David Lloyd Leisure, Bicester

Car Charging Provision

February 2021

Hulley & Kirkwood Consulting Engineers Ltd

Castle House

Horizon Centre

28-38 Upper High Street

Epsom

Surrey

KT17 4RS

(**t**): 01372 747 047

(**f**): 0870 928 1028

(**e**): hk.london@hulley.co.uk

(**w**): www.hulley.co.uk

Prepared By:	Gordon McInnes
Authorised By:	Gordon McInnes
Revision:	02
Date:	February 2021
File Location:	K:41602/Reports

David Lloyd Leisure, Bicester

Car Charging Provision

February 2021

REV	DESCRIPTION	PREPARED BY	DATE
Issue No. 1	First Issue	J G McInnes	Oct 2020
Issue No. 2	Updated	J G McInnes	Feb 2021

Index:

1.0 Proposal

To comply with the planning conditions for electrical vehicle charging provisions, it is intended to provide the following infrastructure within the current project.

- Installation of 3 twin 7kW chargers
- Installation of ducting to facilitate a further 3 twin chargers in the future.

The initial build will provide the critical 2 twin charging points with provision for ducts to suit 3 further twin stations - refer to drawing 41602(62)101.

2.0 Single Outlet

The Pod Point Solo Charger - Commercial is a single vehicle charging charger designed for commercial purposes only. The Solo Charger is available in a universal socketed model only. The Solo is available in a variety of charging rates.

Speed category	Fast Charging
Charging rates (s)	3.6, 7, 22kW
Product family	Solo

Single vehicle charging

Wi-Fi enabled

3 Year warranty

Smart Reporting & Pod Point Network enabled

Socketed Solo

3.0 Twin Outlet

The Pod Point Twin Charger is a dual Type 2 socketed vehicle charger suitable for commercial and public installations. The twin charger is available for both single and 3 phase electrical supplies and is compliant with a pay as you go charging system for drivers. Every twin charger includes and ships with a surface mount foundation plate.

Speed category	Fast Charging
Charging speed (s)	3.6kW, 7kW, 11kW & 22kW
Product family	Twin

