

HEXHAM SHAMBLES CONSERVATION PROJECT

October 2023

ELECTRICAL PROPOSALS FOR LISTED BUILDING CONSENT

Section 1: Power Installation

NCC Drawing 62-01

Component Manufacturers Images

Section 2: Lighting Installation




NCC Drawing 63-01

Lighting Manufacturers Design Simulations and Luminaire Images

Note: All light sources low energy LED.

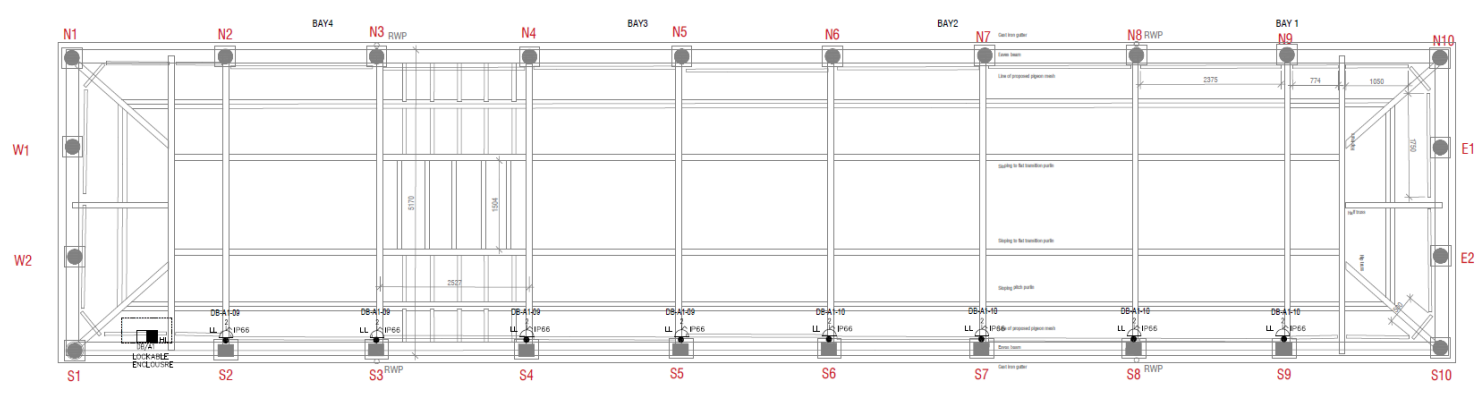
DRAWING NOTES
 THIS DRAWING IS PURELY INDICATIVE ALL DIMENSIONS MUST BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF THE WORKS.

LEGEND

-  13A WEATHER PROOF IP66 LOCKABLE TWIN SWITCHED SOCKET OUTLET
-  SP & N DISTRIBUTION BOARD
-  20mm BLACK PVC HEAVY DUTY CONDUIT

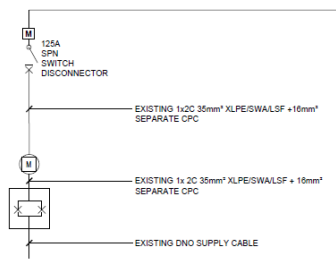
ANNOTATION

- BL - DENOTES 'BENCH LEVEL'
- CV - DENOTES 'CEILING VOID'
- HL - DENOTES 'HIGH LEVEL'
- ML - DENOTES 'MID LEVEL'
- LL - DENOTES 'LOW LEVEL'
- AB - DENOTES 'ABOVE BENCH'
- BB - DENOTES 'BELOW BENCH'
- 65 - DENOTES INGRESS PROTECTION RATING
- DAC - DOOR ACCESS CONTROL
- CCTV - CLOSED CIRCUIT TELEVISION
- FAP - FIRE ALARM PANEL
- Z1 - DENOTES ATEX ZONE RATING
- DTB - DENOTES 'DROP TO BELOW'
- RTA - DENOTES 'RISE TO ABOVE'
- HOLD - DENOTES 'ON HOLD - IN ABEYANCE'
- CLN - CLEANERS




