

SCHEDULE 11 - SITE DESIGN REQUIREMENTS

1. Operational Service Life

The operational service life of each site Approved for installation and operation by Conwy County Borough Council (CCBC) shall be a minimum of ten (10) years from the point of installation.

The EVCPO shall reflect the required operational service life in:

- a. the quality of the design, fabrication and installation of each charge point unit and the associated infrastructure; and
- b. the regime devised to operate, inspect, test, maintain, repair and renew the charge point unit and the associated infrastructure in accordance with **Schedule 15**.

If during the 10-year period the EVCPO and CCBC agree that the charge point equipment should be updated or replaced, this should be discussed with CCBC and may be permitted by CCBC provided all works are at the expense of the EVCPO.

2. Rapid charge EVCPs

Where rapid charging units are to be installed, the EVCPO shall provide EVCPs that meet the minimum requirements contained as part of **Schedule 12**.

3. Site Layout and Infrastructure

The EVCPO shall subject each EVCP site to a formal design process in which:

- a. the design and layout of the site is determined in accordance with the requirements of this document; the particular requirements and recommendations of the EVCP unit manufacturer; and Good Industry Practice;
- b. designs and documentation are prepared for the purposes of securing any necessary permissions for use of the site in accordance with **Schedule 13**; safely constructing the site in accordance with the Implementation Plan and construction phase plan; and safely operating and maintaining the site in accordance with **Schedule 15**; and
- c. consideration is given to the safe operation, maintenance, renewal and decommissioning of the site, and the measures necessary to address any residual safety hazards for individuals that may come into contact with the site once it is operational.

CCBC shall provide the EVCPO with a site in each of the locations identified in **Schedule 2**. Along with assurances that -

- a. the design and layout of the site has been determined in accordance with the requirements of this document; the particular requirements and recommendations of the EVCP unit manufacturer; and Good Industry Practice;

- b. designs and documentation are prepared for the purposes of supporting any necessary permissions for use of the site in accordance with the lease agreement and safely constructing the site in accordance with the Implementation Plan and construction phase plan; and safely operating and maintaining the site in accordance with [the Operating schedule]; and
- c. consideration has been given so that the EVCPO can undertake to the safe operation, maintenance, renewal and decommissioning of the site, and the measures necessary to address any residual safety hazards for individuals that may come into contact with the site once it is operational.

The EVCPO shall provide (at a minimum) the following items of infrastructure at each EVCP location in accordance with the requirements of this Schedule:

- a. one or two EVCP units and their foundations (quantity as specified in **Schedule 2** and agreed in the implementation plan going forwards). CCBC will ensure that a minimum of two paved parking spaces are provided at sites where one EVCP is required and a minimum of three paved parking spaces are provided where two chargers are required. If any disruption to these spaces or the surrounding area occurs during the installation of the charge point or power supply the EVCPO will be required to reinstate the surface.
- b. one (or two if required) feeder pillar (cabinet) to house the electrical connection supply and associated equipment.
- c. Any ground or electrical installation work required in order to connect the charge points to the feeder pillar.
- d. Vehicle restraint system; and
- e. Traffic signs and road markings at time of installation

CCBC shall identify sites for the EVCPO such that the EVCPO can design and construct the EVCP site so that the needs of disabled electric vehicle users are met. The EVCPO shall apply the guidance in BS 8300-1 (Design of an accessible and inclusive built environment. Part 1: External environment – Code of practice) when determining the standard of provision of access routes to the EVCP unit, and the location, orientation and form of construction of the charge point unit and the associated infrastructure.

4. Parking Bay(s)

CCBC will provide a minimum of two adjacent bays where one EVCP is required and three adjacent dedicated bays at sites where two charge points are required, so that a second vehicle

can use the charging point unit if required. At least one of the bays is required to have the minimum dimensions and features shown in Figure 2 which have been derived from BS 8300-01.”

NOTE: CCBC MAY RETAIN THE RIGHT TO CHARGE THE CUSTOMER FOR THE USE OF THE PARKING BAY WITHIN PAY AND DISPLAY CAR PARKS.

