

Electric Car Charging Policy at Aderrig Phase 2

1.0 Proposed Allocation of Spaces

The provision of e-car facilities within the Aderrig Phase 2 scheme will be broken into 3 categories, as detailed below. The locations of these spaces are indicated on the attached drawing, reference 21-072 E1008.

1.1. Off-Curtilage Live E-Car Charging Spaces

(Indicated in Red on 21-072 E1008)

Electric car charging facilities in the public realm within the Aderrig Phase 2 development will be provided in 10% of all off-curtilage spaces which will result in a total of 22 spaces being provided.

1.2 Off-Curtilage Future E-Car Charging Spaces

(Indicated in Blue on 21-072 E1008)

In addition to the provision live charging facilities that will be provided, a ducting network will be installed during the construction phase to allow the future installation of E-Car charging facilities to all remaining off-curtilage parking spaces within the proposed development.

In addition to ducting to the spaces, provision will also be made to provide ESB metering facilities for the proposed future spaces and all negotiations with ESB Networks for the provision of power supplies to the site will include the future network capacity and ducting requirements of all car charging spaces.

1.3 On Curtilage Spaces

(Indicated in Green on 21-072 E1008)

In addition to the off-curtilage provisions referred to above, each individual dwelling that has on-curtilage parking will be wired to allow the future installation of an EV Charging Point. A dedicated circuit will be provided on the Consumer Unit with wiring to an external junction box on front/side of the dwelling.

This will allow purchasers to easily install an EV Charging Point with minimal disruptive works within the dwelling thereby removing one barrier that may discourage potential electrical vehicle purchasers.

2.0 Specificaton & Management of Charging Facilities

2.1 Proposed Public Realm Electric Vehicle Charging Point Specification

Car charging points will meet the following specification:

- GPRS Networked suitable for commercial & on-street locations.
- RFID access control allowing regular users to pay using a contactless identification card which can be sourced from the charging point vendor.
- Mobile phone payment enabled using appropriate App
- Overcurrent & earth leakage detection per socket.
- Approved energy meter with utilisation logging/history.
- Full online monitoring and control through a GSM/GPRS modem for monitoring and billing.

- Open Charge Point Protocol (OCPP) 1.5 compliant with back office support provided by the vendor.

2.2 Billing method for EV Charging Point Users

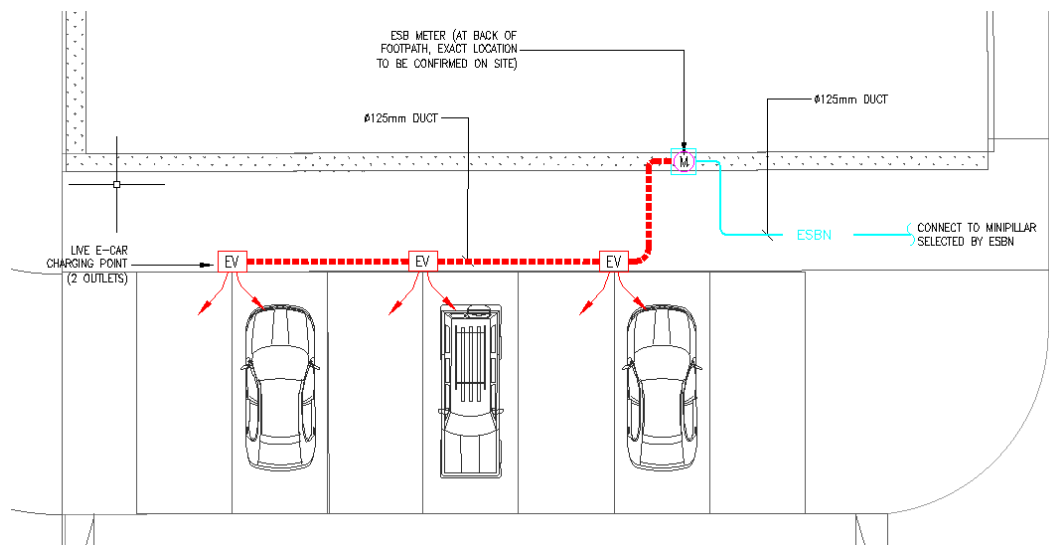
The EV Charging Points provided will be Open Charge Point Protocol (OCPP) compliant. Each meter will also be fitted with Radio Frequency Identification (RFID) capability to allow contactless payment via Near Field Communications (NFC) from a pre-registered payment card or from a smartphone app. The proposed operator of the EV Charging Points will also offer a telephone service with phone numbers printed on the charging point for occasional users of the facility.

The operator of the EV Charging Points will then collect the revenue from each user of the electric charging points via these payment methods and then pass this revenue onto the entity responsible for paying for the supply of electricity to the units. A commercial arrangement will need to be entered into between the Management Company of the development and the provider of the charging points.

2.3 Administration and Payment of Electricity Supply to EV Charging Points

Once the revenue associated with the use of the EV Charging Points has been collected, the monies collected have to be used to cover the costs of the electricity supplied.

The electric vehicle charging points which are located in the public realm will be connected fed from a local metered connection (located in an ESB approved meter cabinet) which in turn will be supplied from a nearby ESB Networks mini-pillar as shown on the typical details below. A dedicated ESB Networks meter will be provided in the cabinet which will allow the electricity consumption to be metered by an electricity supplier. Each meter cabinet can supply multiple charging points subject to detailed design and loading requirements.



This arrangement can be repeated around the site with meter cabinets located close to each cluster of EV charging points. The Meter Point Reference Numbers (MPRNs) for each meter around the site will be assigned to a single electricity supply account and the management and payment of the bill for the electricity use at each of these points can be administered by the Management Company

This arrangement will ensure that the costs associated with the supply of electricity to the EV Charging Points will remain separate from all other electricity supply costs within the development. This will provide future flexibility in how these facilities are managed with the possibility that they could be incorporated into a network of nationwide chargers if such a network were to be developed.