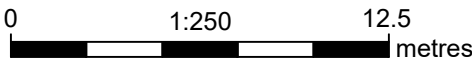




The details provided on this drawing are subject to comments by all the relevant approving authorities or overseeing organisation. No construction works shall take place until technical approval has been obtained by the approving authority or overseeing organisation. It is to be understood that these drawings and the information shown are preliminary only and shall not be used for construction. Should the contractor commence work on site prior to obtaining technical approval, then it is entirely at their own risk and no liability shall be accepted by SHD Lighting Consultancy Ltd.

PR09 TO BE FITTED WITH MANUFACTURERS FRONT & REAR SHIELDS DURING INSTALLATION



CRESCENT

GENERAL NOTES

- Before construction commences, the site engineer shall ensure that all design information is mutually compatible with all other drawings and documents provided by the overseeing organisation and all drawings and documents are to be read in conjunction with one another.
- In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately.
- SHD Lighting Consultancy Ltd accept no liability in the event of not being notified and where construction work has commenced.
- This lighting design has been prepared in accordance with the HEMSA/HEA Guidance Note - CDM2015 Regulations, Issue 1.1 dated 09/04/15 - Procedure 2 and The Construction (Design and Management) Regulations 2015 - PART 3 Health and safety duties and roles - 9. Duties of designers.

NOTES

- All drawings and documents are to be read in conjunction with one another and are mutually compatible and shall be read as such.
- Any inaccuracies are to be reported to the overseeing organisation immediately.
- The information on this drawing does not account for installation considerations, site conditions or provide any form of risk assessment.
- Electrical installation work shall be carried out in accordance with the requirements of the latest edition of the IET wiring regulations, BS 7671
- The planting of trees near to lighting columns is to be avoided as future growth may inhibit lighting levels. Due to the layout of the plots and associated driveways it is inevitable that there will be conflict with proposed landscaping features. Where such instances occur the street lighting column locations will take precedence in order to satisfy the requirements of the British Standard.
- The calculation shown by this drawing assumes that the whole area being considered is in the same plane, i.e. there are no changes in gradient or elevation and no account has been taken for the blocking effect caused by buildings, trees, etc.
- Final lighting unit positions shall be agreed onsite with the overseeing organisation.
- Lighting unit foundations shall be designed in accordance with the manufacturer datasheet's for the columns and soil types present.
- Lighting columns shall be located to the rear of the footpath or verge, unless stated otherwise. If this is not possible the minimum setback distance for any lighting column to be erected from the kerb face shall be 800mm.
- Before construction commences, the site engineer shall ensure that all setting out information is mutually compatible with all the drawings and documents provided by the designers.
- Lighting unit positions indicated upon this drawing may change without prior or additional notice due to local site or environmental constraints subject to designers approval.
- The developer will be required to arrange payment for any energy liability charges with their electricity supplier and will be responsible, unconditionally, for the condition, operation and any risk or liability of all the street lighting equipment on all privately owned sections of the development.

STATUTORY SERVICE NOTES

- Current statutory service record plans should be obtained by the contractor / overseeing organisation before the commencement of any street lighting installation or removal works. It should be assumed by the contractor that not all services have been identified during the design period. It is the responsibility of the contractor to ensure that all unidentified services are carefully located and reported.
- The contractor shall identify the location of any overhead electrical or communication equipment prior to the undertaking of any onsite works. Should the presence of such equipment be identified, the contractor shall consult with the relevant statutory undertaker for further guidance.
- Installation and Removal works should be carried out in accordance with Energy Network Association Technical Specification 43-8, Electricity at Work Regulations 1989, Construction Design and Management (CDM) 2015 & G39/1 and all other relevant Health and Safety Executive regulations.
- All works in the vicinity of any overhead cables shall conform to the requirements of Health and Safety Executive, Guidance Note GS6 "Avoidance of danger from overhead power lines"
- All works in the vicinity of underground mains or cables shall conform to the requirements of Health and Safety Executive, Health and Safety Guidance HGS47 "Avoiding danger from underground services" and any additional requirements specified by the relevant undertaker.
- The contractor will be responsible for liaison with the undertakers and for programming the agreed protection and / or diversion works to any statutory undertakers apparatus into the overall works programme

LIGHTING CLASSIFICATION

This lighting design has been produced in accordance with: BS 5489-1:2020, CEN/TR 13201-1:2014, BS EN 13201-2:2015 & BS EN 12464-2: 2014 outdoor lighting documents and guidelines.

