LIVERMORE
CALIFORNIA

# Electric Vehicle Charging Stations

## Purpose

This handout summarizes the requirements for both residential and nonresidential Electric Vehicle Charging Stations (EVCS).

## Permits Required

### Residential/Duplex

- A Building Permit is required

### MultiFamily/Commercial/Industrial

- A Site Plan Design Review is required
- A Building Permit is required

## Fees

Planning (multifamily/commercial) $903 minimum
Building Permit Residential $225 per charger.
Commercial $406 per charger.

## Plan Submittal Requirements

### Residential/Duplex

- An electrical plan is required (8.5''x 11''), include the following: See sample Plan (A) below
- Specify panel rating and location of the existing electrical service (example: 200 amp service panel)
- Indicate EV charging system load and circuit size‡
    - Provide disconnect within sight if EVCS is rated more than 60 Amps
- Specify level of EV charging (Level 1* or Level 2**)
- Provide Load calculations when the service panel rating is less than 200 Amps
- Provide manufacturers cut sheets/ installation instructions
- Indicate installation height is min 18'' indoors and min 24'' outdoors above floor/grade level
- Indicate if a second electric meter for EV charging will be installed

### MultiFamily/Commercial/Industrial

Site Plan Design Review

- Provide existing and proposed site plan including:
    - Location of proposed EVCS
    - Show parking and landscaping
- Provide manufacturers cut sheets
- Provide elevation plan or photo with dimensions

Building Permit

- Provide building and electrical plans
- Building footprints and landscaped areas
- Locations of existing and proposed EVCS, panelboard, and service equipment
- Provide accessibility features associated with proposed EVCS/2016 CBC 11B-812
- Provide single line diagram showing existing and added electrical loads with calculations‡
- Indicate levels of EV charging; three levels are allowed in commercial/industrial/ multi-family properties (*, **, †)

## Review Time

Included review time for the entitlement portion and the permit portion

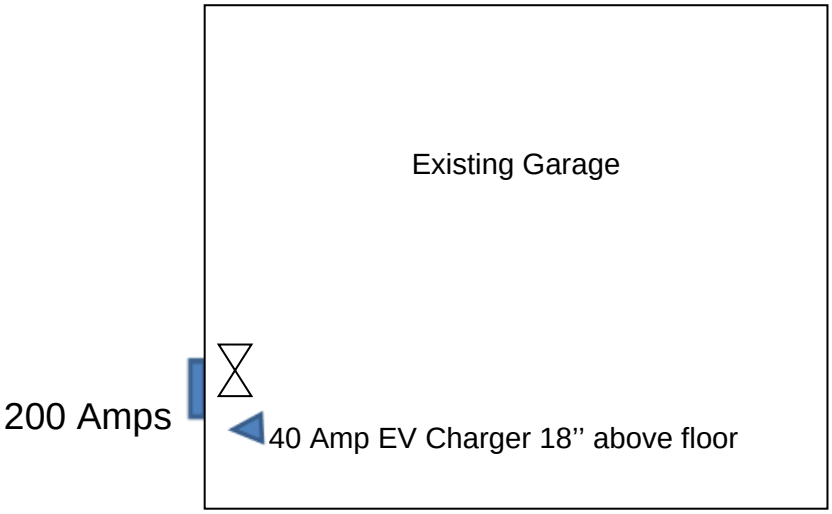
City Hall
Permit Center
Community Development Department
1052 South Livermore Avenue
Livermore, CA 94550
phone: (925) 960-4400
fax: (925) 960-4419
CA Relay: Dial 711
www.cityoflivermore.net

## Additional Resources

*Level 1 - 120 VAC - This is regular household voltage. It can fully charge a depleted battery in six to 10 hours, depending on the vehicle model.
**Level 2 - 240 VAC - This voltage is the type that supports clothes dryers. It can fully charge a depleted battery in three to eight hours, depending on the vehicle model.

†Level 3 - 480 VAC or 208V three-phase - This is high voltage DC charging equipment that requires three-phase electric service. It can charge a depleted battery to roughly 80 percent of capacity in 30 minutes, depending on the vehicle model.
‡Calculated load of chargers are considered continuous loads. Overcurrent protection device shall have a rating of not less than 125% of the maximum load.

Residential Plan Sample




Sample plan (A)

City Hall
Permit Center

Community Development Department
1052 South Livermore Avenue
Livermore, CA 94550

phone: (925) 960-4400
fax: (925) 960-4419
CA Relay: Dial 711

www.cityoflivermore.net