POWER INSTALLATION NOTES

1. ALL WORKS SHALL BE DONE IN STRICT ACCORDANCE WITH IET WIRING REGULATIONS 18TH EDITION BS7671 'REQUIREMENTS FOR ELECTRICAL INSTALLATION'
2. ALL INDIVIDUALS CARRYING OUT THE WORKS SHALL BE PART OF AN ACCREDITED UKAS SCHEME.
3. ANY ALTERATIONS/DEVIATIONS FROM THE DRAWINGS, SPECIFICATION OR SCHEDULE OF WORKS SHALL ONLY BE CARRIED OUT, WITH WRITTEN CONSENT FROM THE NORTHUMBERLAND COUNTY COUNCIL ELECTRICAL ENGINEER. UNAUTHORISED CHANGES WILL BE RECTIFIED AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.
4. ALL EQUIPMENT WILL BE INSTALLED AS PER THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.
5. ALL WORKS, EQUIPMENT AND EQUIPMENT NECESSARY FOR THE INSTALLATION WILL BE INCLUDED AND PROVIDED BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR WILL NOTIFY NORTHUMBERLAND COUNTY COUNCIL, PROPERTY SERVICES, PRIOR TO COMMENCEMENT ON SITE OF ANY CIRCUMSTANCES THAT WOULD DICTATE, ANY SPECIALISED EQUIPMENT OR SKILLS REQUIRED TO CARRYOUT THE INSTALLATION.
6. THE ELECTRICAL CONTRACTOR SHALL STRIP OUT, TAKE DOWN, REMOVE FROM SITE AND DISPOSE OF AS PER THE WEEE REGULATIONS, ALL REDUNDANT ELECTRICAL EQUIPMENT, WIRING AND ACCESSORIES.
7. ALL CABLING SHALL BE RAN IN CONTAINMENT AND/OR FIXED TO THE BUILDING FABRIC, UNDER NO CIRCUMSTANCES SHALL ANY CABLING BE INSTALLED WITHOUT APPROPRIATE CONTAINMENT OR UNATTACHED TO THE BUILDING FABRIC.
8. ANY DAMAGE TO THE BUILDING FABRIC AS A RESULT OF THE ELECTRICAL INSTALLATION WILL BE RECTIFIED BY THE ELECTRICAL CONTRACTOR AT THEIR EXPENSE.
9. NO INTRUSIVE SURVEYS OR WORKS SHALL BE UNDERTAKEN WITHOUT CHECKING AND SIGNING A TYPE 3 ASBESTOS SURVEY (REFURBISHMENT & DEMOLITION).
10. THE ELECTRICAL CONTRACTOR WILL PROVIDE AND INSTALL DB/1 SCHNEIDER ACTI 9 SP&N 12 WAY DISTRIBUTION BOARD WITH SCHNEIDER 125 AMP ISOLATORS WITH TYPE 2 SURGE PROTECTION DEVICE INTEGRAL TO DISTRIBUTION BOARD.
11. UNLESS STATED OTHERWISE ALL POWER CIRCUITS WILL BE WIRED 4MM² PVC BLACK SHEATHED T&E CABLE.
12. UNLESS STATED OTHERWISE ALL SOCKETS WILL BE SURFACED MOUNTED.
13. ALL CIRCUITS WILL BE CLIPPED DIRECT TO THE BUILDING FABRIC FROM THE DB TO THE COLUMN AND CONNECTED TO THE SOCKET BY 20mm HEAVY DUTY BLOCK PVC CONDUIT.
14. THE ELECTRICAL CONTRACTOR WILL PROVIDE AND INSTALL OUTDOOR LOCKABLE IP66 DOUBLE SOCKETS.
15. THE ELECTRICAL CONTRACTOR WILL PROVIDE AND INSTALL A WEATHER PROOF LOCKABLE CONTAINER TO HOUSE DB/1



DB/1	CCT	DEVICE	CABLE TYPE	CABLE/CPC SIZE	DESCRIPTION
NEW 125A SP&N DISTRIBUTION BOARD C/W 125A SWITCH DISCONNECTOR INCOMER + TYPE 2 SURGE PROTECTION DEVICE INTEGRAL TO DISTRIBUTION BOARD MANUFACTURER: SCHNEIDER ELECTRIC TYPE: ACTI 9 ISOBAR	1	RCBO C 10A	BS EN50525-2-21	1.5mm ² CORE	LIGHTING - BAY 1
	2	RCBO C 10A	BS EN50525-2-21	1.5mm ² CORE	LIGHTING - BAY 2
	3	RCBO C 10A	BS EN50525-2-21	1.5mm ² CORE	LIGHTING - BAY 3
	4	RCBO C 10A	BS EN50525-2-21	1.5mm ² CORE	LIGHTING - BAY 4
	5	RCBO C 10A	BS EN50525-2-21	1.5mm ² CORE	LIGHTING - UPLIGHTERS CARPARK SIDE
	6	RCBO C 10A	BS EN50525-2-21	1.5mm ² CORE	LIGHTING - UPLIGHTERS SHOPS SIDE
	7				
	8				
	9	RCBO B 20A	BS EN50525-2-21	4.0mm ² CORE	RADIAL - SOCKET SHOP SIDE NEAREST ABBEY
	10	RCBO B 20A	BS EN50525-2-21	4.0mm ² CORE	RADIAL - SOCKET SHOP SIDE
	11				
	12				



Northumberland
County Council

Property Services, County Hall, Morpeth, NE61 2EF

HEXHAM SHAMBLES

PROPOSED POWER INSTALLATION

DRAWN	CS	SCALE	DATE
CHECK	CS	1:50	16-09-23

DWG LOCATION
THIS DRAWING IS COPYRIGHT

CA220003	62-01	0
----------	-------	---

CONSTRUCTION STAGE

Product Code: HG 20B Product Range: Round Conduit Issue Date: 16/05/2022

Description:
20 mm PVCu Round Conduit Heavy Gauge
Black (3m Length)

