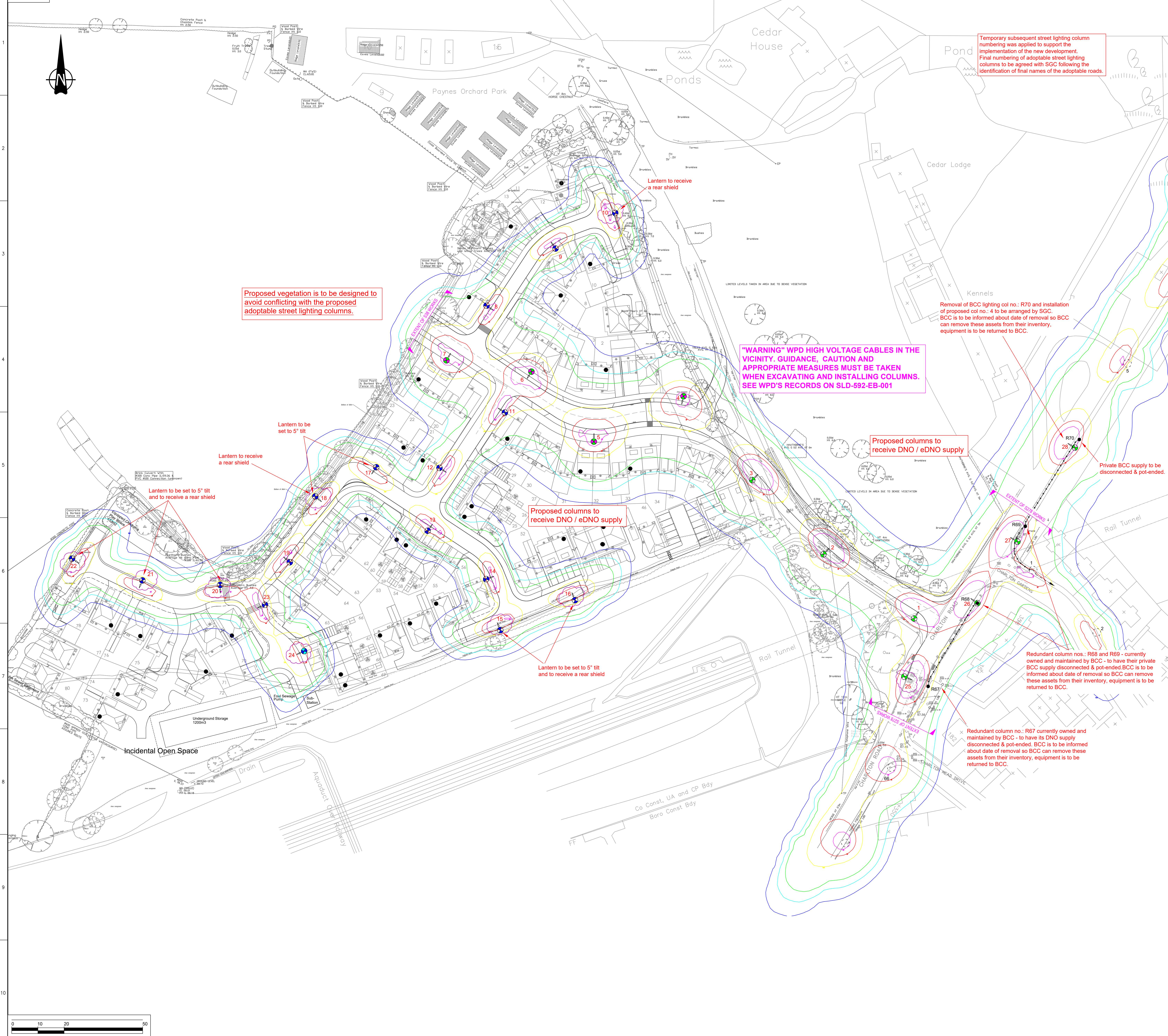


SCALE: 1:500



Proposed vegetation is to be designed to avoid conflicting with the proposed adoptable street lighting columns.

Temporary subsequent street lighting column numbering was applied to support the implementation of the new development. Final numbering of adoptable street lighting columns to be agreed with SGC following the identification of final names of the adoptable roads.

"WARNING" WPD HIGH VOLTAGE CABLES IN THE VICINITY GUIDANCE, CAUTION AND APPROPRIATE MEASURES MUST BE TAKEN WHEN EXCAVATING AND INSTALLING COLUMNS. SEE WPD'S RECORDS ON SLD-592-EB-001

Where street lighting columns are shown in orange/red, the area of adoption would need to be extended to incorporate proposed lighting columns. See adoption note below.

ADOPTION NOTE

ALL ADOPTABLE STREET LIGHTING COLUMNS SHALL BE INSTALLED IN ADOPTED/ADOPTABLE HIGHWAY. In residential areas columns shall normally be installed at the rear of the footpath.

For columns that are to be erected to serve a shared surface carriageway or shared cycleway/pathway, the column will need to be offset by at least 500mm behind the edge of the carriageway or pathway. A 1m x 1m square area around the base of the column will need to be dedicated as adopted highway to allow future maintenance and column replacement. The Developer is required to:

1. Submit a revised highway adoption drawing based on this lighting layout to the Development Implementation Team. This must be suitably coloured, to confirm the areas of land that are to be adopted as highway.
2. Confirm that conveyance legal documents have been amended to reflect the highway adoption drawing - i.e. the 1m x 1m square removed from the purchaser's curtilage.

Failure to meet these requirements may jeopardise the road adoption. Columns are installed on shared surface routes shall be erected with the door facing the carriageway for ease of access.

