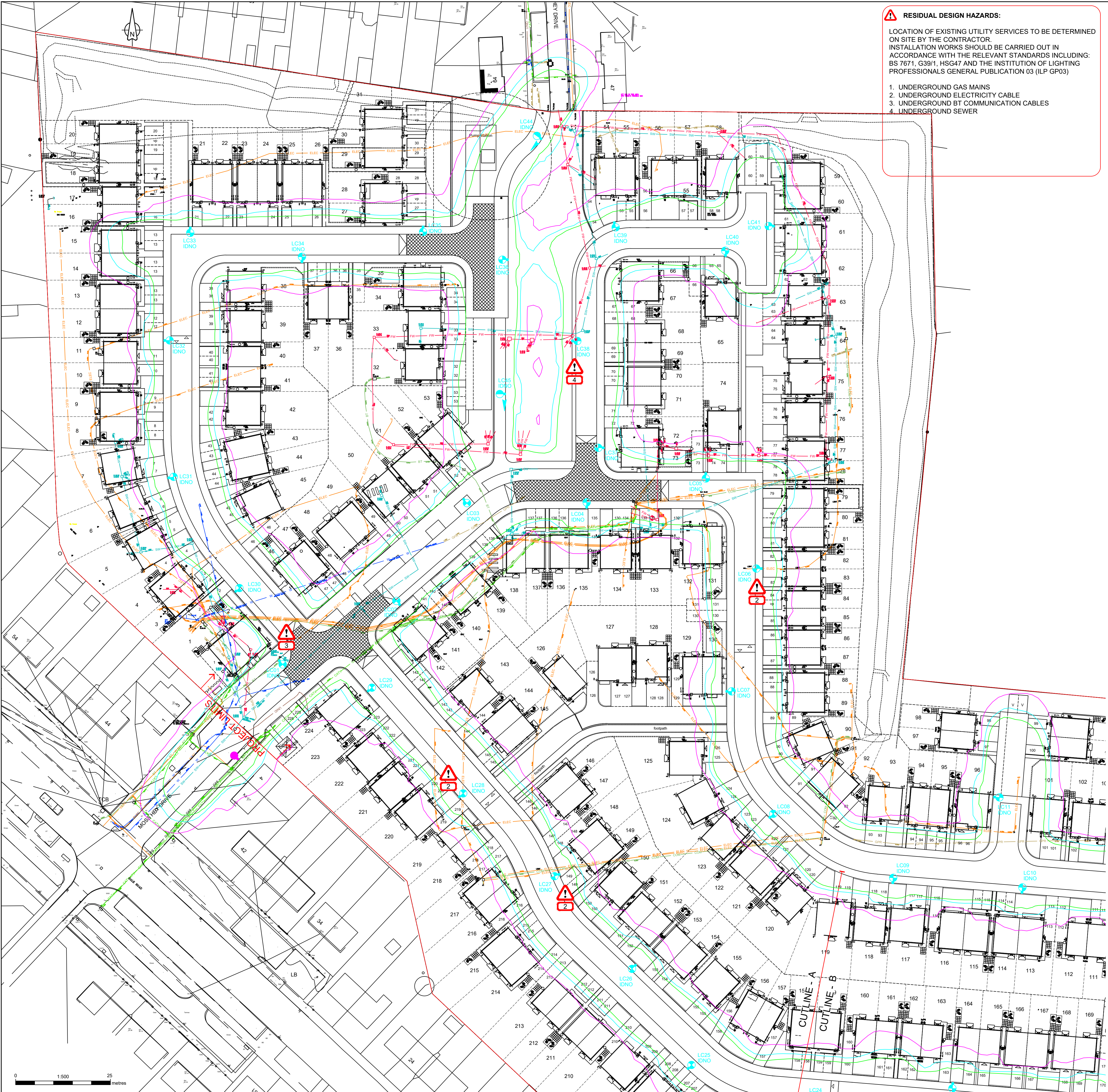




RESIDUAL DESIGN HAZARDS:

LOCATION OF EXISTING UTILITY SERVICES TO BE DETERMINED ON SITE BY THE CONTRACTOR.

INSTALLATION WORKS SHOULD BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT STANDARDS INCLUDING: BS 7671, G39/1, HSG47 AND THE INSTITUTION OF LIGHTING PROFESSIONALS GENERAL PUBLICATION 03 (ILP GP03)

1. UNDERGROUND GAS MAINS
2. UNDERGROUND ELECTRICITY CABLE
3. UNDERGROUND BT COMMUNICATION CABLES
4. UNDERGROUND SEWER

GENERAL NOTES

1. All documents shall be checked to ensure they are compatible by the contractor before construction commences. In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately.
2. SHD Lighting Consultancy Ltd accept no liability in the event of not being notified and where construction work has commenced. 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 overseeing organisation and all drawings and documents are to be read in conjunction with one another.
3. 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.
4. Current statutory service record plans should be obtained by the contractor / overseeing organisation before commencement of any street lighting installation or removal works.
5. All services are to be located and identified prior to installing or removing any lighting columns. All works should be carried out in accordance with HSE GS6, ENA 43-8, HSE HGS47, G39/1 and all relevant HSE regulations

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. All services are to be located and identified prior to installing or removing any lighting columns.
3. 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.
4. 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"
5. 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.
6. 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

