CITY OF PALO ALTO

DEVELOPMENT SERVICES – DIVISION

SUBMITTAL GUIDELINES:

ELECTRICAL VEHICLE SUPPLY EQUIPMENT, EVSE

EFFECTIVE: January 4, 2018

SCOPE: COMMERCIAL

APPLICABLE CODES: 2016 CBC, CRC, CPC, CMC, CEC, CALGreen, CEnC, and PAMC

The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate.

SUBMITTAL

☐ Submit four (4) sets of drawings and three (3) sets of supporting documents for Commercial EVSE's to the Building Department. Building, Planning and Fire review is required.

☐ Complete the City of Palo Alto Electric Utility EVSE application form.
- For EVSEs rated greater than 40A, or those that require an overcurrent protection device (i.e. circuit breaker) greater than 50A, a utility review/approval prior to submittal to Building Department for electric permit is required.
- Submittals may be submitted to Kelly Haruta or taken to 1007 Elwell Ct. for approval by City of Palo Alto Utilities (CPAU) prior to submitting to the Building Department.

☐ If the existing electric service (meter) is to be upgraded:
- 200A or less: Also submit a City of Palo Alto Utility Service Application
- Over 200A: Also submit a City of Palo Alto Utility Service Application and the manufacturer's cut sheets for the proposed new panel

☐ Each submittal must be accompanied by a complete copy of the manufacturer's installation instructions for EVSE/Connector.

☐ Plan sizes shall be minimum 11"x 17" and maximum 24"x 36". The font size shall be legible.

☐ Provide job-specific site plan showing the following:
- Building and street locations
- Proposed EVSE's, accessible EV spaces locations and any bollard protections (CBC 11B-228.3)
- Existing or proposed electric meter location
- Accessible path of travel from the accessible EV parking to the accessible building or facility entrance. (CBC 11B-208.3.1)
- Show the location of the required EVSE disconnects that are a minimum of 10' from each charging station location and readily accessible by the Fire Department.

- ☐ Provide elevation view of the proposed of the ESVE installation and show the height dimensions of the operable parts. (CBC 11B-812.2)

- ☐ Indicate on the drawings that a minimum 8"x10" reflective signs with red background and white lettering stating “Electric Vehicle Charging Station EPO” with 1.5” tall text will be installed at each charging location.

- ☐ EVSE subject to vehicle collision shall be protected. Install bollard on each side in front of charger. Bollards shall be 4” diameter, 2’ below grade and 4’ above ground with reflective stripe at the top. Bollards shall be set 4’ on center from each other.

- ☐ For EVSE installations over 400 lbs., provide structural calculations and details by a California licensed Civil or Structural Engineer for the lateral seismic anchorage per ASCE 7, Section 13.1.4 (CBC 1613.1).

- ☐ Provide details and specifications when EVSE is mounted on a metal post. See Figure CPA 004 below:

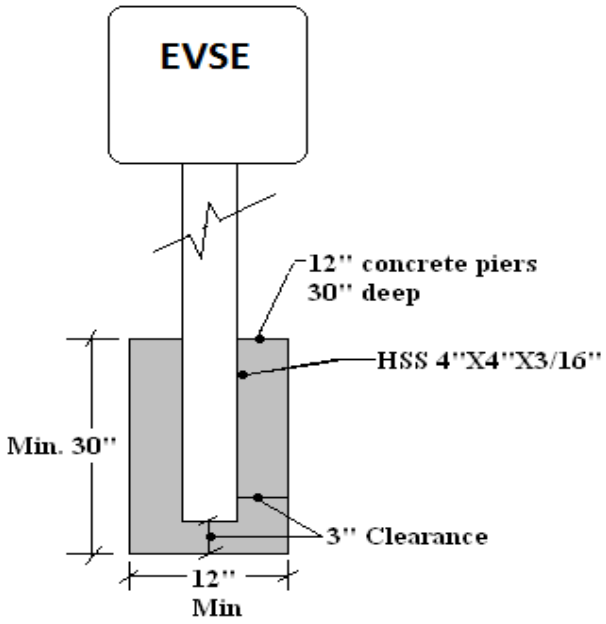


Figure CPA 004 – EVSE Mounted on Metal Post – Sample Specifications

- ☐ Provide the following information per NEC Article 220:
  - Demonstrate that the EVSE has been calculated at 125% on the load calculations
  - Three line diagram must be included in the submittal with the following information (see Figure CPA 005 for example diagram)
  - Wire size, insulation type, distance of the wires from the service point to the EVSEs (include the equipment grounding conductor)
  - Size of the over current device, i.e., circuit breaker
  - The size of the main electric panel, distribution panels (sub panels) and disconnects

