CITY of BREA

Permit Number: _____

2022 Checklist for Installing Residential Electric Vehicle Charging Station (EVCS) at Existing Facilities

Check One	Type of Charging Station(s) Proposed	Power Levels (Proposed circuit rating)
☐	Level 1	110/120 volt AC (15 or 20 Amps)
☐	Level 2 – 3.3 kilowatt (low)*	208/240 VAC (20 or 30 Amps)
☐	Level 2 – 6.6 kilowatt (medium)*	208/240 VAC (40 Amps)
☐	Level 2 – 9.6 kilowatt (high)*	208/240 VAC (50 Amps)
☐	Level 2 – 19.2 kilowatt (highest)*	208/240 VAC (100 Amps)
☐	Other (provide detail)	

***Plan check fee will be required**

Section 1: PERMIT DESCRIPTION

1. Submittal requirements:
    a. Checklist
    b. Electrical load calculation worksheet (Level 2 only)
    c. Electrical permit application
    d. Site plan
    e. Single-line diagram (Level 2 only)
    f. Manufacturer specifications
2. Does the scope of work on the plans match the electrical permit application description? □Yes □No

Section 2: ELECTRICAL LOAD CALCULATION

1. Electrical load calculation is required, is it included in submittal? (CEC1 220) □Yes □No
2. Based on the load calculation, is a new electrical service panel upgrade required2? □Yes □No
    a. If yes, do plans include the electrical service panel upgrade? □Yes □No
    b. If yes, has a separate permit been pulled for the panel upgrade? □Yes □No
3. Is the single-family residence identified as a condominium? □Yes □No
4. Is the charging circuit appropriately sized for a continuous load (125%)? □Yes □No
5. Is the charging equipment proposed a level 2 – 9.6kW station with a circuit rating of 50 amps or higher? □Yes □No □Not Applicable
6. If yes, is a panel schedule with electrical calculations included with the single-line diagram? □Yes □No □Not Applicable

_____

1 2022 California Electrical Code. Article 220 Branch-Circuit, Feeder, and Service Calculations.
2 The size of the existing service MUST be equal to or larger than the Minimum Required Size of main service breaker. If the existing service panel is smaller than the minimum required size of existing electrical services, then a new upgraded electrical service panel must be installed.

CITY of BREA

Permit Number: _____

Section 3: SITE PLAN & SINGLE LINE DRAWING

1. If yes to Section 2 Q2 and/or Q3, is the required single-line diagram submitted for the proposed project □Yes □No
    a. Are mechanical ventilation requirements triggered for indoor venting requirements per (CEC 625.52(B))? □Yes □No
        i. If yes, is a mechanical plan included with the permit application? □Yes □ No
2. Is the Site plan fully dimensioned and drawn to scale?
    a. Showing location, size and use of all structures? □ Yes □ No
    b. Showing location of electrical panel AND charging system? □ Yes □ No
    c. Showing type of charging system and mounting? □ Yes □ No
3. Is the type of mounting for charging system included if the charging system is not wall-mounted? □Yes □No □Not Applicable

Section 4: COMPLIANCE WITH 2022 CALIFORNIA ELECTRICAL CODE (TITLE 24, PART 3)

1. Does the plan include EVCS manufacturer's specs and installation guidelines? □Yes □No
2. Does the site plan identify the amperage and location of existing electrical service panel? □Yes □No
    a. If yes, does existing panel schedule have room for additional breakers? □Yes □ No
    b. Are sizes for the conduit and conductor included? □Yes □No
    c. Is the charging unit rated more than 60 Amps or more than 150V to ground? □Yes □No
    d. If yes, are disconnecting means provided in a readily accessible location in line of sight and within 50ft of EVCS? (CEC 625.43) ("Within sight" defined as within 50') □Yes □ No
3. Does the charging equipment have a Nationally Recognized Testing Laboratory (NRTL) approved listing mark? (UL 2202/UL 2200) □ Yes □ No
4. If trenching is required, is the trenching detail called out? □Yes □ No
    a. Is the trenching in compliance with electrical feeder requirements from structure to structure? (CEC 225) □Yes □ No
    b. Is the trenching in compliance of minimum cover requirements for wiring methods or circuits? (18" for direct burial per CEC 300) □Yes □No

CORRECTION(S) SUMMARY:

Permit Number:_____

Site Plan: Please provide the following elements on the below site plan

- Draw street location with street name
- Mark location of main panel and location of proposed EV
- charger Mark location of front door and driveway

Main Breaker: _____Amps

EVCS Breaker: _____Amps

Existing

Single-Family Residence