

City of Fairfax, Virginia

FIRE DEPARTMENT / CODE ADMINISTRATION

10455 Armstrong Street • Room 208 • Fairfax, VA 22030-3630 **P** 703.385.7830 • www.fairfaxva.gov/code

The following are general submittal requirements to obtain building and electrical permits for a typical Electric Vehicle Supply Equipment (EVSE) or charging station installation.

1. Scaled Site Plan

a. Identify the complete layout of existing parking spaces and proposed location of EVSE parking space(s) with respect to existing building and structures. Reference 2015 Virginia Construction Code Section 109.2.

2. Professional Engineer

- a. Scaled electrical drawings and load calculations are required to be digitally sealed, signed and dated by professional engineer (electrical) licensed by the State of Virginia. Reference Code of Virginia Section 54.1-402
- b. Electrical plan single-line diagrams showing the system, point of connection to the power supply and the EVSE

3. Physical Damage Prevention

a. Identify means of protection by providing details and establishing location on site plan for area where electrical equipment is likely to be exposed to physical damage. Enclosures or guards are to be arranged and of such strength as to prevent such damage. Reference 2014 National Electrical Code (NEC) Article 110.27(B)

4. Structural Support and Conduit

- a. EVSE foundation detail(s)
- b. Physical damage prevention element detail(s)
- c. Electrical conduit trench details (e.g., under soil, under asphalt, under concrete) Reference 2014 NEC Article 300.5.
- d. All earth work including hand digging requires 811 ticket.

5. Electrical Load Calculations

- a. Electrical load calculations determine sufficiency of existing electrical service for the additional load from EVSE and wiring methods. Reference 2014 NEC Article 625
- b. Electrical Source/Metering

6. EVSE Information

 The EVSE manufacturer's product literature, installation instructions and charger specifications

7. Additional Electrical Service

a. If an additional electrical service and EV electrical service meter panel are a part of the scope of work, provide specific identification signs to provide warning to personnel who may be servicing or need to shut down the electrical meter panels. Reference 2014 NEC Articles 110.22, 225.37 and 230.2 (E)

8. Utility provider notification

a. If electrical service is not provided from a building, utility provider is required to be notified of charger installation to ensure the utility electrical system components are adequately sized to maintain high levels of service and reliability.