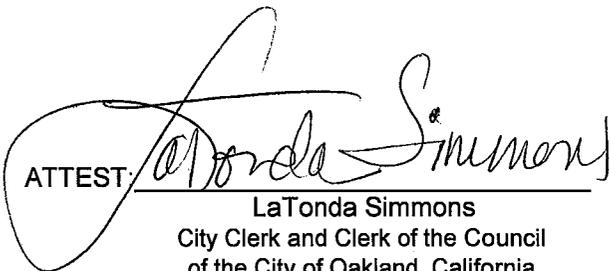
NOES- 0

ABSENT- 0

ABSTENTION- 0

Introduction Date

FEB 07 2017

ATTEST:   
LaTonda Simmons  
City Clerk and Clerk of the Council  
of the City of Oakland, California

DATE OF ATTESTATION: 3-14-17