

## DESIGNERS RISK ASSESSMENT INFORMATION

**Williams Lighting  
Consultants Ltd.**

| Issue No. 1 |             | Name           | Signature                                                                          | Date       | Position |
|-------------|-------------|----------------|------------------------------------------------------------------------------------|------------|----------|
| Designer    | Prepared by | Peter Williams |  | 26/02/2020 | MD       |

### 1. Project Description

|                                |                                                                   |
|--------------------------------|-------------------------------------------------------------------|
| Document No.                   | WLC322-RA                                                         |
| Scheme Title                   | NANT SILYN, WREXHAM                                               |
| Brief description and location | Exterior lighting for proposed development at the above location. |

### 2. Design considerations

|                |                                                                                                           |
|----------------|-----------------------------------------------------------------------------------------------------------|
| Considerations | Lighting to be designed in accordance with the BS5489.                                                    |
|                | This Risk Assessment highlights any issues associated with the installation of the highway lighting only. |

## 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 & DOCUMENT / DRAWING REFERENCE                                                                                                                                          | RESIDUAL RISK ASSESSMENT |                |              | FURTHER CONTROL MEASURES / RECOMMENDATIONS OR CONSTRUCTION CO-ORDINATORS COMMENTS               |
|---------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------|----------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------|--------------|-------------------------------------------------------------------------------------------------|
|                                                                                             |                    |                                                                 |                                                                                                       | SEVERITY (S)            | LIKELIHOOD (L) | RISK (S x L) |                                                                                                                                                                                                 | SEVERITY (S)             | LIKELIHOOD (L) | RISK (S x L) |                                                                                                 |
| A.1 LAND USE                                                                                |                    |                                                                 |                                                                                                       |                         |                |              |                                                                                                                                                                                                 |                          |                |              |                                                                                                 |
| A.1.1 Are there any H&S hazards from the works that might affect adjacent land or land use? |                    |                                                                 |                                                                                                       |                         |                |              |                                                                                                                                                                                                 |                          |                |              |                                                                                                 |
| i) During construction of the works                                                         | Y                  | Installation of lighting equipment adjacent to footpath/roadway | Public / operatives                                                                                   | 5                       | 2              | 10           | Install barriers to protect public from works area. Competent contractor.                                                                                                                       | 5                        | 1              | 5            |                                                                                                 |
| ii) During operation of the works                                                           | N                  |                                                                 |                                                                                                       |                         |                |              |                                                                                                                                                                                                 |                          |                |              |                                                                                                 |
| A.2 EXISTING UTILITIES AND SERVICES                                                         |                    |                                                                 |                                                                                                       |                         |                |              |                                                                                                                                                                                                 |                          |                |              |                                                                                                 |
| A.2.1 Underground services within the Site:                                                 |                    |                                                                 |                                                                                                       |                         |                |              |                                                                                                                                                                                                 |                          |                |              |                                                                                                 |
| i) Electricity                                                                              | Y                  | Below ground works                                              | Striking underground electricity cable – electrocution / burning hazard. Workforce and site personnel | 5                       | 4              | 20           | Ensure CAT scans are undertaken to locate services/utilities. Mark up on site if required. No works to be undertaken without a valid permit to dig. Utility plans to be provided by contractor. | 5                        | 1              | 5            | Principal Contractor Must ensure that all excavations are carried out in accordance with HSG 47 |



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|         |   |                    |                                                                                   |   |   |    |                                                                                                                                                                                                |   |   |   |                                                                                                    |
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| ii) Gas | Y | Below ground works | Striking underground gas main – explosion, gas leak. Workforce and site personnel | 5 | 4 | 20 | Ensure CAT scans are undertaken to locate services/utilities. Mark up on site if required. No works to be undertaken without a valid permit to dig. Utility plans to be provided by contractor | 5 | 1 | 5 | Principal Contractor<br>Must ensure that all excavations are carried out in accordance with HSG 47 |
|---------|---|--------------------|-----------------------------------------------------------------------------------|---|---|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|----------------------------------------------------------------------------------------------------|

(S)                      Severity                      (L)                      Likelihood                      (RR)                      Risk Rating (RR = S x L)

| HAZARD IDENTIFICATION / ACTIVITY        | APPLICABLE (Y / N) | ACTIVITY           | WHAT IS THE HAZARD AND WHO / WHAT IS AT RISK                                            | INITIAL RISK ASSESSMENT |                |              | DESIGN CONTROL MEASURES & DOCUMENT / DRAWING REFERENCE                                                                                                                                         | RESIDUAL RISK ASSESSMENT |                |              | FURTHER CONTROL MEASURES / RECOMMENDATIONS OR CONSTRUCTION CO-ORDINATORS COMMENTS               |
|-----------------------------------------|--------------------|--------------------|-----------------------------------------------------------------------------------------|-------------------------|----------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------|--------------|-------------------------------------------------------------------------------------------------|
|                                         |                    |                    |                                                                                         | SEVERITY (S)            | LIKELIHOOD (L) | RISK (S x L) |                                                                                                                                                                                                | SEVERITY (S)             | LIKELIHOOD (L) | RISK (S x L) |                                                                                                 |
| iii) Water                              | Y                  | Below ground works | Striking underground water main – flooding hazard. Workforce, site personnel and public | 5                       | 4              | 20           | Ensure CAT scans are undertaken to locate services/utilities. Mark up on site if required. No works to be undertaken without a valid permit to dig. Utility plans to be provided by contractor | 5                        | 1              | 5            | Principal Contractor Must ensure that all excavations are carried out in accordance with HSG 47 |
| iv) Telecom                             | Y                  | Below ground works | Striking underground telecom service                                                    | 3                       | 4              | 12           | Ensure CAT scans are undertaken to locate services/utilities. Mark up on site if required. No works to be undertaken without a valid permit to dig. Utility plans to be provided by contractor | 3                        | 1              | 3            | Principal Contractor Must ensure that all excavations are carried out in accordance with HSG 47 |
| v) Highway Lighting                     | N                  |                    |                                                                                         |                         |                |              |                                                                                                                                                                                                |                          |                |              |                                                                                                 |
| A.2.2 Overhead services across the Site |                    |                    |                                                                                         |                         |                |              |                                                                                                                                                                                                |                          |                |              |                                                                                                 |

(S) Severity (L) Likelihood (RR) Risk Rating (RR = S x L)

|                                                                                                                                                                            |   |                                                   |                           |   |   |    |                                                                            |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------------------|---------------------------|---|---|----|----------------------------------------------------------------------------|---|---|---|
| i) Telecom                                                                                                                                                                 | N |                                                   |                           |   |   |    |                                                                            |   |   |   |
| <b>A.3 EXISTING ELECTRICAL EQUIPMENT (including highway lighting columns, CCTV columns, feeder pillars, illuminated traffic signs, gantries, communications equipment,</b> |   |                                                   |                           |   |   |    |                                                                            |   |   |   |
| A.3.1 Any disconnection and removal of electrical equipment required ?                                                                                                     | N |                                                   |                           |   |   |    |                                                                            |   |   |   |
| <b>PART B - THE DESIGN - CONSTRUCTION HAZARDS</b>                                                                                                                          |   |                                                   |                           |   |   |    |                                                                            |   |   |   |
| <b>B.1 COMMENCEMENT OF SITE WORKS</b>                                                                                                                                      |   |                                                   |                           |   |   |    |                                                                            |   |   |   |
| B.1.1 Any special measures needed to protect the public?                                                                                                                   |   |                                                   |                           |   |   |    |                                                                            |   |   |   |
| i) Pedestrians, equestrians and other non motorised users (e.g footpath diversions and segregation)                                                                        | N |                                                   |                           |   |   |    |                                                                            |   |   |   |
| ii) Motorised users (e.g. Traffic Management - traffic diversions, road closures, speed limits, safety zones, barriers)                                                    | N |                                                   |                           |   |   |    |                                                                            |   |   |   |
| <b>B.2 SITE CLEARANCE</b>                                                                                                                                                  |   |                                                   |                           |   |   |    |                                                                            |   |   |   |
| B.2.1 Any special H&S considerations required for site clearance?                                                                                                          | N |                                                   |                           |   |   |    |                                                                            |   |   |   |
| <b>B.3 COMMISSIONING AND MAINTENANCE</b>                                                                                                                                   |   |                                                   |                           |   |   |    |                                                                            |   |   |   |
| B.3.1 Electrical Works                                                                                                                                                     | Y | Testing of new electrical circuits within columns | Operatives, electrocution | 5 | 3 | 15 | Isolate cables in accordance with BS7671. Trained and competent workforce. | 5 | 1 | 5 |

(S) Severity (L) Likelihood (RR) Risk Rating (RR = S x L)

| (S) | Severity           | (L) | Likelihood | (RR)     | Risk Rating (RR = S x L) |                                                                                             |
|-----|--------------------|-----|------------|----------|--------------------------|---------------------------------------------------------------------------------------------|
| 1   | Negligible         | 1   | Remote     | 1        | Low                      | Acceptable                                                                                  |
| 2   | Minor              | 2   | Unlikely   | 2-5      | Medium                   | Acceptable with effective control measures                                                  |
| 3   | Lost time injuries | 3   | Possible   | 6 - 7    | Significant              | Not acceptable, risks need investigation to consider reasonable practical improvements      |
| 4   | Severe             | 4   | Likely     | 8 to 16  | High                     | Review urgently required to determine whether the risk can be removed / reduced or controls |
| 5   | Fatality           | 5   | Probable   | 20 to 25 |                          | Risks must be removed or reduced                                                            |