

## STREET LIGHTING DESIGN RISK ASSESSMENT



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

|                    |                                                                         |            |
|--------------------|-------------------------------------------------------------------------|------------|
| Document:          | SHD1843-SHD-HLG-BEAL-RA-EO-Lighting Design Risk Assessment-R1           |            |
| Prepared by:       | SHD Lighting Consultancy Ltd                                            | 26/08/2025 |
| Scheme Title:      | Bealey Industrial Estate                                                |            |
| Brief Description: | S38 street lighting design                                              |            |
| Considerations:    | The lighting scheme has been designed in accordance with BS 5489-1:2020 |            |
| Specification:     | Bury Metropolitan Borough Council                                       |            |

This document must be read in conjunction with SHD1843-SHD-HLG-BEAL-DR-EO-Lighting Layout-R1

**No information was provided to the location of any existing or proposed low or high voltage underground electricity cables, low or high voltage overhead electricity cables, low, medium or high-pressure gas mains, any water mains pipes, underground or overhead communication cables or equipment or any other associated hazards.**

All services are to be located and identified prior to installing or removing any equipment.

All works should be carried out in accordance with HSE GS6, ENA 43-8, HSE HGS47, G39/1 and any relevant HSE regulations

Details of existing statutory undertakers' plant are to be obtained by the client prior to installing or removing any equipment.

All works in the vicinity of any overhead cables shall conform to the requirements of HSE guidance note GS6 "avoidance of danger from overhead lines"

All works in the vicinity of underground mains or cables shall conform to the requirements of HSE guidance note 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 (this is to include adjustment of stats covers).

Any damage to plant or apparatus shall be repaired at the contractor's expense.

No works shall be constructed until technical approval has been obtained from the local authority or overseeing organisation by the developer. Should works be constructed without approval they will be entirely at the developer's risk.

| DESIGNER'S RISK ASSESSMENT |                                  |                  |                                                                 |                                                                                               |                         |                                                                                        |              |                                                                                                                        |                          |                |              |                                                                                                  |
|----------------------------|----------------------------------|------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------|--------------|--------------------------------------------------------------------------------------------------|
|                            | HAZARD IDENTIFICATION / ACTIVITY | APPLICABLE (Y/N) | ACTIVITY                                                        | WHAT IS THE HAZARD AND WHO / WHAT IS AT RISK                                                  | INITIAL RISK ASSESSMENT |                                                                                        |              | DESIGN CONTROL MEASURES                                                                                                | RESIDUAL RISK ASSESSMENT |                |              | FURTHER CONTROL MEASURES / RECOMMENDATIONS                                                       |
|                            |                                  |                  |                                                                 |                                                                                               | SEVERITY (S)            | LIKELIHOOD (L)                                                                         | RISK (S x L) |                                                                                                                        | SEVERITY (S)             | LIKELIHOOD (L) | RISK (S x L) |                                                                                                  |
| 1                          | During construction of the works | Y                | Installation of highway lighting equipment adjacent to footpath | Public & Operatives                                                                           | 5                       | 3                                                                                      | 15           | Install barriers to protect public from works area                                                                     | 2                        | 2              | 4            |                                                                                                  |
| 2                          | Electricity                      | Y                | Below ground works                                              | Striking underground electricity cable - electrocution/burning. Workforce and site personnel. | 5                       | 4                                                                                      | 20           | Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig. | 5                        | 2              | 10           | Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47. |
| 3                          | Gas                              | Y                | Below ground works                                              | Striking underground gasmain - explosion, gas leak. Workforce and site personnel.             | 5                       | 4                                                                                      | 20           | Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig. | 5                        | 2              | 10           | Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47. |
| 4                          | Water                            | Y                | Below ground works                                              | Striking underground water main - flooding hazard. Workforce and site personnel.              | 5                       | 4                                                                                      | 20           | Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig. | 5                        | 2              | 10           | Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47. |
|                            | (S)                              |                  | (L)                                                             |                                                                                               | Risk Rating (RR=S x L)  |                                                                                        |              |                                                                                                                        |                          |                |              |                                                                                                  |
|                            | 1                                |                  | 1                                                               |                                                                                               | Insignificant           | Acceptable                                                                             |              |                                                                                                                        |                          |                |              |                                                                                                  |
|                            | 2                                |                  | 2                                                               |                                                                                               | Low                     | Acceptable with effective control measures                                             |              |                                                                                                                        |                          |                |              |                                                                                                  |
|                            | 3                                |                  | 3                                                               |                                                                                               | Medium                  | Not acceptable, risks need investigation to consider reasonable practical improvements |              |                                                                                                                        |                          |                |              |                                                                                                  |
|                            | 4                                |                  | 4                                                               |                                                                                               | Significant             | Review urgently required to determine if the risk can be removed or controls improved  |              |                                                                                                                        |                          |                |              |                                                                                                  |
|                            | 5                                |                  | 5                                                               |                                                                                               | High                    | Risks must be removed or reduced                                                       |              |                                                                                                                        |                          |                |              |                                                                                                  |

| DESIGNER'S RISK ASSESSMENT |                                  |                  |                                                                     |                                                                                                             |                         |                                                                                        |              |                                                                                                                        |                          |                |              |                                                                                                                                            |
|----------------------------|----------------------------------|------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|                            | HAZARD IDENTIFICATION / ACTIVITY | APPLICABLE (Y/N) | ACTIVITY                                                            | WHAT IS THE HAZARD AND WHO / WHAT IS AT RISK                                                                | INITIAL RISK ASSESSMENT |                                                                                        |              | DESIGN CONTROL MEASURES                                                                                                | RESIDUAL RISK ASSESSMENT |                |              | FURTHER CONTROL MEASURES / RECOMMENDATIONS                                                                                                 |
|                            |                                  |                  |                                                                     |                                                                                                             | SEVERITY (S)            | LIKELIHOOD (L)                                                                         | RISK (S x L) |                                                                                                                        | SEVERITY (S)             | LIKELIHOOD (L) | RISK (S x L) |                                                                                                                                            |
| 5                          | Telecom / Data                   | Y                | Below ground works                                                  | Striking underground telecoms or data service cables.                                                       | 5                       | 4                                                                                      | 20           | Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig. | 5                        | 2              | 10           | Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47.                                           |
| 6                          | Highway Lighting                 | Y                | Below ground works                                                  | Striking underground highway lighting cable - electrocution / burning hazard. Workforce and site personnel. | 5                       | 4                                                                                      | 20           | Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig. | 5                        | 2              | 10           | Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47.                                           |
| 7                          | Overhead data lines              | Y                | During lighting column installation or MEWP striking overhead lines | Loss of service / Injury to site personnel.                                                                 | 3                       | 3                                                                                      | 9            | Contractor to be aware of any overhead cables.                                                                         | 2                        | 1              | 2            | All installations shall be in accordance with GS6 and G39 - No work to be undertaken in the vicinity zone                                  |
| 8                          | Overhead power lines             | Y                | Installation of lighting columns                                    | Loss of service / Injury to site personnel.                                                                 | 5                       | 3                                                                                      | 15           | Columns to be located outside vicinity zone in accordance with G39.                                                    | 2                        | 1              | 2            | All installations shall be in accordance with GS6 and G39 - No work to be undertaken in the vicinity zone - Consult with DNO for guidance. |
|                            | (S)                              |                  | (L)                                                                 |                                                                                                             | Risk Rating (RR=S x L)  |                                                                                        |              |                                                                                                                        |                          |                |              |                                                                                                                                            |
|                            | 1                                |                  | 1                                                                   |                                                                                                             | Insignificant           | Acceptable                                                                             |              |                                                                                                                        |                          |                |              |                                                                                                                                            |
|                            | 2                                |                  | 2                                                                   |                                                                                                             | Low                     | Acceptable with effective control measures                                             |              |                                                                                                                        |                          |                |              |                                                                                                                                            |
|                            | 3                                |                  | 3                                                                   |                                                                                                             | Medium                  | Not acceptable, risks need investigation to consider reasonable practical improvements |              |                                                                                                                        |                          |                |              |                                                                                                                                            |
|                            | 4                                |                  | 4                                                                   |                                                                                                             | Significant             | Review urgently required to determine if the risk can be removed or controls improved  |              |                                                                                                                        |                          |                |              |                                                                                                                                            |
|                            | 5                                |                  | 5                                                                   |                                                                                                             | High                    | Risks must be removed or reduced                                                       |              |                                                                                                                        |                          |                |              |                                                                                                                                            |

| DESIGNER'S RISK ASSESSMENT |                                  |                    |                                                                                                                                                                            |                                                 |                         |                                                                                        |              |                                                                                                                |                          |                |              |                                                                                      |
|----------------------------|----------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------|--------------------------|----------------|--------------|--------------------------------------------------------------------------------------|
|                            | HAZARD IDENTIFICATION / ACTIVITY | APPLI(C)ABLE (Y/N) | ACTIVITY                                                                                                                                                                   | WHAT IS THE HAZARD AND WHO / WHAT IS AT RISK    | INITIAL RISK ASSESSMENT |                                                                                        |              | DESIGN CONTROL MEASURES                                                                                        | RESIDUAL RISK ASSESSMENT |                |              | FURTHER CONTROL MEASURES / RECOMMENDATIONS                                           |
|                            |                                  |                    |                                                                                                                                                                            |                                                 | SEVERITY (S)            | LIKELIHOOD (L)                                                                         | RISK (S x L) |                                                                                                                | SEVERITY (S)             | LIKELIHOOD (L) | RISK (S x L) |                                                                                      |
| 9                          | Working adjacent to highway      | Y                  | Maintenance of equipment                                                                                                                                                   | Site Personnel being struck by errant vehicles. | 5                       | 3                                                                                      | 15           | Column doors to face away from oncoming vehicles and columns to be sited to the rear of footway when possible. | 4                        | 1              | 4            | Compliance with design contract documents, method statements and working procedures. |
| 10                         | Working at height                | Y                  | Installation of luminaires                                                                                                                                                 | Dropping materials / tools from height.         | 4                       | 3                                                                                      | 12           | Barriers to be placed around columns and suitable PPE shall be worn.                                           | 4                        | 1              | 4            | Operative to warn pedestrians of hazard overhead.                                    |
| 11                         | Electric Vehicle Charging Points |                    | Clearance distances between lighting columns and EV charging system (including connected vehicle) must be greater than 2.5m, when connected to different earthing systems. | Electric shock                                  | 5                       | 3                                                                                      | 15           | Locate EV points, greater than 2.5m away from lighting column                                                  | 5                        | 2              | 10           | Lighting design and EV point locations to be assessed                                |
| 12                         |                                  |                    |                                                                                                                                                                            |                                                 |                         |                                                                                        |              |                                                                                                                |                          |                |              |                                                                                      |
|                            | (S)                              |                    | (L)                                                                                                                                                                        |                                                 | Risk Rating (RR=S x L)  |                                                                                        |              |                                                                                                                |                          |                |              |                                                                                      |
|                            | 1                                |                    | 1                                                                                                                                                                          |                                                 | Insignificant           | Acceptable                                                                             |              |                                                                                                                |                          |                |              |                                                                                      |
|                            | 2                                |                    | 2                                                                                                                                                                          |                                                 | Low                     | Acceptable with effective control measures                                             |              |                                                                                                                |                          |                |              |                                                                                      |
|                            | 3                                |                    | 3                                                                                                                                                                          |                                                 | Medium                  | Not acceptable, risks need investigation to consider reasonable practical improvements |              |                                                                                                                |                          |                |              |                                                                                      |
|                            | 4                                |                    | 4                                                                                                                                                                          |                                                 | Significant             | Review urgently required to determine if the risk can be removed or controls improved  |              |                                                                                                                |                          |                |              |                                                                                      |
|                            | 5                                |                    | 5                                                                                                                                                                          |                                                 | High                    | Risks must be removed or reduced                                                       |              |                                                                                                                |                          |                |              |                                                                                      |