

## New Jersey Department of Environmental Protection (DEP) It Pay\$ to Plug In (IPPI) EV Charging Grant Program

### Compliance and Best Practices Guidelines for Accessible EV Charger Installation

#### I. Introduction

The purpose of this document is to provide IPPI applicants with guidance on how applicants can accommodate current Electric Vehicle Charging and Accessibility standards as they relate to Charging Station siting, design, and installation. As Electric Vehicle Charging technology continues to advance, the legislation addressing Electric Vehicle Charging and Accessibility may be subject to future change. As such, the IPPI Program's Compliance and Best Practices Guidelines for Accessible EV Charger installation may also be subject to change to accurately reflect the most recent legislation.

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#### II. EV Charging and Accessibility Standards: Background

The New Jersey State Uniform Construction Code (UCC) Act authorizes the Commissioner of the Department of Community Affairs to adopt and enforce rules pertaining to construction codes and provides for the administration and enforcement of those rules throughout the State. The accessible provisions of the UCC are found within the [barrier free subcode](#) (N.J.A.C. 5:23-7) and Chapter 11 of the building subcode (N.J.A.C. 5:23-3.14) and provide a standard for the State of New Jersey. These subcodes include requirements for accessible parking spaces, their design and location. The requirements are limited to the State of New Jersey and can in some instances exceed the ADA Standards for parking.

The Americans with Disabilities Act (ADA) is a federal civil rights law that prohibits discrimination in public places against individuals with disabilities. The [ADA Standards for Parking](#) explain federal requirements for accessible parking, including the minimum number of required accessible spaces, and their design and location. In the state of New Jersey, the ADA Standards are largely superseded by the UCC. However, street parking, parking lots not associated with nor serving a building or structure are not covered under the UCC and therefore must meet the requirements of the ADA.

Neither the ADA nor the UCC currently provide standards specific to charging station-equipped parking spots. However, the standards from both documents as they pertain to parking and equipment operation may be applied to charging station-equipped parking spots. This document will provide requirements and guidance based on these prior standards in addition to several industry studies and planning guides that contain best practices for installing charging stations that service accessible parking spaces.

### III. DEP's IPPI Grants Program: ADA-Compliance Requirements

This document describes Accessibility compliance and best practices for entities that receive funding from *It Pay\$ to Plug In* (IPPI), DEP's grant program for electric vehicle charging infrastructure.

The DEP's IPPI [Program Overview and Instructions](#) must be adhered to in order to receive funding from the program. The following requirement applies to Level 1, Level 2, and DC Fast charging stations that are funded by IPPI. (See Section 3.3 Charging Station Eligibility):

*Charging station installation must meet Americans with Disabilities (ADA) compliance guidelines and the New Jersey Uniform Construction Code (UCC) requirements and follow all applicable laws, ordinances, regulations and standards.*

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All applicants must also check the corresponding box on the [Certification Checklist](#) acknowledging that they read this document (Compliance and Best Practices Guidelines for Accessible EV Charger Installation). The checklist must be dated and signed by the applicant.

### IV. Definitions

Listed below are words and phrases that are referred to throughout this document. These words and phrases are defined in relation to their use within this document and may not have universal application.

**“Accessible EVSE Parking Space”** - for the purposes of this document, an Accessible EVSE Parking Space refers to a charging station in an accessible parking space that is constructed with the express purpose of adhering to guidelines and best practices for installing an accessible option for EV charging. Refer to Figure 1 for an example of an Accessible EVSE Parking Space.