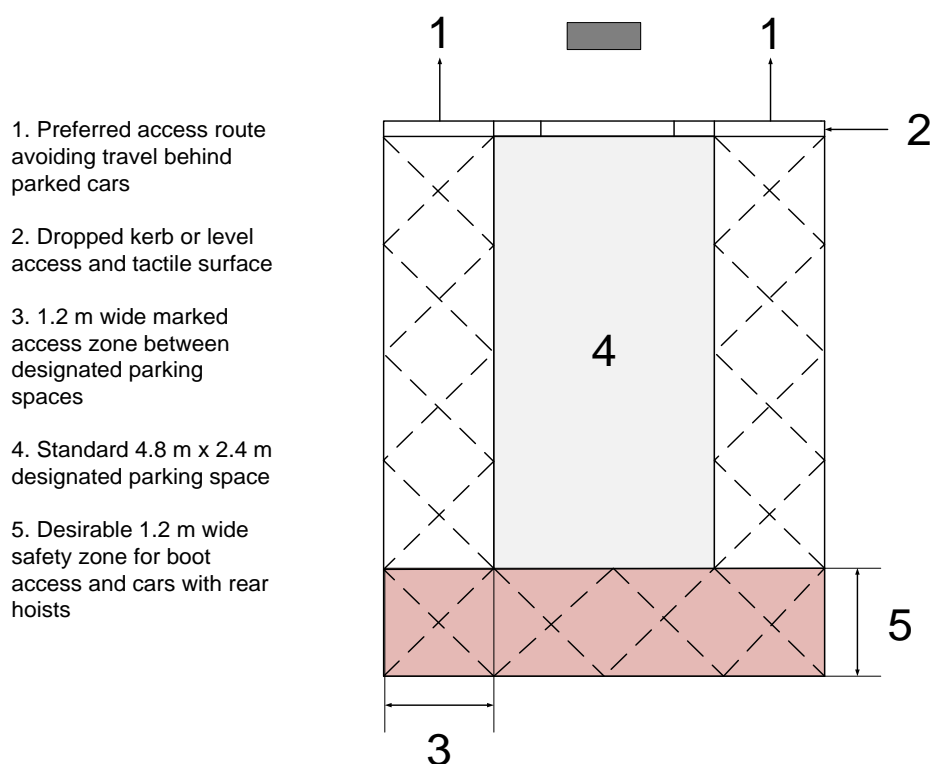


Figure 1 Parking Bay Requirements

It is recognised that as an EVCP can supply two vehicles at the same time, multiple bays (more than three) may be required to ensure adequate access to the charging points at sites where more than one charge point is installed. The EVCPO will need to take in to account the topography of the individual site / car park and ensure that this is accounted for when submitting their proposed design as part of the Stage gate 1 approval process. Please note that only one of the bays is required to have the minimum dimensions and features shown in Figure 2.

Vehicle access to and from the dedicated parking bays shall be readily available from the nearest interface with the public highway.

The final layout needs to comply with the [Welsh Electric vehicle charging infrastructure: national standards](#) and include signs and bay marking as specified within the standards and illustrated below.

4.2 Traffic signs

Charge points should be easily identified by users through clear and consistent signage. Whilst drivers can search apps for charge point locations, this is not always precise which makes signage very important.

All traffic signs in Wales that display text should be bilingual with the Welsh language displayed as to be seen first, in accordance with the [Welsh Language \(Wales\) Measure 2011](#).



Prescribed sign within Schedule 4 of the [Traffic Signs Regulations and General Directions 2016](#) and also described in guidance from the [Traffic Signs Manual](#).

Signage should also highlight any restrictions associated with parking in the bay, such as maximum duration of stay. Regular cleaning and maintenance of signage and information panels is recommended to ensure that they remain legible.

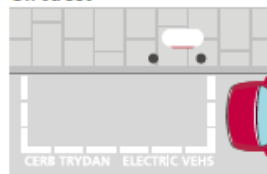
[Consumer Experience at Public Chargepoints](#) suggests a lack of signposting to public charge points along motorways, A-roads, at MSAs and destinations.



Sign used to indicate the location of a charge point.

4.3 Road markings

On-street



Road markings for on-street parking bays with charge points installed adjacent should comply with the [Traffic Signs Regulations and General Directions 2016](#). The dotted road marking may be provided with the text omitted.

Off-street



This guidance recommends that road markings for off-street parking bays with charge points in Wales should:

1. Have a bay (min 2.4m x 4.8m)
2. With a white EV icon (same as traffic sign)
3. And white hatching on all sides (min 1.2m)

All off-street bays should use hatching to make bays accessible for all customers.

The size of the EV bay should be considered if there is a need to accommodate larger vehicles.

5. Vehicle Restraint Systems

The EVCPO shall provide vehicle restraint systems to protect each EVCP unit from low speed impacts (up to and including 30mph) by errant vehicles.

The vehicle restraint systems employed shall not obstruct access to the EVCP unit by users or maintenance personnel.

The vehicle restraint systems employed shall not cause damage to the EVCP unit if subject to a low speed impact (up to and including 30mph) from an errant vehicle.

6. Traffic Signs and Road Markings

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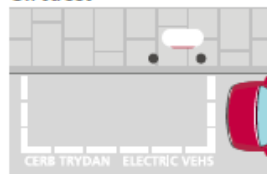
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The size of the EV bay should be considered if there is a need to accommodate larger vehicles.

The EVCPO shall furnish each EVCP site with clear road traffic signs and road markings to indicate:

- the dedicated parking bay where vehicles must park to access the EVCP unit;
- user access routes, which have been agreed with CCBC and site owner, to and from the dedicated parking bay and charge point unit within the car park (if charger is obscured or not readily visibly upon entry to car park); and
- the restrictions applicable to users of the dedicated parking bay.

The EVCPO shall provide at least one (1) post-mounted traffic sign adjacent to each EVCP unit identifying that the dedicated parking bay is to be used for parking for “electric vehicle recharging point only” and as illustrated above. The traffic sign shall comply with The Traffic Signs Regulations and General Directions 2016 and be specified using BS EN 12899-1 – Fixed, vertical road traffic signs.

The EVCPO shall provide a symbol or text road marking as illustrated above to identify the dedicated parking bays; including any logos or bay markings features required by the Local Authority or landowner. Road markings used to demarcate the dedicated parking bay shall employ a different colour to that used to identify any adjacent parking areas.

The traffic signs and road markings applied to EVCP sites shall be consistent with the [Welsh Electric vehicle charging infrastructure: national standards](#). The Local Authority shall be consulted as to the required designs and markings as requested. The EVCPO shall take into account requirements of the Local Authority (and the landowner, if this is not the same)

and the geography of the individual site/car park and submit their proposed markings to support their layout design as part of the Stage gate 1 approval process.

All signs and marking must be provided in both the Welsh and English languages as shown above, with Welsh over English text.

It is the responsibility of the EVCPO to oversee the process of providing signs and bay markings, either by undertaking this work themselves or by appointing a suitably qualified sub-contractor or Local Authority to undertake this work on their behalf.

In some circumstances CCBC may fund additional signage to indicate the location of the charge point e.g. signage from the SRN. CCBC will be responsible for the installation of this signage.

7. Incoming Electrical Supply

The incoming electrical supply to each rapid EVCP unit sourced by the EVCPO will be a minimum of 100kVA.

8. Electrical Installations

Electrical designs and installations shall comply with BS 7671 (Requirements for Electrical Installations) and the applicable guidance within the Code of Practice for Electric Charging Equipment Installation published by The Institution of Engineering and Technology (IET).

9. CCTV

Wherever possible CCBC will aim to provide a site which has CCTV coverage as a safety provision for EVCP users and to deter criminal behaviour. However, this cannot be guaranteed.

10. Site Identification

Each of charge points of the installation shall be identified by the EVCPO with a unique identification or serial number.