NOTES

1. All works are to be carried out in accordance with the latest Manchester City Council street lighting specification.
2. Any inaccuracies are to be reported to the overseeing organisation or site engineer immediately.
3. The contractor shall liaise with the DNO in relation to the programming and coordination of any works associated with the connection and disconnection of street lighting equipment.
4. 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 take all necessary steps to ensure that any such unidentified services are carefully located and not damaged.
5. The contractor shall identify the location of any overhead electrical or communication equipment prior to the undertaking of any on-site works. Should the presence of such equipment be identified, the contractor shall consult with the relevant statutory undertaker for further guidance.
6. Final lighting column positions shall be agreed onsite with Manchester City Council street lighting engineer.
7. Final lighting column identification numbers shall be agreed with Manchester City Council street lighting engineer.
8. Any existing or proposed trees are to be cutback, removed or relocated elsewhere to avoid interference with the street lighting luminaire or prevent any future access or maintenance.
9. The contractor shall provide Manchester City Council with as-built drawings, test certificates and column and lantern data sheets in accordance with the latest Manchester City Council street lighting specification.
10. Lighting column foundations shall be designed in accordance with the manufacturer datasheet's for the columns and soil types present (refer to Manchester City Council specification).
11. 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.
12. The use of Independent Distribution Network Operator's (IDNO's) is permitted. Any chosen IDNO shall have a service level agreement in place with Manchester City Council prior to adoption of the new installation.
13. IDNO contact details shall also be stored inside the base compartment of each lighting column via means of an identification label.

LIGHTING CLASSIFICATION

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

Main Roads lighting classification: P3 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >7.50 lux <11.25 lux
Minimum illuminance (Emin): >1.50 lux
Emin/Eav (Uniformity): >0.20 (20%)

Cul-de-Sac & footpath lighting classification: P4 (BS 5489-1:2020, Table A.5)

Minimum maintained average illuminance (Eav): >5.00 lux <7.50 lux
Minimum illuminance (Emin): >1.00 lux
Emin/Eav (Uniformity): >0.20 (20%)

Qty 41

Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base as supplied by Mallatite to Manchester City Council street lighting specification.

Column Reference: B0004/9
Luminaire: Philips Luma Gen 2 Mini
Mounting Type: Post top mounted

Manufacturer Reference: BGP703 DW50 BL1 9000 40LED 5.2S CLO L90 740

Lumen Output: 9,000 lm
Charge Code: 42 0050 0000 100
Luminaire Wattage: 50 w
Colour Temperature: Neutral White (4000K)
Luminaire Tilt Inclination: 0°
Luminous Intensity: G3
Control Gear: DALI enabled dimmable driver
Control Type: Philips Citytouch Central Management System Node (35/18 lux)

Refer to: 'SHD426-SHD-HLG-NORT-SH-EO-Lighting Schedule-R1' for dimming regime

Supply: IDNO electrical supply connection
Primary Isolator: IDNO approved
Secondary Isolator: Lucy Zodian double pole Isolator with 32A double pole switch with BS88-2 6A HRC fuse to luminaire
Internal Wiring: 1.5mm² 3 core PVC insulated flexible cable
Door Orientation: Perpendicular to kerb

Qty 4

Proposed galvanised MID-HINGED tubular steel lighting column of 6.0 metre nominal height with a planted base as supplied by Mallatite to Manchester City Council street lighting specification.

Column Reference: A5730
Luminaire: Philips Luma Gen 2 Mini
Mounting Type: Post top mounted

Manufacturer Reference: BGP703 DW50 BL1 9000 40LED 5.2S CLO L90 740

Lumen Output: 9,000 lm
Charge Code: 42 0050 0000 100
Luminaire Wattage: 50 w
Colour Temperature: Neutral White (4000K)
Luminaire Tilt Inclination: 0°
Luminous Intensity: G3
Control Gear: DALI enabled dimmable driver
Control Type: Philips Citytouch Central Management System Node (35/18 lux)

Refer to: 'SHD426-SHD-HLG-NORT-SH-EO-Lighting Schedule-R1' for dimming regime

Supply: IDNO electrical supply connection
Primary Isolator: IDNO approved
Secondary Isolator: Lucy Zodian double pole Isolator with 32A double pole switch with BS88-2 6A HRC fuse to luminaire
Internal Wiring: 1.5mm² 3 core PVC insulated flexible cable
Door Orientation: Perpendicular to kerb

Existing lighting column to remain. Shown for tie in purposes only. Manchester City Council to confirm actual luminaire details

Indicates direction of travel for raise/lower mid hinged lighting column

UNIT IDENTIFICATION KEY:

LC** Proposed lighting column identification number

ELECTRICAL CONNECTION TYPE:

IDNO Proposed independent DNO supply connection

ISOLUX CONTOUR KEY:

0.20 Isolux contour line
1.00 Isolux contour line
2.00 Isolux contour line

R1	ADDED DIMMING REGIME: AMENDED LUMINAIRE OUTPUT	12/01/2022	SRH
R0	INITIAL DESIGN FOR REVIEW AND COMMENT	01/12/2021	SRH
REV	DESCRIPTION	DATE	BY

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

SCHEME:	NORTHENDEN, MANCHESTER		
DRAWING:	S38 STREET LIGHTING DESIGN		
CLIENT:	MILLER HOMES		
DRAWING NUMBER:	SHD426-SHD-HLG-NORT-DR-EO-Design Layout-R1	DRAWN:	SRH
	SHEET 1 OF 2	CHECKED:	SRH
CONTRACT NUMBER:	SHD426	DATE:	01/12/2021
		SCALE @ A1	1:500
		REVISION:	R1

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

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.