**Figure 1: Accessible EVSE Parking Space**

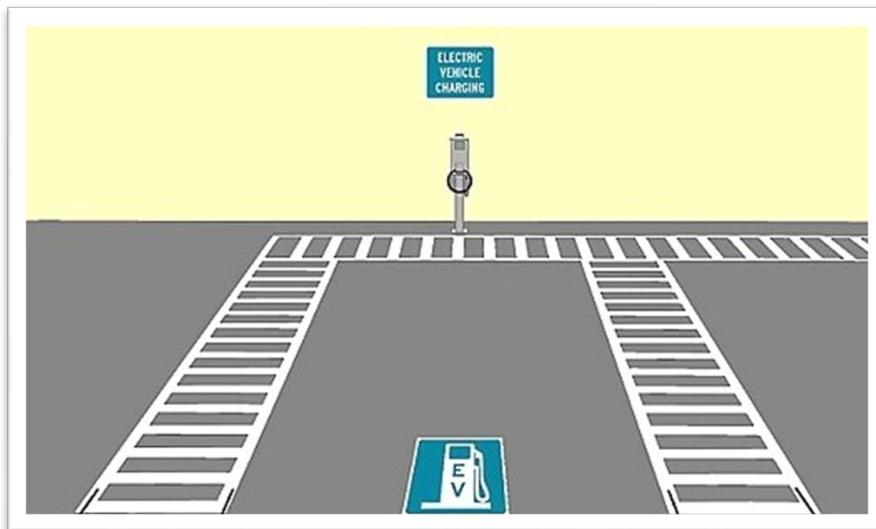
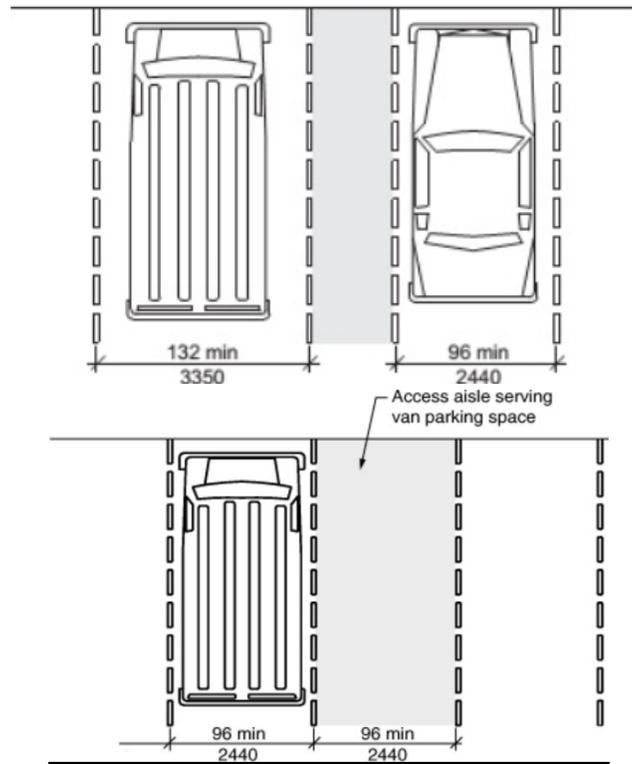


Image Source:

<https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/184-ada-standards/guide/1798-chapter-5-parking>

**“Accessible Parking Space”** – The UCC and the 2010 Americans with Disabilities Act requires that accessible car parking spaces be at least 96 inches (8 feet) wide. Accessible van parking spaces be at least 132 inches wide (11 feet). If the adjacent access aisle is at least 96 inches wide, the van parking space shall be at least 96 inches wide. Refer to Figure 2 for an example of an Accessible Parking Space.

**Figure 2: Accessible Parking Space**



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Image Source:

<https://codes.iccsafe.org/content/ICCA11712017P2/chapter-5-general-site-and-building-elements>

**“Access Aisle”** - Side access aisle of 60 inches wide (minimum) to allow space for wheelchairs and other mobility equipment to be maneuverable in and out of the parking space. Refer to Figure 3 for an example of an Access Aisle.

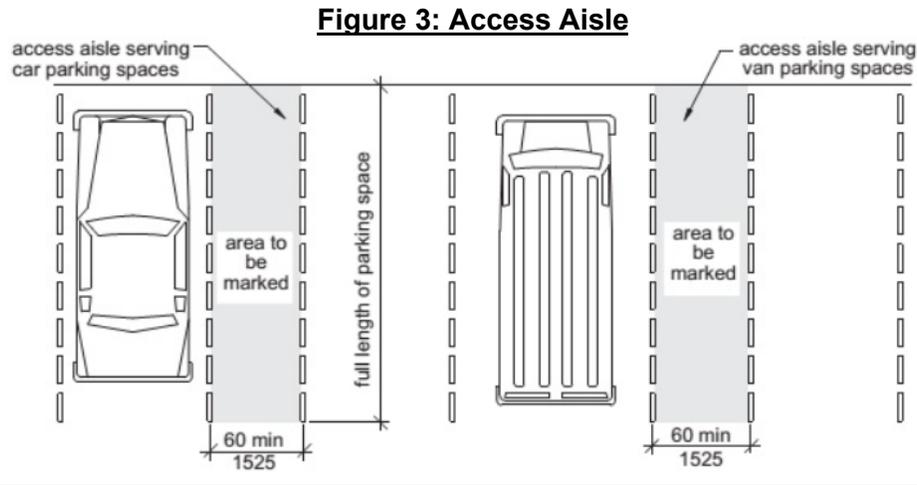


Image Source:

<https://codes.iccsafe.org/content/ICCA11712017P2/chapter-5-general-site-and-building-elements>

**“Reach Range”** - All operable parts of the charging stations, including payment mechanism if present, shall be within 48 inches (4 ft) maximum measured from the surface of the parking space where charging stations are installed. This means that the highest operable part of the equipment can be no higher than 42-inches from the base of the dispenser if mounted on a six-inch curb. Additionally, no object in the surrounding area can be allowed to physically inhibit an individual from accessing the charging equipment from the accessible parking space. This includes any curbs, wheel stops, sign poles, setbacks, bumper guards, and/or bollards. Refer to Figure 4 for an example of reach range consideration and measurements.

**Figure 4: Reach Range**

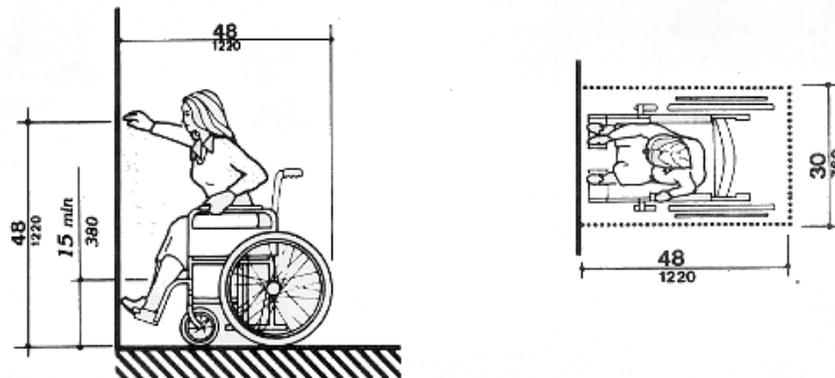


Image Source:

[Fig. 5a High Forward Reach Limit \(ada.gov\)](#)

**“Non-Accessible EVSE Parking Space”** - for the purposes of this document, a Non-Accessible EVSE Parking Space refers to a charging station that is not constructed with the express purpose of adhering to guidelines and best practices for installing an accessible EVSE Parking Space. A Non-Accessible EVSE Parking Space cannot be marked as accessible.

## V. DEP’s IPPI Grants Program: Accessibility Compliance Guidelines and Best Practices

The DEP produced this guideline document to ensure each applicant is aware that federal, state, and local accessibility regulations exist and may be applied to the installation and servicing of an Accessible EVSE Parking Space. Should an applicant choose or otherwise be required to install and service an EV charging station in an accessible parking stall, it is recommended that the applicant adhere to the following guidelines.

### V(a). Installing an Accessible EVSE Parking Space

While there is no common national standard for Accessible EVSE Parking Spaces, many concepts are addressed within existing Federal guidelines and/or required within State or municipal codes. When installing an Accessible EVSE Parking Space, general requirements often found within these existing guidelines and/or codes indicate that the following must be provided or adhered to:

Signage and Markings - DEP’s IPPI [Program Overview and Instructions](#) require signage and floor paint designating the parking space for Electric Vehicles only. All signs must be visible and mounted near the Charging Station. The [UCC](#) and [ADA Standards for Accessible Design](#) have specific signage and marking requirements for accessible parking spaces BUT don’t necessarily apply to charging stations. If the facility has multiple compliant Accessible EVSE Parking Spaces, it is required that each Accessible EVSE Parking space must display a sign indicating the parking stall is sized to accommodate accessible vehicles and that priority should be preserved for such users unless all other stalls are in use. *Refer to Figure 5 for an example of signage for an Accessible EVSE Parking Space.*

Required Minimum Number of Accessible Parking Spaces - Because an EVSE Parking Space must be used for EV charging only, the parking space associated with the charging station is not considered to be an UCC/ADA- compliant accessible parking space by UCC/ADA Standards and cannot count towards the minimum number of required UCC/ADA-compliant accessible parking spaces under the UCC and the 2010 Americans with Disabilities Act. **Before creating an Accessible EVSE Parking Space, ensure that the associated parking facility will continue to meet all ADA and UCC requirements for minimum number of accessible parking spaces once installation is complete.**

Electric Vehicles Only – As per the IPPI [Program Overview and Instructions](#), each charging station must be located at a parking space that is designated for electric vehicles only. A dual-port charging station must have two EV-only parking spaces.