ACCESSIBLE PARKING SPACE REQUIREMENTS

☐ When electric vehicle charging stations or spaces are provided, EVSE shall be provided in accordance with CBC 11B-228.3 and Table 11B-228.3.2.1 (see below)

TABLE 11B-228.3.2.1
ELECTRIC VEHICLE CHARGING STATIONS FOR PUBLIC USE AND COMMON USE

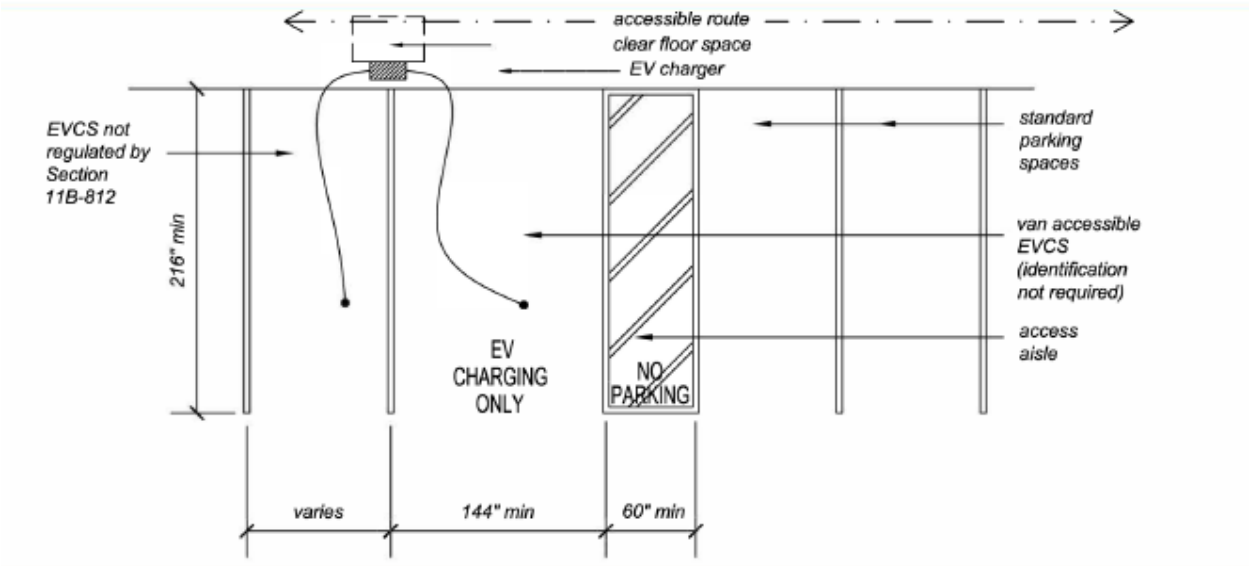
TOTAL NUMBER OF EVCS AT A FACILITY[1]	MINIMUM NUMBER (by type) OF EVCS REQUIRED TO COMPLY WITH SECTION 11B-812[1]		
	Van Accessible	Standard Accessible	Ambulatory
1 to 4	1	0	0
5 to 25	1	1	0
26 to 50	1	1	1
51 to 75	1	2	2
76 to 100	1	3	3
101 and over	1, plus 1 for each 300, or fraction thereof, over 100	3, plus 1 for each 60, or fraction thereof, over 100	3, plus 1 for each 50, or fraction thereof, over 100

1. Where an EV charger can simultaneously charge more than one vehicle, the number of EVCS provided shall be considered equivalent to the number of electric vehicles that can be simultaneously charged.