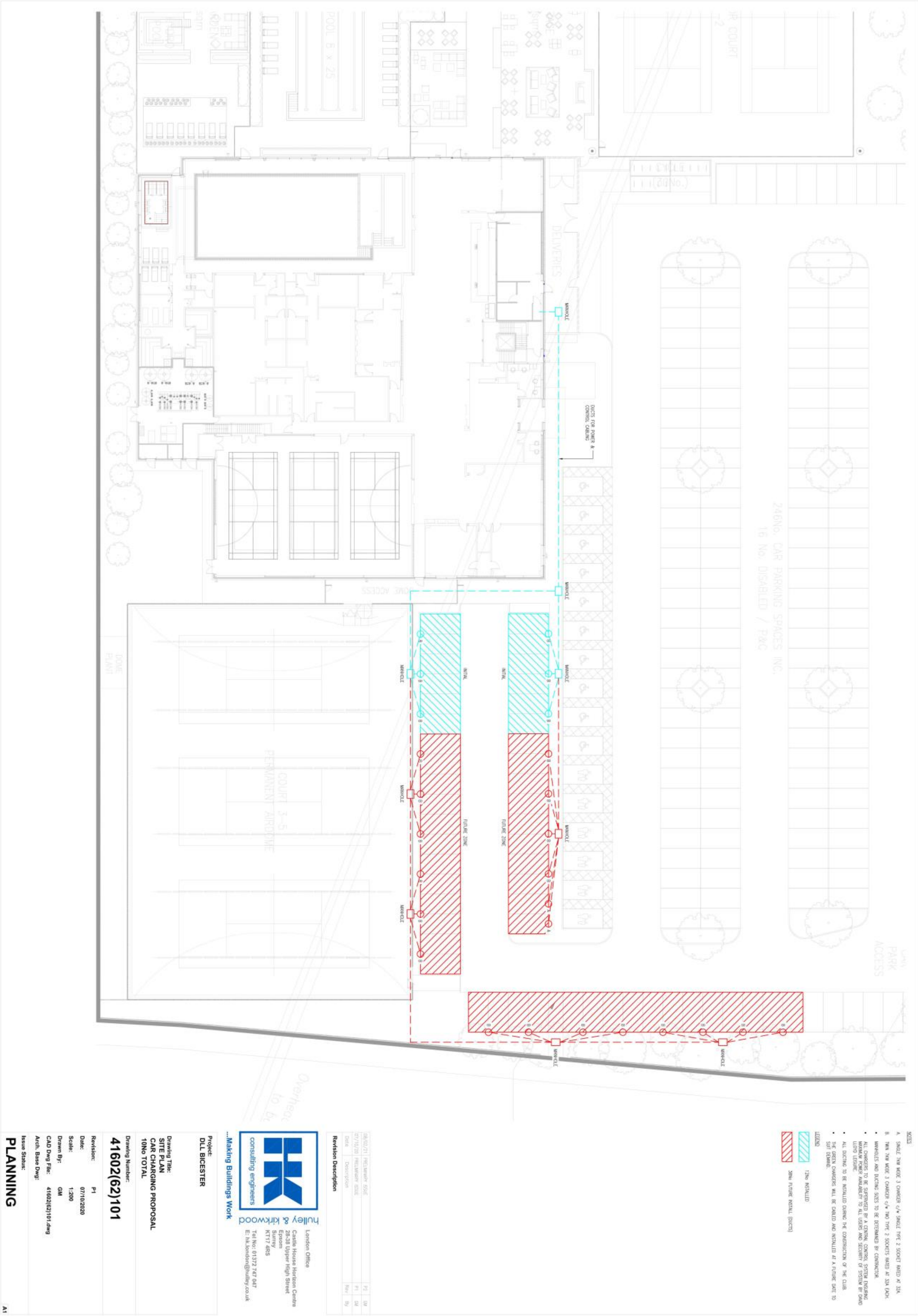
Dual vehicle charging

Wi-Fi & 3G/4G enabled*

3 Year Warranty

Smart Reporting & Pod Point Network enabled

Surface Mount Foundation attached


Project:
DLL BICESTER
Drawing Title:
SITE PLAN
CAR CHARGING PROPOSAL
10No TOTAL
Drawing Number:
41602(62)101
PLANNING
...Making Buildings Work
consulting engineers
hulley & kirkwood

4.0 COMMON FEATURES

4.1 Physical Properties

Socket type	Universal Type 2
Socket height	1000mm
Enclosure rating	IP54 Mennekes Socket

4.2 Power

Charge protocol	Mode 3
Rated frequency	50 Hz
Over-current protection	Internal (dynamic)
RCD protection	Internal 30mAh resettable (per socket)**
DC vehicle fault protection	Internal 6mAh DC (per socket) (BS7671:2018)
RCD protection (main unit)	Internal 100mAh (time delayed)
Upstream RCD protection	Optional
Standby power consumption	8 Watts max

4.3 Standards and Compliance

Socket compliance	IEC62196-2:2016 (with lock and lock status)
Standards compliance	• LVD 2014/35/EU • EMCD 2014/30/EU • EN61851-1 and -22 • IEC62196-2:2016 • CE Certified

The Pod car vehicle chargers are already installed across the David Lloyd Leisure estate.

5.0 Layout Drawing

Refer to the site layout drawing 41602(62)101 for details of the proposed ducting and vehicle charging station layouts.

6.0 Impact on Utility Infrastructure

The car charging provision will add additional electrical load to the building to support the charging provision.

The initial two twin chargers are included within the base build allowance for a new club. The addition of three twin chargers at 7kW will add 40kW to the building load without restriction.