
0 1:250 12.5 metres

**GENERAL NOTES**

1. 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.
2. In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately.
3. SHD Lighting Consultancy Ltd accept no liability in the event of not being notified and where construction work has commenced.
4. 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**

1. All drawings and documents are to be read in conjunction with one another and are mutually compatible and shall be read as such.
2. Any inaccuracies are to be reported to the overseeing organisation immediately.
3. The information on this drawing does not account for installation considerations, site conditions or provide any form of risk assessment.
4. Electrical installation work shall be carried out in accordance with the requirements of the latest edition of the IET wiring regulations, BS 7671
5. 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.
6. 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.
7. Final lighting unit positions shall be agreed onsite with the overseeing organisation.
8. Lighting unit foundations shall be designed in accordance with the manufacturer datasheet's for the columns and soil types present.
9. 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.
10. 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.
11. 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.
12. 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**

1. Current statutory service record plans should be obtained by the contractor / overseeing organisation before the commencement of any street lighting installation or removal works.
2. 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.
3. 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.
4. 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.
5. 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"
6. 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.
7. 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 outdoor lighting documents and guidelines.

Lighting classification: P5 (BS 5489-1:2020,Table A.5)

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

Luminaires use a warm white (3000k) colour temperature LED light source with reduced blue light output and mounted at 0° to the horizontal plane as per recommendations in Guidance Note 08 (Bats and Artificial Lighting in the UK) as published by The Institution of Lighting Professionals and Bat Conservation Trust.

Horizontal illuminance (contours indicate projected lux values at ground level, excluding the screening effect of buildings, trees, hedges, etc.)

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.

Qty 4 — 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 at 0° tilt |
| Manufacturer Ref: | HWD2-#3K04 500-S4-CLO-Gen5 |
| Lumen Output: | 0.79klm |
| Charge Code: | 42 0008 0000 100 |
| Luminaire Wattage: | 8w |
| Colour Temperature: | Warm White (3000k) |
| Luminous Intensity: | G3 |
| Control Type: | Lucy Zodion SS6 10 lux (1:1 ratio) mounted in 7 pin NEMA base |
| Dimming Profile: | Dusk until 21:00: 100% lumen output 21:00 until 06:00: 50% lumen output 06:00 until Dawn: 100% lumen output |
| 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 galvanised steel feeder pillar incorporating electrical Kwh meter (Model: TOFCO Ltd: FP140 or equivalent)

Proposed 6mm² XLPE/SWA/PVC 3 core cable with copper conductors, laid in 100mm orange UPVC ducting denoted with 'STREET LIGHTING' at 1000mm intervals diametrically opposed, laid in trench, depth to invert to be minimum 450mm in footway and minimum 750mm in carriageway

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

Road crossing to Cumberland Council specification

**UNIT IDENTIFICATION KEY**

**PR**** Private lighting column identification number
**FP**** Feeder pillar identification number

**ELECTRICAL CONNECTION TYPE**

**IDNO** Independent Distribution Network Operator connection
**T**** Private cable termination type:
Refer to SHD1349-SHD-HEL-ARLE-DR-EO-Electrical-R0

**ISOLUX CONTOUR KEY**

0.20 Isolux contour line
0.40 Isolux contour line
0.60 Isolux contour line
1.00 Isolux contour line
2.00 Isolux contour line

| REV | DESCRIPTION | DATE | BY |
|---|---|---|---|
| R0 | INITIAL DESIGN FOR REVIEW AND COMMENT | 27/01/2024 | SRH |


SHD
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| | |
|---|---|
| SCHEME: | OFF ARLECDON PARKS ROAD |
| DRAWING: | PRIVATE LIGHTING DESIGN |
| CLIENT: | RG PARKINS |
| DRAWING NUMBER: | SHD1349-SHD-HLG-ARLE-DR-EO-Lighting Layout-R0 — SHEET 1 OF 1 |
| DRAWN: | SRH |
| CHECKED: | SRH |
| APPROVED: | |
| CONTRACT NUMBER: | SHD1349 — DATE: 27/01/2024 |
| SCALE @ A1 | 1:250 |
| REVISION: | R0 |

**PRELIMINARY DESIGN - NOT FOR CONSTRUCTION**