PERMITTING CHECKLIST FOR ELECTRIC VEHICLE CHARGING STATION APPLICATIONS

Electrical installation for electric vehicle charging in single family dwellings and commercial buildings with up to **400 amps of service** (Including any needed charging equipment, service upgrade, receptacle and associated wiring), do not require plan check, and are readily issued as Express Permits in person or e-permits when done on-line.

EVCS shall comply with applicable sections of the California Electric Code (CEC). EVCS shall be listed by UL or another nationally recognized testing laboratory.

For all EVCS, other than those mentioned above, submit the following documents per the checklist below. Please complete the following information related to permitting and installation of electric vehicle chargers/ electric vehicle service equipment (EVCS / EVSE) as a supplement to the application for an electrical and/or building permit. This checklist contains the technical aspects of EVSE installations and is intended to help expedite permitting and use for electric vehicle charging.

Building Plan Check Submittal Documents Required:

Completed **Permit Application for Building Plan Check**, if submitting in person or apply online through ePlanLA (eplanla.lacity.org). **Plan Requirements – See below. Provide the following documents in your in person or electronic plan submittal.**

A.SITE/FLOOR PLAN

A site plan and a floor plan (if located inside a building) must be provided showing the following information:

- Existing building(s) and structure(s)
- Existing parking spaces and proposed location of EVCS parking space(s)
- Dimensioned layout of existing accessible parking spaces, including access aisles
- Location and layout of proposed accessible EV charging station
- Elevation of the charging unit sufficient to demonstrate compliance with the reach ranges for side or front
- approach to the unit by persons with disabilities as required in the Los Angeles Building Code

B.ARCHITECTURAL PLANS

Architectural plans shall show the following information:

- EVCS installed are in compliance with LABC Section 11B-228.3 for the minimum number of required accessible EVCS spaces.
- EVCS installed are in compliance with LABC 11B-812 for dimensions, accessible route, access aisles, reach
- range, identification signage, etc.
- Where rated assemblies are penetrated (through or membrane), an appropriate and listed assembly penetration shall be provided at the time of review and must be made available to the inspector at the time of installation. NOTE: It is not permissible to route conductors or raceways through required stair shafts or exit passageways.

C.STRUCTURAL PLANS

Structural plans and calculations must be signed and stamped by a California registered Civil or Structural Engineer who is responsible for the design and installation of the system. Architectural and Structural plans shall show the following information:

- Location and details for anchorage of EV equipment
- Seismic anchorage calculations for non-structural components per ASCE 7 Chapter 13

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Electrical Plan Check Submittal Documents Required

Completed **Permit Application for Electrical Plan Check**, if submitting in person or apply online through **ePlanLA** (eplanla.lacity.org). **Plan Requirements – See below. Provide the following documents in your in-person or electronic plan submittal.**

A. SITE/FLOOR PLAN

A site plan and a floor plan (if located inside a building) must be provided showing the following information:

- Existing building(s) and structure(s)
- Existing parking spaces and proposed location of EVCS parking space(s)
- Dimensioned layout of existing accessible parking spaces, including access aisles
- Location and layout of proposed accessible EV charging station
- Elevation of the charging unit sufficient to demonstrate compliance with the reach ranges for side or front approach to the unit by persons with disabilities as required in the Los Angeles Building Code
- All disconnects sizes, conduits and conductors routing/sizes, and location of panel/sub-panels connected to the EVCS system and the meter panel.

B. ELECTRICAL PLANS

Electrical plans and calculations must be signed and stamped by a California registered Electrical Engineer who is responsible for the design and installation of the system. The electrical plans shall include the following information:

- Single-line diagram showing the electrical single line drawing showing themain service, sub panels and disconnecting means (as applicable) and theproposed EV charging unit(s). Include/show the size of all overcurrentprotection devices (in amperes) for the main service, sub panels, disconnectsand EV charger circuit supplies. Show conduit sizes and types, and conductorsizes and types.
- Electrical load calculations shall include existing and proposed load(s) thatdemonstrate the that the electrical service and/or distribution equipment isnot overloaded. Note: Unless all electrical equipment and overcurrentprotective devices are listed for use at 100% of rated load, the calculatedload on this equipment shall not exceed 80% of the nameplate rating of theequipment or the over-current protection device (OCPD).
- Electrical panel schedule
- Manufacturers' data sheets for the specified and listed charging equipment.If proposed to be located outdoors, the listing for outdoor use shall beincluded.
- Amperage supplied to charge the electric vehicle
- EVCS has an appropriate NEMA rated enclosure (CEC 110.28) and thewiring method complies with CEC 625.9(A) through (F).
- Based on proposed EVCS location, determine if cord length will reach avehicle's charging inlet without excessive slack and does not exceed 25' inlength (CEC 625.17).
- All enclosures shall have a mounting height between 36" and 48". Connectorheight shall be between 36" and 48" from the ground (CEC 625.29) unlessotherwise indicated by the manufacturer.
- Ensure sufficient space exists around electrical equipment for safe operationand maintenance (CEC 110.26); The minimum required space is 30" wide, 3'deep and 6'6" high and will be higher depending upon system voltage.
- EVCS shall be installed per the requirements of Chapter 3 of the CEC.Conductors shall be sized to support 125% of the rated equipment load(CEC 625.21) unless permitted otherwise.