

1. **Description:** The Contractor shall allow for the infrastructure to facilitate a vehicle charging system based on the provision of 20 % of the car park to have the ability to charge an electric vehicle.

The total number of spaces available is 389.

20% of these spaces overall should be identified for use by EVC. The 20% overall will include Staff, Visitors, disabled and Fleet [secure side].

25% of the allowance has been requested for the staff area which includes 5 spaces in side the secure side for fleet charging.

78 EVC spaces have been identified across the site for EVC which are made up of the following:

The load proportioned to EVC would be 516kVA - all systems will need to be based on a load sharing system.

- 12 Visitor spaces based on providing 12 x 22kW chargers with a load allowance of 268kW across the day. This allows for visitors to charge quicker with a shorter duration of stay and up to 22kW.
- 59 Staff spaces based on providing 7 kW chargers and a load allowance across the day of 177kW. These are anticipated to be a longer slower charge due to the shift patterns of staff
- 2 Accessible spaces based on providing 7 kW chargers and a load allowance across the day of 7kW.
- 5 Fleet spaces based on providing 7kW charger and load allowance of 64kW. This allows for longer periods of charge and load will be shared. These are also Expected to be used mainly through the night but with an allowance of two in the day as well. The origin of supply for the fleet spaces shall also be the EVC arrangement within the car park. It is expected that these systems will be directly plugged in without the need to charge for use.

The Contractor shall have the responsibility of providing all below ground ducting, co ordinated routes, plinths and kiosks necessary.

At stage 4c a 523kVA load has been allowed for with the supply and shall be taken from the EVC Substation located within the car park.

The EVC kiosk shown within the car park has been sized to house an 800 kVA transformer and this shall be the origin of the EVC system.

The MoJ, or operator are expected to appoint a specialist EVC organisation in the near future, but until that decision is made the aesthetic of the EVC chargers may change between manufactures.

Below are a selection from Rolec as an example which cover the 7 and 22kw options we are expecting.

ROLEC offer the following Quantum range which can provide 7.4 or 22kw versions.



## QUANTUM

### Intelligent EV charging pedestal

A sophisticated and resilient EV charging point, providing a combination of durability and impeccable design for all locations. The integrated LED amenity lighting also provides greater visibility of the charging bays and surrounding areas.

This future-proof pedestal effortlessly integrates with any chosen OCPP back-office management system, delivering a plug-and-charge or pay-to-charge solution. EV drivers can enjoy a hassle-free charging experience, initiated via a new contactless payment option, mobile app or RFID card/fob.

### Future-proof & feature rich

- Plug & charge, app, contactless payment (model dependant), or RFID controlled charging
- Choose from 1x, 2x or 4x universal charging socket(s)
- Up to 7.4kW or 22kW charging output(s)
- PME fault detection (no earth rod required)
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (Can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in AC overload & fault current protection (RCBO)
- Built-in 6mA DC leakage protection
- Cable lock feature (can be permanently locked by user)
- Integrated RFID reader(s)
- LED amenity lighting head (Photocell controlled)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Surface or roof mountable
- OZEV grant fundable
- Designed & manufactured in the UK

Or, ROLEC offer the following Autorange range which can also provide 7.4 or 22kw versions



## AUTOCHARGE

### Intelligent EV charging pedestal

The AUTOCHARGE is a robust and hard-wearing EV charging pedestal. Its heavy-duty and vandal-resistant features, make it the ideal solution for exposed locations such as workplaces and public car parks.

This future-proof OCPP compliant pedestal can offer a simple plug & charge or pay-to-charge solution via the EV driver's smartphone and/or RFID card/fob through any chosen OCPP back-office management system.

### Future-proof & feature rich

- Plug & charge, mobile app or RFID controlled charging
- Choose from 1x or 2x universal charging socket(s)
- Up to 7.4kW or 22kW charging output(s)
- PME fault detection (no earth rod required)
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (Can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in AC overload & fault current protection (RCBO)
- Built-in 6mA DC leakage protection
- Switchgear & components behind lockable door
- Cable lock feature (can be permanently locked by user)
- Integrated RFID reader(s)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Surface or root mountable
- OZEV grant fundable
- Designed & manufactured in the UK

Or, ROLEC offer the following Basiccharge range which can also provide 7.4 or 22kw versions



## BASICCHARGE

### Intelligent EV charging pedestal

The BASICCHARGE is a simplistic and affordable EV charging pedestal. This versatile charger's integrated LED amenity lighting also provides greater visibility of the charging bays and surrounding areas.

This future-proof OCPP compliant pedestal can offer a simple plug & charge or pay-to-charge solution via the EV driver's smartphone and/or RFID card/fob through any chosen OCPP back-office management system.

### Future-proof & feature rich

- Plug & charge, mobile app or RFID controlled charging
- Choose from 1x or 2x universal charging socket(s)
- Up to 7.4kW or 22kW charging output(s)
- PME fault detection (no earth rod required)
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (Can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in AC overload & fault current protection (RCBO)
- Built-in 6mA DC leakage protection
- Cable lock feature (can be permanently locked by user)
- Integrated RFID reader(s)
- LED amenity lighting head (Photozell controlled)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Surface or roof mountable
- OZEV grant fundable
- Designed & manufactured in the UK