Figure CPA 008 – Electric Vehicle Charging Stations for Public Use and Common Use
Source: DSA Presentation: Access California New Regulations for Electric Vehicle Charging Stations

☐ Provide accessible parking space details, i.e., dimensions, access aisles, surface markings, and signage as required per CBC 11B- 812.6 through 812.9. (See Figure CPA 009)

Figure CPA 009 – Sample Layout for new EVSEs



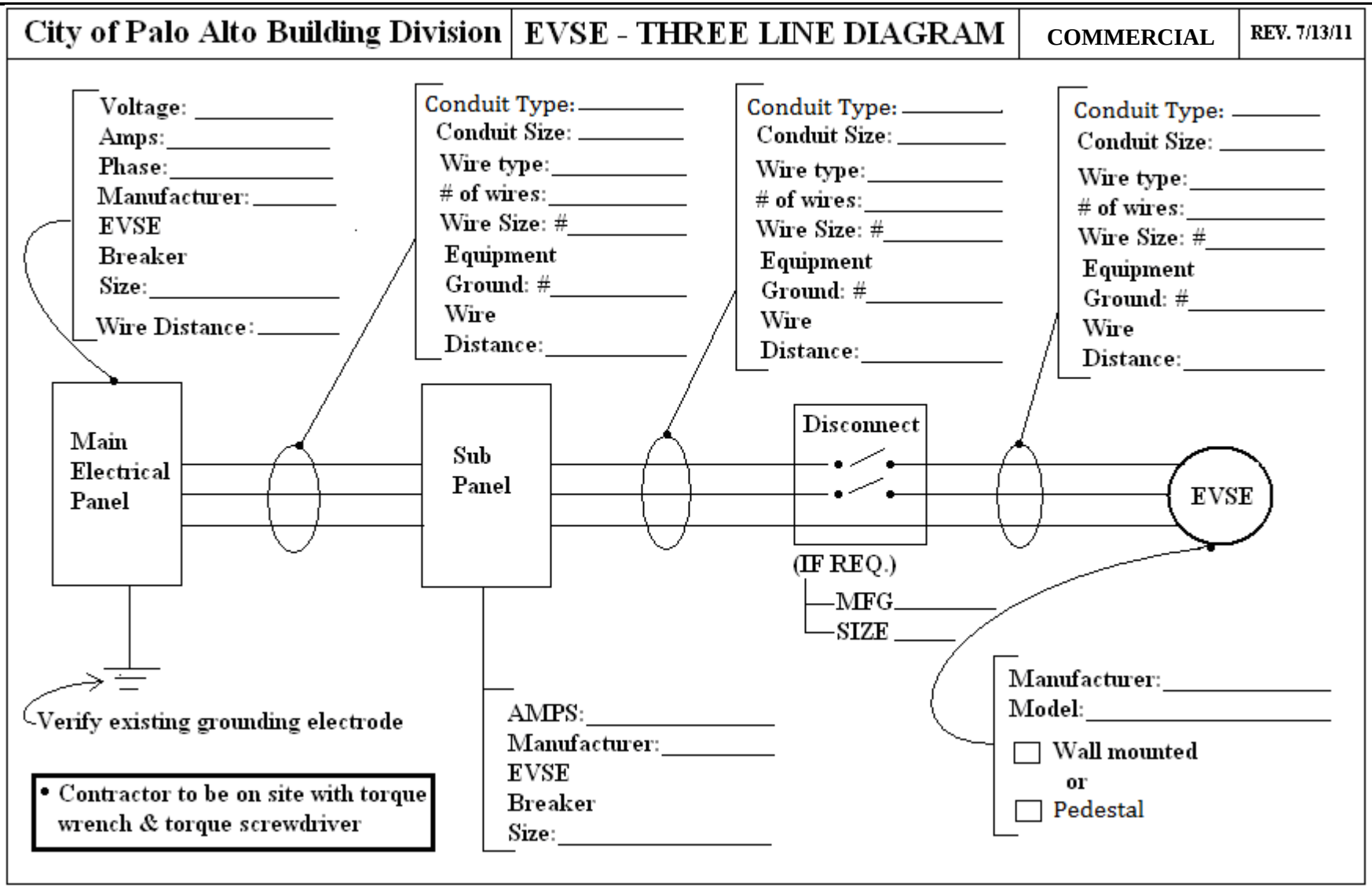


Figure CPA 005 – Three-Line Diagram Example for EVSE Submittal