



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
OFFICE OF THE SECRETARY
Bonifacio Drive, Port Area, Manila



097.13 DPWH

07.17.2025

07.17.2025

DEPARTMENT ORDER)

NO. 136)

Series of 2025)

7/17/2025

**SUBJECT: Guidelines for the Construction of
Electric Vehicle Charging Station
(EVCS)**

In support of Republic Act No. 11697, otherwise known as the "Electric Vehicle Industry Development Act (EVIDA)", and in line with the Department's efforts to promote energy efficiency and green mobility through the installation of Electric Vehicle Charging Station (EVCS) within its offices, the herein attached Guidelines are hereby prescribed for the guidance and compliance of all concerned. These Guidelines aim to ensure uniformity in implementation, compatibility with existing infrastructure, and adherence to safety and electrical standards across all DPWH offices.

This Order shall take effect immediately.

MANUEL M. BONOAN
Secretary

Department of Public Works and Highways
Office of the Secretary



WIN5T02994

Encl.: Guidelines for the Construction of Electric Vehicle Charging Station (EVCS)

9.1 MGM/AGC

Guidelines for the Construction of Electric Vehicle Charging Station (EVCS)

1. Introduction

The accelerating global transition toward electric vehicles (EVs) underscores the urgent need for a robust and reliable charging infrastructure. As EV adoption continues to grow, the strategic planning and deployment of Electric Vehicle Charging Stations (EVCS) have become essential components in shaping urban development, enhancing energy efficiency, and promoting environmental sustainability.

These Guidelines for the Construction of EVCS provide a comprehensive framework for stakeholders involved in the planning and installation of EVCS. The goal is to ensure efficient, safe, and sustainable implementation aligned with national and departmental objectives.

The successful deployment of EVCS is a multidisciplinary effort that requires careful consideration of site suitability, electrical infrastructure capacity, compliance with regulatory standards (including building and electrical codes), enforcement of safety protocols, and mitigation of environmental impacts. These Guidelines aim to support the establishment of a resilient, scalable, and user-friendly charging network that not only accelerates the adoption of electric mobility but also advances the Department's commitment to sustainability and innovation.

2. Scope

The scope of these Guidelines is limited to EVCS intended for own-use within the Department of Public Works and Highways (DPWH) facilities. This includes EVCS that support the charging needs of EVs owned, operated, and maintained by the DPWH. These Guidelines are intended to ensure the safe, efficient, and standardized deployment of EVCS infrastructure in support of the agency's transition to electric mobility.

These Guidelines do not cover EVCS intended for public access, commercial use, or installations operated by third-party service providers for revenue generation, including those in malls, gas stations, or other public areas.

3. Definition of Terms

Electric Vehicle Charging Station (EVCS). Electric Vehicle Charging Station is a facility with equipment for the delivery of electrical energy to EVs or their batteries, installed in an enclosure with special control functions and communications, and may be located off the vehicle with reference to Section 6 of the Implementing Rules and Regulations (IRR) of Republic Act No. 11697, also known as the Electric Vehicle Industry Development Act (EVIDA).

Electric Vehicle Charging Equipment (EVCE). Electric Vehicle Charging Equipment is a device that delivers electric power to charge an electric vehicle, composed of an integrated hardware and software components that manage, control, and ensure safe and efficient charging.

4. Guidelines for the Construction of EVCS

To ensure the safe, efficient, and sustainable deployment of EVCS, all proposed sites must undergo thorough assessment and comply with minimum technical and regulatory standards. This section outlines the key requirements and conditions that must be satisfied prior to the construction of EVCS. The guidelines are structured to address critical aspects of site selection and preparation, including but not limited to location suitability, accessibility, and electrical system compatibility.

The following subsections detail the specific site requirements and electrical system readiness that must be met for an EVCS location to be considered eligible for installation.

4.1. Site Requirements

4.1.1. The preferred site should be as close as possible to an existing main electrical panel or sub-feeder panel to minimize voltage drop and reduce cabling requirements, while taking into account the actual layout and limitations of the facility.

4.1.2. The selected location must be easily accessible to authorized EVs, with ample space for safe approach, parking, and maneuvering. Ideal sites should be secure and highly visible.

4.1.3. The selected location must provide sufficient space to accommodate typical EV types, with a minimum dimension of 2.5 meters by 5 meters.

4.1.4. The site for EVCS shall not be considered a parking slot. EVs shall also be prohibited from parking on EVCS when not charging.

4.1.5. The site must have a level, paved surface (concrete or asphalt) suitable for supporting the charger and for safe vehicle operation during charging.

4.1.6. The site must be elevated or otherwise protected from potential flooding. Low-lying areas or locations with a history of water accumulation shall not be used for charger installation unless the EVCE is installed on an elevated platform with a minimum height of 0.2 meters above the highest recorded flood level.

4.1.7. The charging equipment shall be installed in a covered area such as an existing garage, shed, or building. In the absence of such existing structure, it is recommended to construct a weatherproof structure to house the charging equipment.

4.2. Electrical System Requirements

4.2.1. The site must have a reliable and stable power source capable of supporting the rated electrical demand of the EVCE unit.

4.2.2. There should be an available circuit breaker to accommodate the additional load of the EV Charger.

4.2.3. The electrical system must cater to and be compatible with the power requirements of the EVCE. If the existing infrastructure cannot support the charger's required voltage or capacity, appropriate electrical upgrades may be implemented, including the installation of

step-up transformers, provided that the office has sufficient space and technical capacity. Specifically, a 60 kW DC charger requires a minimum 75 kVA (230V–400V) dry-type step-up transformer, while a 22 kW AC charger requires a minimum 30 kVA (230V–400V) dry-type step-up transformer. All step-up transformers shall comply with the requirements of Item 1102 – Powerload Center, Switchgear, Panel Boards, and Other Overcurrent Protective Devices.

4.2.4. The EVCE shall be installed with a separate meter or sub-meter to allow for monitoring of the EVCS consumption.

4.2.5. Wires and cables shall conform to the requirements of Item 1101, Wires, Cables and Wiring Devices.

4.2.6. Panel boards and circuit breakers shall conform to the requirements of Item 1102, Power load Center, Switch Gear, and Panel Boards and Other Overcurrent Devices.

4.2.7. Conduits, boxes and fittings shall conform to the requirements of Item 1100, Conduits, Boxes and Fittings.

4.2.8. Surge protective devices shall be in accordance with IEC 61643-11, Surge Protective Devices for low-voltage power systems.

4.3. Other Requirements

4.3.1. Signage for the EVCE shall be required and must comply with Annex H.3 of the Department of Energy (DOE) Department Circular (DC) No. 2023-05-0011, as well as the minimum standard specifications outlined in Section 4.11 of the Highway Safety Design Standards Part 2: Road Signs and Pavement Marking Manual.

4.3.2 Only EVCE suppliers and installers accredited by the DOE pursuant to DOE Department Circular No. 2023-05-0011 shall be eligible to install, commission, or service EVCS infrastructure for the DPWH.

4.3.3. The EVCS shall comply with the minimum fire prevention consistent with Section 3.4 of the Implementing Guidelines (IG) for Obligations of EVCS Providers and EVCS Requirements, Specifications and Interconnectivity (ORSI).

4.3.4. The installation site must include physical protection measures such as curbs, bollards, or metal barriers to prevent impact damage from vehicles or other external forces.

5. Implementation and Compliance

All Implementing Offices shall ensure strict adherence to the provisions of these Guidelines, as well as to all applicable laws, rules, and regulations governing the construction and operation of EVCS.