City of Carmel-by-the-Sea Building
Safety Division
Guidance Document

24-11 Electric Vehicle Charger Submittal Requirements

In order to process and expedite your request for a Level 1 or Level 2 Electric Vehicle Charger/Service Equipment (EVCS/EVCE) permit application, submit the items listed below. Please confirm plan content by ***checking*** the appropriate boxes and ***signing*** below. ***Incomplete submittals will not be accepted for review.*** We do not accept submittals by mail or courier, only electronic submittals are accepted through our web portal or in person via thumb drive. Physical plans are not accepted.

The EVSCS permit may only be issued to the property owner, a class B General Contractor or to a properly licensed C10 Electrical contractor

1. General – Submittal Requirements

- ☐ Signature on all pages by design professional(s)
- ☐ Name, title, registration number, address, email and telephone number of applicable design professional(s)
- ☐ Planning department approval may be required prior to approval of the building permit application.

2. Electric Vehicle Service Equipment Plan Requirements

- ☐ **Cover sheet** shall include, name, address, assessor parcel # (APN), contact information of the property owner and the contractor including license type & license number. General information about the system being installed, including the brand, charger level (1 or 2), amperage of system... Also list the 2022 California Building Code (CBC), 2022 California Electrical Code (CEC), 2022 California Residential Code (CRC), 2022 Fire Code (CFC), 2020 National Electric Code (NEC) & City of Carmel by the Sea Municipal Code (CMC).

- ☐ **Site plan**, shall show a North arrow, all property lines, significant trees, building footprint, building setbacks, existing & proposed electrical location, street & driveway. Include the proposed charger location, main electric panel location and location of any associated electrical equipment with the working space clearances.

- ☐ **Floor plan,** show the proposed location if charger is to be located inside a garage or carport

- ☐ **Electrical single line diagram,** show the main service panel size, conduit type & size, conductor type & size, charger brand & model #, charger kW output, shut down location (over 50 amp). Note – "Smoke and Carbon monoxide alarms required prior to final inspection per CRC R315"

- ☐ **Electrical load calculation,** the existing electrical equipment shall have adequate capacity to supply all the equipment intended to be used at one time. In order to confirm, please provide a whole house load calculation consistent with 2020 NEC Figure 220.1 or ***complete the following load calculation*** form.

- ☐ **Two (2) Digital Photographs** of the Main Service Panel- (1) with the panel "dead front" cover installed (2) with the "dead front" cover removed
  NOTE: Panel boards and load centers that appear compromised, modified, missing identification labels or are known to be hazardous will be required to be replaced. If a new main service panel is proposed, a licensed electrical contractor is required to replace the main service panel. Zinsco & Federal Pacific panel boards are required to be replaced.

- ☐ **Provide documentation of all proposed equipment**, include equipment type, listing, testing agency approvals, equipment installation guideline, cut sheets, etc. of all proposed equipment.

Total Floor Area of Dwelling (NEC 220.11) _____ **SQFT.**

Factor	**Quantity**		**Volt Amperes (VA)**
"General Lighting"			
1. General Lighting (SQFT X 3 VA/SQ FT (Table 220.42)	3 X sqft.		
2. Small Appliance Circuits (1500 VA per circuit) (NEC 220.52(A)) (minimum 2)	1500 X		
3. Laundry Circuit (1500 VA per circuit) (NEC 220.52(B))	1500 X		
4. Total General Lighting Load (Add lines 1, 2 & 3):			
5. First 3000 VA @ 100%:			3000
6. Total General Lighting Load – 3000 =_____ @ 35%=			
7. **Net General Lighting Load** (Per NEC 220.42) **(Add lines 5 & 6):**			
***Fixed Appliances(if insufficient space, use back):**	YES	NO	
• Garbage Disposal			
• Bathroom Fan			
• Microwave			
• Dishwasher			
• Other:			
• Other:			
		Total	
8. 3 or less Appliances, Total Appliance VA; 4 or more Appliances, 75% of Total Appliance VA (NEC 220.53):			
***Other Loads (including motors, EV charger(s), etc.)**	YES	NO	Nameplate Rating (VA)
9. Electric Range (8000VA or Nameplate)**			
10. HVAC			
11. Electric Oven			
12. Electric Dryer (5000 VA minimum)**			
13. Electric Vehicle Charger	✔		
14. Other:			
15. Other:			
16. 25% of largest motor (NEC 430.24)			
Total Service Load Volt-Amperes (VA) (Add lines 7, 8 & 9 thru 16) =			
Total Service Load Volt-Amperes / 240-volts = Amperes			
***Service Rating (Amperes)=**			

* For every "YES" answer, indicate VA rating of equipment

** Nameplate rating must be used if larger

*** Service Rating shall be greater than or equal to the Service load

**** Only for Service Ratings of 120/240V, 225 Amps Max

I have read the above information and have submitted all the required information.

Signature: _____ Print: _____ Date: __/__/__

Staff Use Only- Application # _____ Received By _____ Date: __/__/__