Car Park lighting classification: BS 5489-1:2020, Table 4 & BS EN 12464-2:2014, Table 5.9

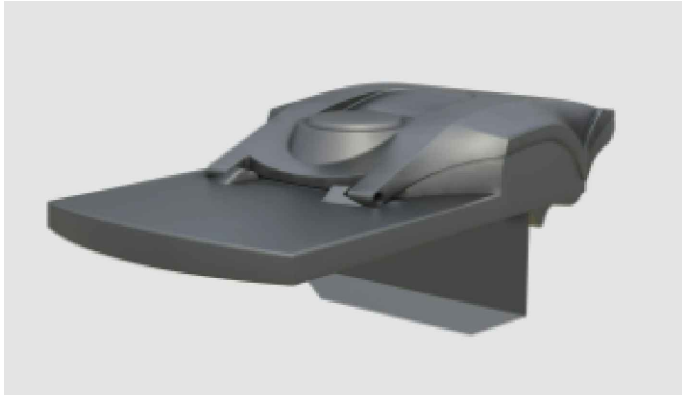
Maintained lighting levels for outdoor car parks
Light traffic: parking areas of shops, terraced & apartment houses, cycle parks

Minimum maintained average illuminance (Eav): >5.00 lux
Lighting uniformity (Emin/Eav) > 0.25 (25%)

Access Roads lighting classification: BS 5489-1:2020, Table A.5

Minimum maintained average illuminance (Eav): >3.00 lux <4.50 lux
Minimum illuminance (Emin): >0.60 lux
Lighting uniformity (Emin/Eav): >0.20 (20%)

All luminaires to be fitted with manufacturers rear shields before installation. Model: HWD BLS/100R



Example Image: ASD HWD Rear Shield



Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base with glass flake root protection.
Column to be manufactured to: EN 40, BS EN 1461 & BS 5649 standards as supplied by Mallatite, CU Phosco, Valmont Stainton or similar.
Luminaire: ASD Lighting Highway Diamond Elite
Mounting Type: Post top mounted
Manufacturer Ref: HWD2-#3K08 700-A5-CLO-Gen5
Lumen Output: 2.00klm
Charge Code: 42 0018 0000 100
Luminaire Wattage: 18w
Colour Temperature: Warm White (3000K)
Luminaire Tilt Inclination: 0°
Luminous Intensity: G3
Control Gear: Xitanium LED driver
Control Type: Lucy Zodion ZCELL 20 lux (1:1 ratio) mounted in 7 pin NEMA base
Supply: Private cable network
Primary Isolator: 32A double pole switch with BS 88 Type 2 6A fuse to luminaire
Internal Wiring: Internal wiring to luminaire shall be 1.5mm² PVC insulated flexible cable
Door Orientation: Perpendicular to kerb edge facing away from oncoming traffic



Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base with glass flake root protection.
Column to be manufactured to: EN 40, BS EN 1461 & BS 5649 standards as supplied by Mallatite, CU Phosco, Valmont Stainton or similar.
Luminaire: ASD Lighting Highway Diamond Elite
Mounting Type: Post top mounted
Manufacturer Ref: HWD2-#3K12 500-A5-CLO-Gen5
Lumen Output: 2.31klm
Charge Code: 42 0019 0000 100
Luminaire Wattage: 19w
Colour Temperature: Warm White (3000K)
Luminaire Tilt Inclination: 0°
Luminous Intensity: G3
Control Gear: Xitanium LED driver
Control Type: Lucy Zodion ZCELL 20 lux (1:1 ratio) mounted in 7 pin NEMA base
Supply: Private cable network
Primary Isolator: 32A double pole switch with BS 88 Type 2 6A fuse to luminaire
Internal Wiring: Internal wiring to luminaire shall be 1.5mm² PVC insulated flexible cable
Door Orientation: Perpendicular to kerb edge facing away from oncoming traffic



1m² concrete hard standing around base compartment of proposed lighting column.



Proposed 450mm x 450mm composite modular chamber to provide duct access complete with lockable heavy duty cover and frame denoted 'STREET LIGHTING' on cover.



Proposed 6mm² XLPE/SWA/PVC 3 core cable with copper conductors, laid in 100mm orange UPVC ducting denoted with 'STREET LIGHTING' at 100mm intervals diametrically opposed, laid in trench, depth to invert to be minimum 450mm in footway and minimum 750mm in carriageway

Chambers and ducting location's shown are indicative only and final setting out positions to be determined by the site engineer or overseeing organisation.

UNIT IDENTIFICATION KEY

PR** Private lighting column identification number

ELECTRICAL CONNECTION TYPE

Private cable termination type:
Refer to SHD895-SHD-HEL-LEVE-DR-EO-Electrical-R0

ISOLUX CONTOUR KEY

- 0.20 Isolux contour line
- 0.60 Isolux contour line
- 1.00 Isolux contour line
- 2.00 Isolux contour line

RO	INITIAL DESIGN FOR REVIEW AND COMMENT	22/02/2022	SRH
REV	DESCRIPTION	DATE	BY

SHD

info@shdlighting.co.uk 07834 490 192 www.shdlighting.co.uk

SCHEME:	OFF LEVENSHULME ROAD, GORTON		
DRAWING:	PRIVATE LIGHTING DESIGN		
CLIENT:	WATSON HOMES		
DRAWING NUMBER:	SHD895-SHD-HEL-LEVE-DR-EO-Electrical-R0	DRAWN:	SRH
	SHEET 1 OF 1	CHECKED:	SRH
CONTRACT NUMBER:	SHD895	DATE:	22/02/2022
		APPROVED:	
		REVISION:	R0
PRELIMINARY DESIGN - NOT FOR CONSTRUCTION			