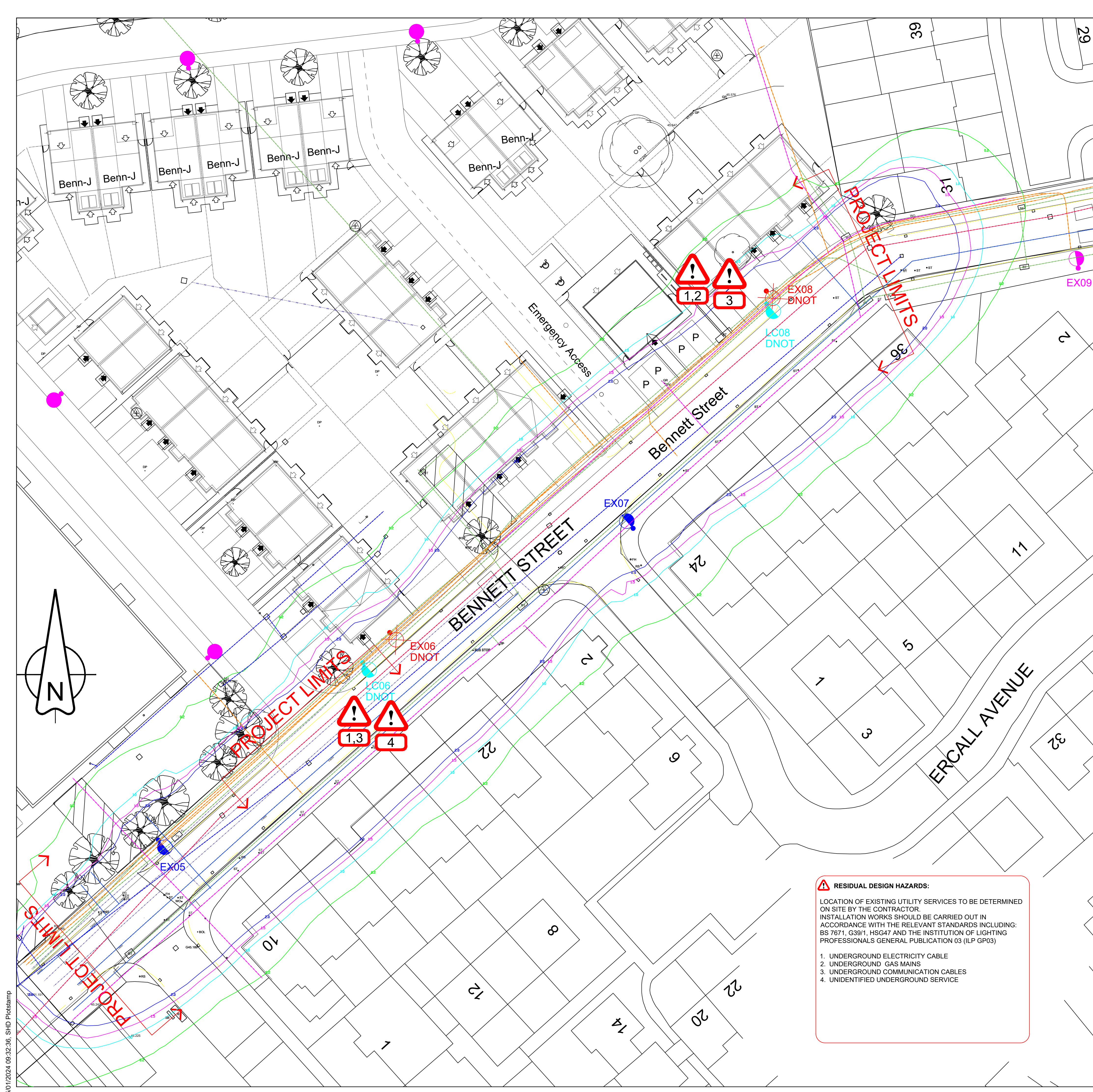




- GENERAL NOTES**
- All documents shall be checked to ensure they are compatible by the contractor before construction commences.
 - In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately.
 - Before construction 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.
 - 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 are to be carried out in accordance with the latest Manchester City Council street lighting specification.
 - Any inaccuracies are to be reported to the overseeing organisation or site engineer immediately.
 - 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. 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 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.
 - 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. 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.
 - 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.
 - Final lighting column positions shall be agreed onsite with Manchester City Council street lighting engineer.
 - Final lighting column identification numbers shall be agreed with Manchester City Council street lighting engineer.
 - 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.
 - 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.
 - 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).
 - 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.
 - 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.
 - IDNO contact details shall also be stored inside the base compartment of each lighting column via means of an identification label.
 - The developer will be responsible, unconditionally, for the condition, operation and any risk or liability of all the highways electrical equipment on all approved Section 38 agreement works until the date of formal adoption of the development.
 - 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.
 - All services are to be located and identified prior to installing or removing any lighting columns.
 - 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: P3 (BS 5489-1:2020, Table A.5)
Required lighting levels:
Minimum average illuminance (Eav): >7.50 lux <11.25 lux
Minimum illuminance (Emin): >1.50 lux
Lighting Uniformity (Emin/Eav): >0.20 (>20%)



Column Reference:	B5514/4
Luminaire:	Philips Luma Gen2 Medium
Mounting Type:	Post top mounted
Manufacturer Reference:	BGP704 DW50 BL1 13000 80LED 5.2S CLO L90 740
Lumen Output:	13.00 km
Charge Code:	42 0071 0000 100
Luminaire Wattage:	71 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 (CMS) Node (35/18 lux)