- Features:**
- Super high impact conduit
 - Heavy gauge
 - Nominal wall thickness 1.8 mm



Conduit



Distribution Board

TOUGH RUBBER SHEATH FLEXIBLE CORDS

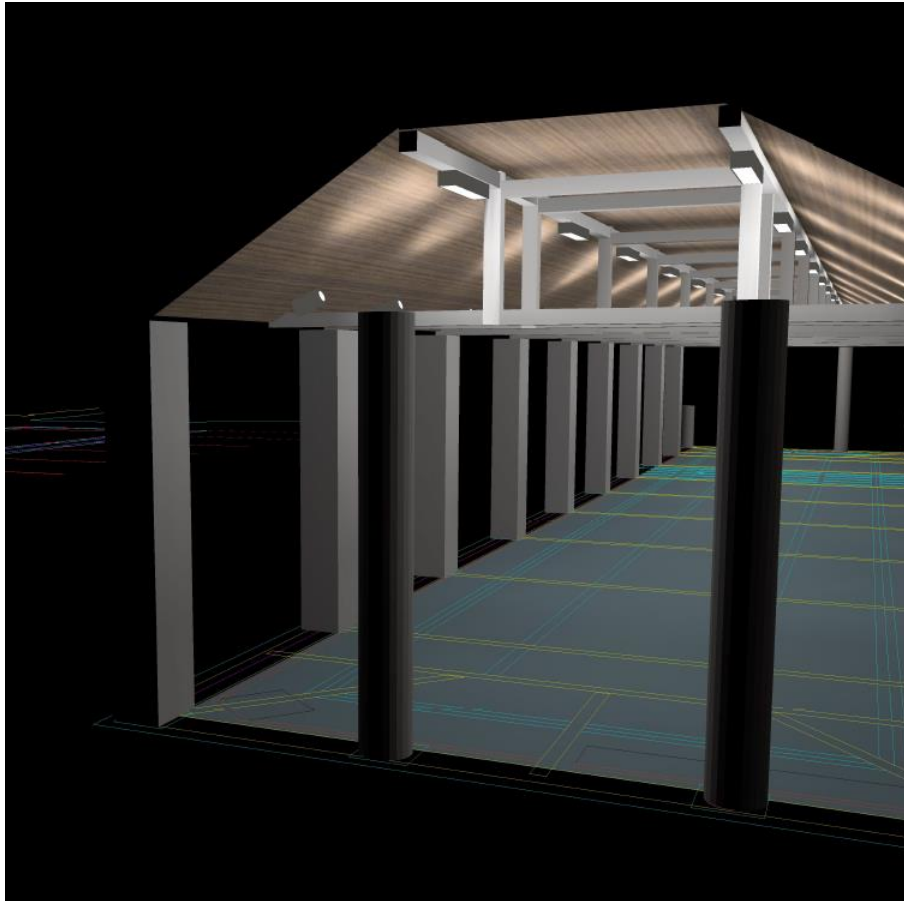


Cable

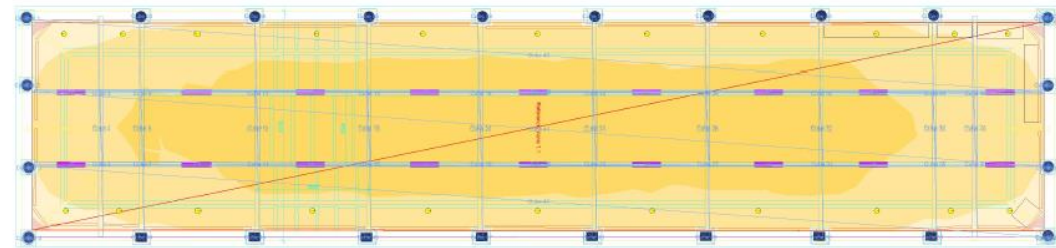


Waterproof Sockets

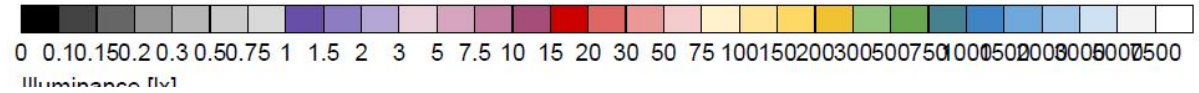
1.1.1 Result overview, Evaluation area 1



3D Lighting Simulation



23 25 27 29 31 33 35 37 39 41 43 45 47 x [m]



Illumination Contours at Ground Level



Metal Cased (Black)
Spot Luminaire



Metal Cased (Black)
Linear Luminaire