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**Figure 5: Signage**



*This figure illustrates the proper presentation of Accessible EV Charging Signage. The top sign indicates the space is accessible and the bottom is an EV Charging Designation sign.*

Accessible Parking Space – An accessible parking space for the vehicle must be provided with an adjacent side access aisle to allow space for wheelchairs and mobility equipment. The dimensions of the parking space and adjacent side aisles must meet the UCC/ADA standards. *Refer to Figure 2 for an example of an Accessible Parking Space.*

Van Accessible Parking - As per New Jersey's reference standard A117.1-2009, the first accessible parking space installed at a facility must be van accessible and have a minimum width of 132 inches. For every SIX or fraction of six accessible parking spaces, at least one shall be a van-accessible parking space.

Connecting Equipment - Equipment cords must be retractable or have a place to hang the connector and cord a safe and sufficient distance above the ground or pavement surface. Any cords connecting the charger to a vehicle shall be configured so that they do not cross a driveway, sidewalk, or passenger unloading area.

Unobstructed Pathway - The location of the charging station and the position of bollards and wheel stops must be carefully considered to ensure there is an unobstructed path to the charging station, and that Reach Range is ensured.

Reach Range - Reach range must always be considered to ensure all operable parts of the charging equipment are accessible to all persons, including wheelchair users.

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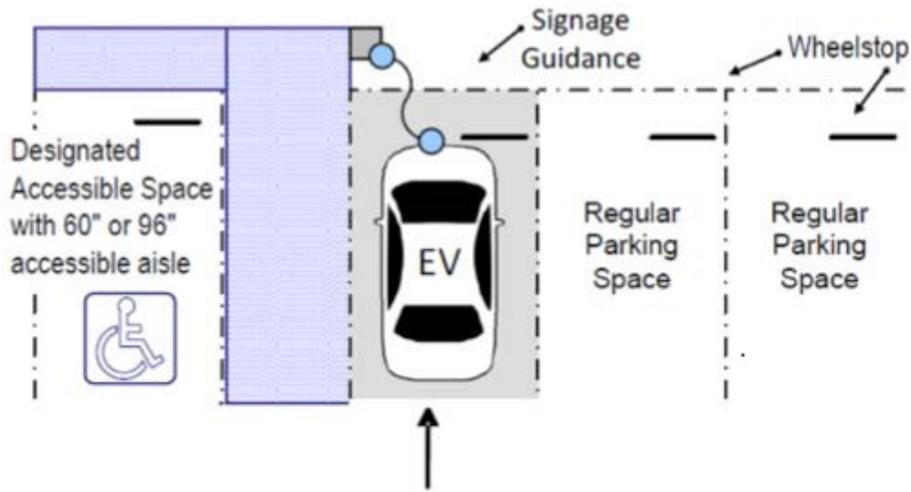
Listed below are additional considerations for differing Accessible EVSE Parking Space installation scenarios:

- A. Installation of charging equipment at an existing accessible parking space. The existing accessible parking stall should have a properly sized parking stall in addition to a barrier free aisle access under UCC and ADA requirements. The resulting charging station must retain aisle access as well as provide a barrier free route to the charging equipment. Considerations should be taken to ensure cords or other pieces of charging equipment do not block pedestrian paths or adjacent accessible routes when plugged into a vehicle.
- B. Installation at an existing non-accessible parking space, with the intent to make the final parking space accessible. Ensure that the resulting Accessible EVSE Parking Space will provide an appropriately sized accessible parking space and aisle access with a route to the charging equipment. This may require the initial parking space to be expanded to accommodate accessible parking space requirements. Ensure that the initial parking space area can accommodate the area requirements of an Accessible EVSE Parking Space prior to beginning installation.
- C. Construction of an entirely new parking space for the sole purpose of housing an Accessible EVSE Parking Space. It is recommended that access aisles are included on both sides of the Parking Space to provide appropriate user mobility. The constructed Parking Space must be accessible, providing the appropriate minimum amount of parking area for cars or vans. When subsequently installing an Accessible EVSE Parking Space at the entirely new parking space, ensure that it will be accessible along

the aisle pathway. Refer to Figure 1 (pg. 2) for an example of a properly constructed parking space housing an Accessible EVSE Parking Space.

- D. Installation of a Dual-Port EV Charger to support both an Accessible EVSE Parking Space and a Non-Accessible EVSE Parking Space. A Dual-Port EV Charger may be installed in between an accessible parking space and regular parking space to create both an Accessible EVSE Parking Space and a Non-Accessible EVSE Parking Space. Only Dual-Port charging equipment may be used in this scenario so that both EVSE Parking Spaces can be used independently. Refer to Figure 6 for an example of properly constructed parking spaces servicing both accessible and non-Accessible EVSE Parking Spaces.

**Figure 6: Dual-Port EV Charger Servicing an Accessible EVSE Parking Space and a Non-Accessible EVSE Parking Space**



**Accessible EV Charging Station**

- Includes pedestal mounted charging station, signage, and barrier free routes to charging equipment and the building.
- The barrier free area adjacent to the Designated Accessible Space shall be striped in blue and be 60" or 96" wide.

Image Source:

[https://afdc.energy.gov/files/u/publication/WPCC\\_complyingwithADArequirements\\_1114.pdf](https://afdc.energy.gov/files/u/publication/WPCC_complyingwithADArequirements_1114.pdf)

## V(b). Installing a Non-Accessible EVSE Parking Space

When installing a Non-Accessible EVSE Parking Space, we recommend as best practice that each station meet general reach range requirements to the greatest extent possible. We also recommend that applicants check local ordinances to see if there are any additional EVSE Parking Space requirements.

## VI. Reporting UCC/ADA Compliance-Related Project Updates to the IPPI Grants Program

If an application is submitted for charging equipment that would not initially be servicing an Accessible EVSE Parking Space, but the project is then subsequently requested or otherwise required by another entity to service an Accessible EVSE Parking Space, the applicant must notify the IPPI grants program. This is important because a grant modification may be necessary, particularly if the equipment and/or charger location must be changed as a result. Failure to provide this notification may result in the cancellation of the application or grant.

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## VII. Additional Resources

Listed in this section are additional resources that provide a wealth of information on accessibility compliance and best practices as it relates to parking and/or EV charging. Please note that this is not a comprehensive list. Applicants are recommended to review these documents.

*2010 ADA Standards for Accessible Design:*

(<https://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards.htm#pgfld-1008283>)

*Accessible and Usable Buildings and Facilities, ICC A117.1-2017: Chapter 5. General Site and Building Elements:*

(<https://codes.iccsafe.org/content/ICCA11712017P2/chapter-5-general-site-and-building-elements>)

*DCA Model Statewide Municipal EV Ordinance*

(<https://www.nj.gov/dca/dlps/home/modelEVordinance.shtml>)

*New Jersey Barrier Free Subcode:*

([https://www.nj.gov/dca/divisions/codes/codreg/pdf\\_regs/njac\\_5\\_23\\_7.pdf](https://www.nj.gov/dca/divisions/codes/codreg/pdf_regs/njac_5_23_7.pdf))

*New Jersey Division of Codes and Standards, 2018 International Building Code, New Jersey Edition, Chapter 11 – Accessibility:*

(<https://codes.iccsafe.org/content/NJBC2018PA2/chapter-11-accessibility>)

*New Jersey Guide to Accessible Parking:*

([https://www.state.nj.us/humanservices/dds/documents/BROCHURES/2020/New\\_Jersey\\_Guide\\_to\\_Accessible\\_Parking\\_Booklet\\_2019.pdf](https://www.state.nj.us/humanservices/dds/documents/BROCHURES/2020/New_Jersey_Guide_to_Accessible_Parking_Booklet_2019.pdf))

*United States Access Board – ADA Guide - Chapter 5: Parking Spaces:*

(<https://www.access-board.gov/ada/guides/chapter-5-parking/>)

*United States Department of Energy - ADA Requirements for Workplace Charging Installation:*

([https://afdc.energy.gov/files/u/publication/WPCC\\_complyingwithADArequirements\\_1114.pdf](https://afdc.energy.gov/files/u/publication/WPCC_complyingwithADArequirements_1114.pdf))