Dimming Profile:	CMS controlled
Supply:	DNO electrical supply connection
Primary Isolator:	DNO approved
Secondary Isolator:	Lucy Zodian double pole Isolator with 32A double pole switch with BS88-2 6A HRC fuse to luminaire
Internal Wiring:	Internal wiring to luminaire shall be 1.5mm² 3 core PVC insulated flexible cable
Door Orientation:	Perpendicular to kerb

Remove existing luminaire and hand back to Manchester City Council for reuse or recycling. To be replaced with post top mounted Philips Luma Gen2 Medium LED luminaire.	Column Reference: Existing tor remain Luminaire: Philips Luma Gen2 Medium Mounting Type: Post top mounted Manufacturer Reference: BGP704 DW50 BL1 13000 80LED 5.2S CLO L90 740 Lumen Output: 13.00 km Charge Code: 42 0071 0000 100 Luminaire Wattage: 71 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 (CMS) Node (35/18 lux) Dimming Profile: CMS controlled Supply: Existing to remain Primary Isolator: N/A Secondary Isolator: Lucy Zodian double pole Isolator with 32A double pole switch with BS88-2 6A HRC fuse to luminaire Internal Wiring: Internal wiring to luminaire shall be 1.5mm² 3 core PVC insulated flexible cable Door Orientation: N/A
Shown for contributory lighting 'tie in' purposes only. Refer to 'SHD690-SHD-HLG-BENN-DR-EO-Lighting Layout-R0' for technical details.	
Existing lighting column and luminaire to remain. Shown for contributory lighting 'tie in' purposes only.	
Existing lighting column to be uprooted and removed from site. Luminaire to be removed and handed back to the local authority for reuse or recycling.	

UNIT IDENTIFICATION KEY:	
LC**	Proposed lighting column identification number
EX**	Existing lighting column identification number
ELECTRICAL CONNECTION TYPE:	
DNOT	Transfer of existing DNO supply connection
ISOLUX CONTOUR KEY:	
0.20 Isolux contour line	
1.00 Isolux contour line	
1.50 Isolux contour line	
2.00 Isolux contour line	

R0	INITIAL DESIGN FOR REVIEW AND COMMENT	23/10/2022	SRH
REV	DESCRIPTION	DATE	BY
SHD			
info@shdlighting.co.uk 07834 490 192 www.shdlighting.co.uk			
SCHEME:	BENNETT STREET, GORTON		
DRAWING:	STREET LIGHTING DESIGN		
CLIENT:	KELLEN HOMES		
DRAWING NUMBER:	SHD691-SHD-HLG-BENN-DR-EO-Lighting Layout-R0	DRAWN:	SRH
	SHEET 1 OF 1	CHECKED:	SRH
CONTRACT NUMBER:	SHD691	DATE:	23/10/2022
		SCALE @ A1	1:500
		REVISION:	R0
CONSTRUCTION ISSUE			

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 ELECTRICITY CABLE
2. UNDERGROUND GAS MAINS
3. UNDERGROUND COMMUNICATION CABLES
4. UNIDENTIFIED UNDERGROUND SERVICE