

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 works to be carried out in accordance with current Halton Borough Council street lighting specification.
- Any inaccuracies are to be reported to the overseeing organisation or site engineer immediately.
- The drawing does not detail statutory undertakers information, this should be sourced by the contractor prior to the commencement of works.
- 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 planting of trees near to lighting columns is to be avoided as future growth may inhibit lighting levels. No lighting column to be within 5m of mature tree canopy.
- Horizontal clearance for the maximum tree canopy shall be greater than 5m from any proposed lighting columns.
- 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 lighting column locations will take precedence over any proposed trees 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.
- The contractor shall liaise with the DNO in relation to the connection and disconnection of any works associated with the programming and coordination of street lighting equipment.
- Final lighting column positions shall be agreed onsite with the Halton Borough Council street lighting engineer.
- Final lighting column identification numbers shall be agreed with the Halton Borough Council street lighting engineer.
- Lighting column foundations shall be designed in accordance with the manufacturer datasheet's for the columns and soil types present.
- The minimum distance for a lighting column to be erected from the kerb face in a service strip shall be 1000mm.
- 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 assets.
- The developer will be required to pay any energy liability charges with their electricity supplier until the date of formal adoption 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 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 mid-hinged galvanised steel lighting column of 6.0 metre nominal height with a planted base as supplied by Fabrikat to Halton Borough Council specifications.	
Luminaire Type:	CRT SLX2
Luminaire Reference:	CRT 10w 2X6 T2 L (XPG3 4000k)
Mounting Type:	Post top mounted
Luminaire Tilt:	0°
Lumen Output:	1.35klm
Charge Code:	42 0010 0000 100
Luminaire Wattage:	10w
Colour Temperature:	Neutral White (4000k)
Luminous Intensity:	G3
Control Type:	Lucy Zodion ZCELL 20lux (1:1 ratio) mounted in 7 pin NEMA socket
Dimming Profile:	Dawn until 00:00: 100% lumen output 00:00 until 06:00: 75% 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 BS 6500 (3183y)
Door Orientation:	Door to face footpath

- Indicates direction of travel of raise/lower 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 stainless steel feeder pillar with hinged door (Model: Ritherdon RH400 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.
- Cable shown in footpath for clarity only. To be installed in verge
- Earth electrode in inspection chamber. To be installed in accordance with current BS7671, BS7430 and IET GN08.

- Feeder pillar, chambers and ducting location's shown are indicative only and final setting out positions to be determined by the overseeing organisation.**
- UNIT IDENTIFICATION KEY**
- PR** Private lighting column identification number
 - FP** Feeder pillar identification number
- ELECTRICAL CONNECTION TYPE**
- DNO Distribution Network Operator connection
 - T** Private cable termination type:
Refer to SHD1648-SHD-HEL-LOVE-DR-EO-Electrical-R2

- ISOLUX CONTOUR KEY**
- 0.20 Isolux contour line
 - 0.60 Isolux contour line
 - 1.00 Isolux contour line
 - 2.00 Isolux contour line

R2	CHANGED LUMINAIRE MODEL, LOWERED LIGHTING CLASS	26/08/2024	SRH
R1	CHANGED LUMINAIRE MODEL AND COLUMN MANUFACTURER	29/07/2024	SRH
R0	INITIAL DESIGN FOR REVIEW AND COMMENT	24/07/2024	SRH
REV	DESCRIPTION	DATE	BY



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

SCHEME:	LOVEL WAY FOOTPATH, HALTON		
DRAWING:	FOOTPATH LIGHTING DESIGN		
CLIENT:	WT JENKINS		
DRAWING NUMBER:	SHD1948-SHD-HEL-LOVE-DR-EO-Design-Lighting Layout-R2	DRAWN:	SRH
	SHEET 4 OF 4	CHECKED:	SRH
CONTRACT NUMBER:	SHD1648	DATE:	24/07/2024
		SCALE @ A1:	1:1250
		REVISION:	R2

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

