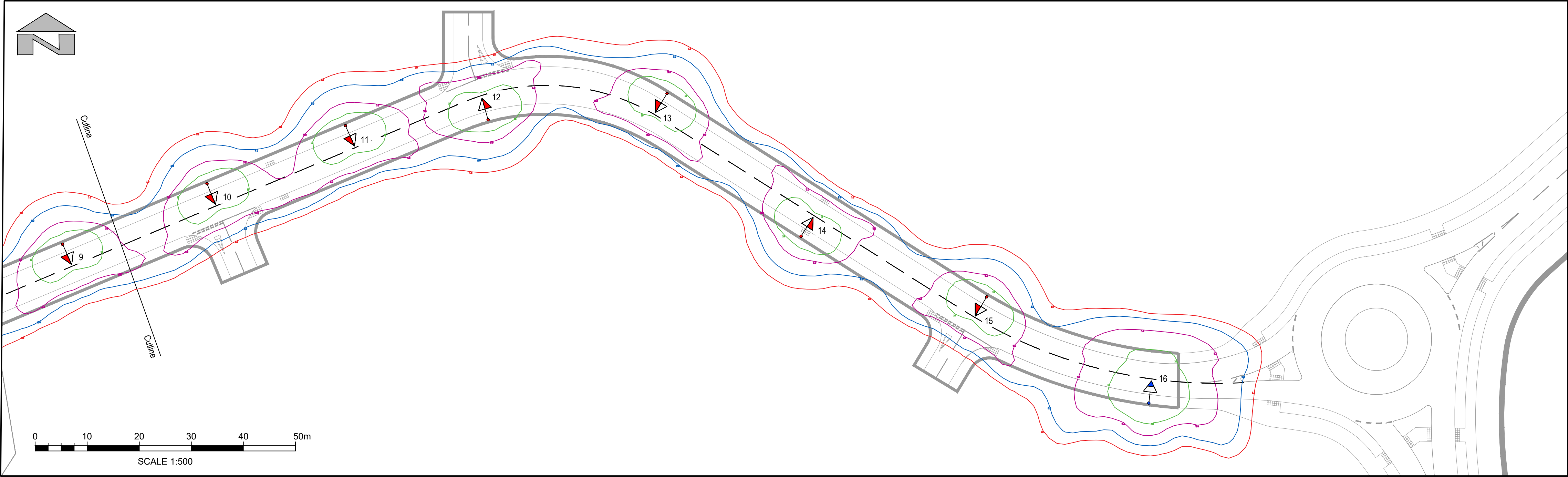
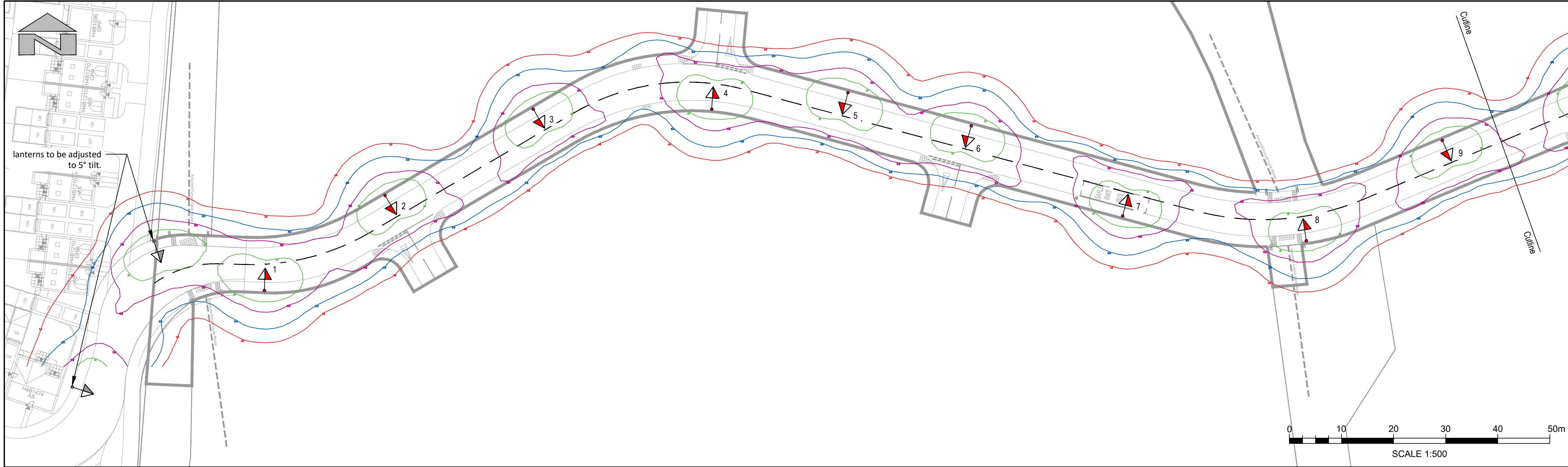




Notes

- The lighting design for the adoptable highway lighting complies with the requirements of BS 5489-1:2020 and BS EN 13201-2:2015 Class P3.
- The lighting installation shall comply fully with Newport City Council specification and the Manual of Contract Documents for Highway Works. All electrical work shall be carried out by a Highway Electrical Association and HERS approved contractor.
- The proposed lighting columns shall be provided with direct unmettered DNO/IDNO 230V ac 50Hz PME underground supplies. The Contractor shall liaise with the DNO/IDNO to arrange the service connections and determine the proposed ducting routes and trenching required to accommodate the service cables. Ducting shall be black in colour.
- Lighting columns shall be designed in accordance with BS EN 40 and hot dipped galvanised to BS EN ISO 1461 with pressed flush door (2 No. security locks) and root protection, as manufactured by CU Phosco Ltd Forest Part No. RM506T01DL2 (6m) and FR2608AF3SL2 (8m) to Newport CC specification with 50 year design life.
- Lighting columns shall be fabricated and positioned such that when the door is accessed, the operative will face oncoming traffic.
- Lighting columns shall be installed at the back of footway or with a minimum of 800mm setback from the face of column to the edge of carriageway. Where there is no footway or highway verge present columns shall be installed in an adoptable 1m x 1m parcel of land behind the shared surface, constructed to match the shared surface material. All locations to be agreed with the supervising engineer before installation.
- Columns shall be identified with a Charles Endirect label plate with black letters and numerals 75 mm high on a white background installed facing oncoming traffic at a height of 2.4 m above the footway or verge. All sign plates are to be attached to the columns with stainless steel banding. Final maintenance numbers for the highway lighting shall be obtained from NCC.
- Lighting columns shall be fitted with Lucy Zodian Trojan Mini DP-SW-FH SURGE double pole secondary cutouts (ref No. THM0139140) complete with integral SPD, earth terminal for 3 core cables and 10mm² PVC/PVC tails to the DNO service cutout. Cutouts shall be secured to the column base compartment backboard with brass round headed wood screws. Cables shall be terminated with type BW cable glands secured to the cutout glandplate with brass locknuts and shrouded with PVC sleeves.
- The phase and neutral wiring between the cutout and luminaire shall be 3 core flexible 'Blue Arctic grade' 2.5mm² PVC/PVC cable with copper conductors.
- The main protective conductor between the cutout gland plate and the column main earthing terminal shall be 10mm² PVC insulated cable with copper conductors complying with BS6004 Table 6491XS.
- The installation shall be installed, tested and commissioned in accordance with BS7671 'Requirements for Electrical Installations - IET Wiring Regulations (18th edition) with appropriate test certificates issued to the Project Engineer on completion of the Works.
- The drawing shall be used solely for the purpose described in the drawing title as other details may be inaccurate.

Key

- 8.0m galvanised steel lighting column c/w post-top mounted Thorn Isaro Pro IP60 LED L35/EWR/730/G36/3000K/350mA/63W/9.09 km luminaire with NFC enabled ballast, 7-pin NEMA socket and Royce Thompson Oasis 2000 35/18 lux on/off photo-electric cell. Note 350mA LED driver specified with headroom for higher lumen output.
- 6.0m galvanised steel lighting column c/w post-top mounted Thorn Isaro Pro IP24/L70/EWS/24LED/WW/3000K/700mA/6.61 km luminaire with NFC enabled ballast, 7-pin Telensa NEMA socket and Royce Thompson Oasis 2000 35/18 lux on/off photo-electric cell. Note the luminaire shall be programmed to operate at 4.92 km (38W) output.
- Phase 3A columns.
- Horizontal illuminance (contours indicate projected lux values at ground level, excluding the screening effect of buildings, trees, hedges, etc.)



Thorn Isaro Pro

| SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION                                                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------------------|--|
| IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:              |  |
| No significant risks identified.                                                                                                       |  |
| Refer to Designers CDM Risk/Hazard Identification Sheet for further information                                                        |  |
| IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT |  |

|     |       |      |      |             |            |
|-----|-------|------|------|-------------|------------|
| P01 | JF    | MB   | MB   | First Issue | 17/09/2021 |
| Rev | Drawn | Chkd | Appd | Description | Date       |

Purpose of Issue

S4 - Suitable for Approval

Classification

Confidential

Client

PJA Civil Engineering Ltd

Project

Main Street,  
Llanwrn Phase 3,  
Newport

Drawing

Street Lighting

|            |       |         |          |
|------------|-------|---------|----------|
| Scale @ A1 | Drawn | Checked | Approved |
| 1:500      | JF    | MB      | MB       |

|             |               |
|-------------|---------------|
| Project No. | Date          |
| GC/3957     | 17th Sep 2021 |

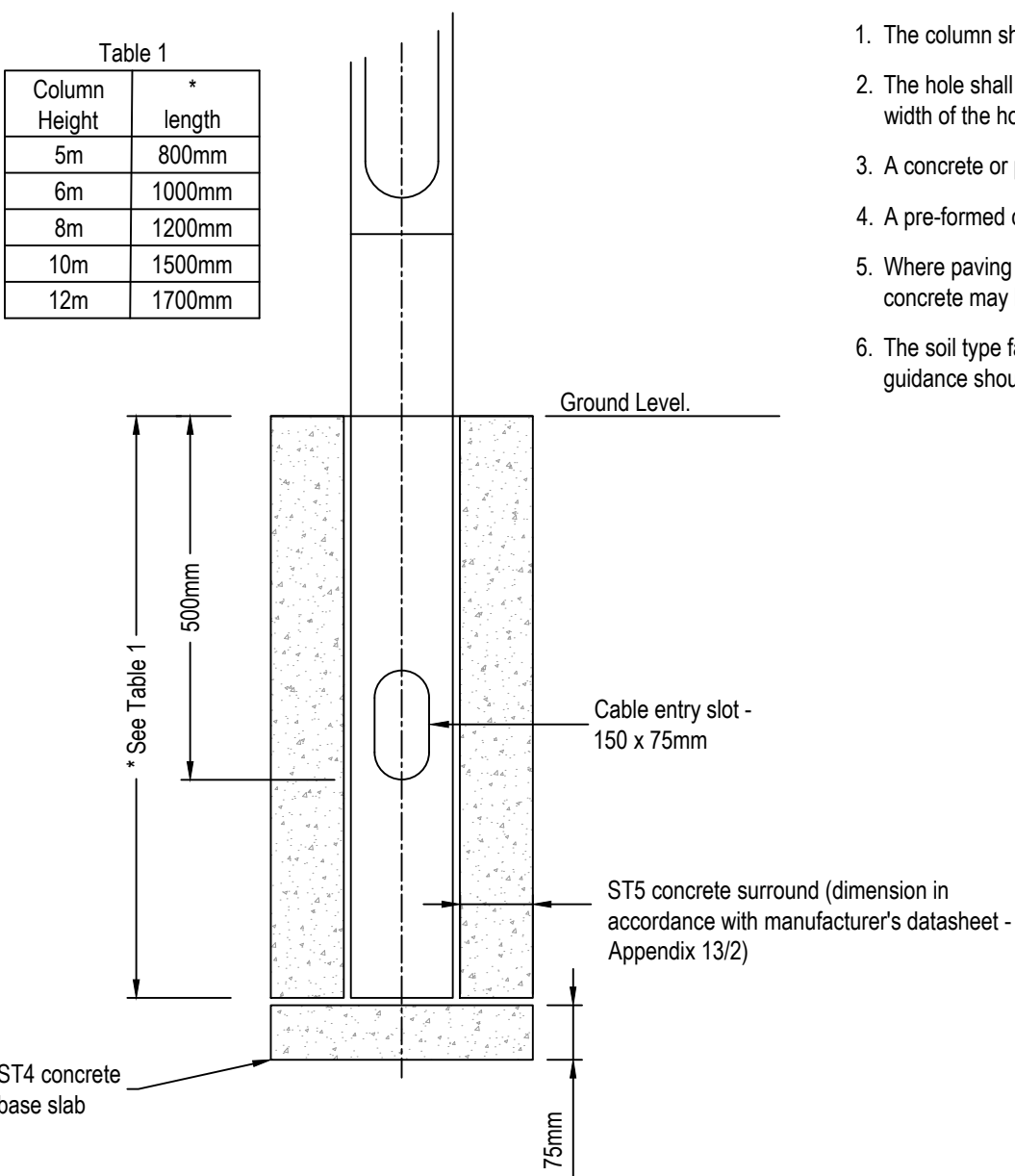
|                                                                 |                  |
|-----------------------------------------------------------------|------------------|
| Drawing Identifier                                              | BS1192 Compliant |
| Project - Originator - Zone - Level - File Type - Role - Number | revision         |
| GC3957-CAP-79-XX-DR-E-1303                                      | P01              |

**CAPITA**  
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029 2080 3500  
www.capitaproperty.co.uk  
Capita Property and Infrastructure Ltd.

Typical Column Planting Detail

| Table 1       |        |
|---------------|--------|
| Column Height | length |
| 5m            | 800mm  |
| 6m            | 1000mm |
| 8m            | 1200mm |
| 10m           | 1500mm |
| 12m           | 1700mm |



- The column shall be installed in accordance with the manufacturer's specific instructions.
- The hole shall be excavated to the depth required for the root of the particular column, keeping the width of the hole to a minimum & creating as little disturbance as possible to the surrounding soil.
- A concrete or paving slab shall be provided in soft ground to prevent sinking.
- A pre-formed duct shall be inserted to the cable entry slot for protection of the cable.
- Where paving or bituminous surfacing is to be applied around the lighting column, the top level of the concrete may be lowered by the thickness of the surfacing.
- The soil type factor shall be taken from PD6547/EN 40 Part 2. For undetermined or unusual conditions guidance should be sought from a Geotechnical Engineer.

Cable Termination - DNO supply

