



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

In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified

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.

All works are to be carried out in accordance with the current

Cumberland Council street lighting design specification. The information on this drawing does not account for installation considerations, site conditions or provide any form of risk assessment.

No account is taken for the blocking effect caused by buildings,trees, etc.

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.

Column positions indicated upon this drawing may change without prior or additional notice due to local site or environmental constraints subject to designers approval.

6. Any inaccuracies are to be reported to the overseeing organisation or site engineer immediately.

The contractor shall liaise with the Distribution Network Operator in relation to the programming and coordination of any works associated with the connection and disconnection of street lighting equipment.

The use of Independent Distribution Network Operator's (IDNO's) is permitted. Any chosen IDNO shall have a Service Level Agreement in place with Cumberland Council prior to adoption of the new

The contractor shall provide Cumberland Council street lighting department with the name, address and emergency contact details for any appointed IDNO.

10. IDNO contact details shall also be stored inside the base compartment of each lighting column via means of an identification

11. Any existing trees are to be cutback, removed or relocated elsewhere to avoid interference with the street lighting luminaire or

prevent any future access or maintenance. 12. The planting of trees near to lighting columns is to be avoided as future growth may inhibit lighting levels.

13. Horizontal clearance for the maximum tree canopy shall be greater

than 5m from any proposed lighting columns. 14. Final lighting column identification numbers shall be agreed with the

Cumberland Council street lighting engineer. 15. The Contractor shall provide the Cumberland Council with as-built

drawings, test certificates and column and lantern data sheets in accordance with Cumberland Council street lighting specification.

16. Lighting column foundations shall be designed in accordance with the manufacturer data sheets for the columns and soil types present

(see also Cumberland Council street lighting specification). 17. The minimum distance for a lighting column to be erected from the kerb face in a service strip shall be 1.0 metres.

18. The developer will be required to pay any energy liability charges with their electricity supplier until the date of formal adoption of the street lighting equipment.

19. The developer will be responsible, unconditionally, for the condition, operation and any risk or liability of all the highways electrical equipment on all approved works until the date of formal adoption of the street lighting equipment.

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"

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.

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%)

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.

Proposed galvanised heavy duty steel lighting column of 6.0 metre nominal height with a planted base as supplied by Mallatite to Cumberland Council street lighting specification.

Column Reference: 8917 PT

Luminaire Type: Thorn Isaro Pro Isaro Pro Small 12LED 350mA EWR Luminaire Reference: Post top mounted at 0° tilt Mounting Type:

Lumen Output: 1.87klm Charge Code: 42 0015 0000 100

Luminaire Wattage: Colour Temperature: Warm White (3000k) Luminous Intensity:

Control Type:

Control Gear: DALI enabled driver

Lucy Zodion SS9 10lux (1:1 ratio) PECU mounted in 7 pin NEMA socket White band. Ref: SP01662

Dusk until 21:00: 100% lumen output **Dimming Profile:** 21:00 until 06:00: 50% lumen output 06:00 until Dawn: 100% lumen output

IDNO electrical supply connection Supply: Primary Isolator: IDNO approved double pole isolator Tofco F144DP isolator Secondary Isolator:

Supply cable between cut-out and Internal Wiring: luminaire shall be 1.5mm² 3core flexible 'artic' cable

Perpendicular to kerb facing away Door Orientation: from oncoming vehicles

Proposed S38 lighting column and luminaire. Shown for contributory lighting 'tie in' purposes only. Refer to 'Lighting Design at Rheda' for technical details.

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

UNIT IDENTIFICATION KEY:

LC** Proposed lighting column identification number

ELECTRICAL CONNECTION TYPE:

IDNO Independent distribution network operator connection

ISOLUX CONTOUR KEY (AT GROUND LEVEL):

0.20 Isolux contour line

0.60 Isolux contour line 1.00 Isolux contour line

2.00 Isolux contour line

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.)

R0 INITIAL DESIGN FOR REVIEW AND COMMENT 26/06/2024 SRH DATE BY REV DESCRIPTION

RHEDA, WHITEHAVEN - PHASE 2

SCHEME: STREET LIGHTING DESIGN DRAWING:

SITE EVOLUTION LIMITED CLIENT: DRAWN: SRH SHD1609-SHD-HLG-RHED-DR-EO-Lighting Layout-R0 DRAWING CHECKED: NUMBER: SHEET 1 OF 1 SCALE @ A1 CONTRACT DATE: SHD1609 NUMBER: REVISION:

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION