EV Charging Solutions

Cannon offers comprehensive support for EV charging solutions, from brownfield to greenfield projects. With expertise in engineering, planning, and construction, Cannon provides implementation of charging infrastructure for fleet vehicles, buses, and individual occupant cars. This includes Level 1 to Level 3 chargers, accommodating different voltages and kilowatt (kW) ratings essential for efficient charging operations.

Services

Planning / Redevelopment

- Preliminary Site Layout and Feasibility
- Due Diligence and Site Selection
- Power Access Assessment
- Life Cycle Cost Analysis
- Grant Funding Assistance

Civil Engineering

- Parking Layout Site Plan
- Site Circulation Design
- ADA / Accessibility Compliance Design and Review
- Parking Studies and Evaluations
- Foundation and Bollard Design

Surveying and Mapping

- Topographic Surveying
- Record Data Boundary Survey

Electrical Engineering

- Power System Study
- Electrical Site Plans
- Electrical Load Calculations
- Coordination with Local Utility
- Product Vendor Research
- Electrical Layout and Distribution Design
- Lighting Design

Construction Support

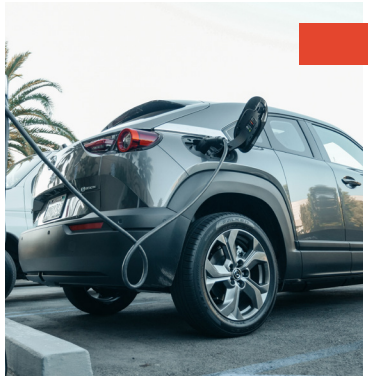
- Permitting and Compliance
- Cost Estimation
- Construction Administration
- Construction Management
- Safety Coordination

Projects

Port of Long Beach EV Charging Stations

Long Beach, California

The Port of Long Beach sought civil and electrical design for the construction of new electric vehicle (EV) charging stations and improvements to an existing parking lot at 725 Harbor Plaza. Cannon provided plans, specifications, an engineer's construction cost estimate, and construction support. The project design included electrical infrastructure to support 18 charging stations, six of which will be constructed in the future. Cannon also proposed solutions so the EV charging stations could be constructed with minimal disturbance to the existing parking lot.



Solvang Parking Lot Upgrades and EV Charging Stations

Solvang, California

To participate in Santa Barbara County's Clean Air Grants Infrastructure Program, The City of Solvang opted to install new EV charging stations in two parking lots; one existing lot to be upgraded, and one proposed parking lot. Cannon developed conceptual and final design documents for the proposed parking lot. The design included low impact development (LID) features mimicking the site's hydrology and permeable materials to promote water infiltration, as well as a sub-basin trash capture device and energy dissipation structure.

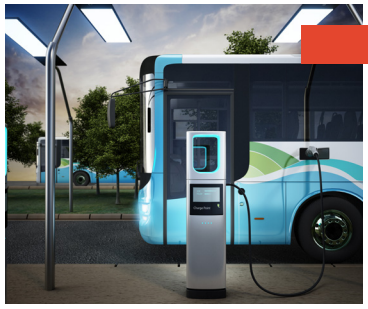
Cannon's electrical team coordinated with PG&E for a new electrical service. The electrical system infrastructure included a main switchboard, distribution panel, step-down transformer, and lighting panel. The City also requested site lighting, an entry gate motor, and a security system.

Downtown Paso Robles Parking Lot Upgrades with EV Charging

Paso Robles, California

Two downtown parking lots in the City of Paso Robles needed upgrades, as many of the features had reached the end of their service life or were not meeting the community's current needs. The City improved these lots and alleys through a capital improvement project. One goal was to provide electric vehicle charging facilities capabilities.

The design included Level 2 electric vehicle charging stations with supply equipment and bollard protection. Cannon specified a new service meter pedestal with capacity to support branch circuits and wiring for charging spaces. Cannon also coordinated with PG&E for new meter service and new PG&E-owned-and-operated lighting in the parking lot.



Transit Yard Electrification

San Luis Obispo, California

To reach their climate action goal of converting all city busses to zero emission busses, the City of San Luis Obispo needed electrical improvements at their Transit Yard. The City selected Cannon to design these improvements, which updated the existing electrical infrastructure, accommodated a future transition to solar power, and built capacity for EV electrical loads. Cannon developed an electrical distribution design for the new charging equipment and prepared construction drawings that included electrical site plans, calculations, details, and conduit routing. Cannon also coordinated with PG&E for upgrades to the existing service.