Proposed vegetation is to be designed to avoid conflicting with the proposed adoptable street lighting columns.

Proposed columns to receive DNO / eDNO supply

Redundant column nos.: R68 and R69 - currently owned and maintained by BCC - to have their private BCC supply disconnected & pot-ended. BCC is to be informed about date of removal so BCC can remove these assets from their inventory, equipment is to be returned to BCC.

Redundant column no.: R67 currently owned and maintained by BCC - to have its DNO supply disconnected & pot-ended. BCC is to be informed about date of removal so BCC can remove these assets from their inventory, equipment is to be returned to BCC.

Lantern to be set to 5° tilt and to receive a rear shield

Lantern to receive a rear shield

Lantern to be set to 5° tilt and to receive a rear shield

Proposed columns to receive DNO / eDNO supply

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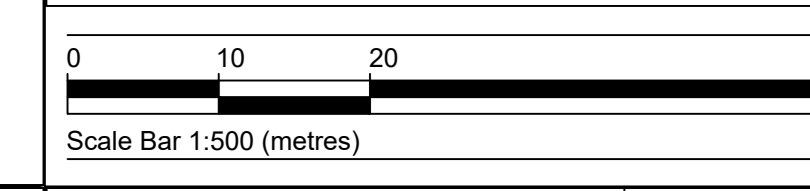
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EQUIPMENT SPECIFIC		ORDNANCE SURVEY																																									
<ul style="list-style-type: none"> Street lighting column to be removed (see notes). Street lighting column to remain. Proposed 6m galvanneal post top tapered column manufactured by CU Phosco Lighting ref no.: TT200407SGFR with glass flake roof (GFR) protection, painted with one coat of Viterlac 305 paint to BS 4800 colour (Q853). Column to receive a post top mounted lantern manufactured by CU Phosco ref.: E850-HP-28-FAA-740-SE8375-17W, 4000K, black in colour, CW 7pin NEMA socket and LED driver factory pre-programmed to SGC's approved dimming regime. Lantern to be set to 0° tilt unless otherwise stated on drawing. CU ordering code: SGC-CU-S-17W-M22 (Elexon UM50 Charge Code: 42 0017 0000 100; switch regime D90) As above but lantern ref.: E850-HP-28-FAA-740-SE8375-17W, 4000K, black in colour, CW 7pin NEMA socket and LED driver factory pre-programmed to SGC's approved dimming regime. Lantern to be set to 0° tilt. CU ordering code: SGC-CU-S-17W-M22 (Elexon UM50 Charge Code: 42 0017 0000 100; switch regime D90) Proposed 8m galvanneal post top tubular column manufactured by CU Phosco Lighting ref no.: FR2608A01/GFR with glass flake roof (GFR) protection, painted with one coat of Viterlac 305 paint to BS 4800 colour (Q853), CW 8pin to 70mm post top spot adaptor ref.: A2050011. Column to receive a post top mounted lantern manufactured by CU Phosco ref.: E851-64-42-0-740-W7-0475-42W, 4000K, black in colour, CW 7pin NEMA socket and LED driver factory pre-programmed to SGC's approved dimming regime. Lantern to be set to 0° tilt. CU ordering code: SGC-CU-M-42W-M22 (Elexon UM50 Charge Code: 42 0042 0000 100; switch regime D90) As above but lantern ref.: E851-64-4-0-740-W7-0475-42W, 4000K, black in colour, CW 7pin NEMA socket and LED driver factory pre-programmed to SGC's approved dimming regime. Lantern to be set to 0° tilt. CU ordering code: SGC-CU-M-42W-M22 (Elexon UM50 Charge Code: 42 0042 0000 100; switch regime D90) 		<p>© Crown copyright and database rights 2023 Ordnance Survey 100023410.</p> <p>NOTES</p> <ol style="list-style-type: none"> 1. All dimensions are in metres unless noted otherwise. 2. The road lighting installation to comply with South Gloucestershire Council's requirements in accordance with the Developer Specification and Street Lighting Policy. 3. The new lighting columns and their DNO / eDNO electrical supplies shall be installed in land dedicated for ownership to the Council by the Developer enabling continuity of installation and maintenance access. Should property access require column(s) to be repositioned the Developer shall notify the Council to obtain agreed alternative position(s). 4. All equipment and installation works shall comply with relevant British Standards. For this development, the equipment detailed in the section equipment specific shall be installed. Prior to any installation or road lighting works commencing on site, alternative equipment may be considered for approval by the Council subject to agreement for suitability, design, lighting performance and operational costs. <p>EQUIPMENT GENERAL</p> <ol style="list-style-type: none"> 1. Unless otherwise shown the columns shall be installed to the Type 2 foundation (see standard drawing no.: SGCSD1300/01A) in the rear of the footpath or similar off-set when in verge. Column poles may also be used after gaining prior consent of the SGC Lighting Engineer of the proposed column pot installation. On cycle-paths / shared cycle-paths: unless otherwise shown, the columns shall be installed to the Type 2 foundation (see standard drawing no.: SGCSD1300/01A). They shall be installed behind and out of the footpath with a 0.6m clearance from the back edge of the path, if possible. 2. All street lighting lanterns are to be switched by a one part electronic negative ratio (1:0.5) photo-electric control unit (PECU) manufactured by Westec Technology Ltd type 8480 set to switch on at 35 lux unless otherwise stated in Equipment Specific. (Elexon UM50 Charge Code: 99 0007 0000 100) 3. All street lighting lanterns are to be fitted with an electronic LED driver, factory pre-programmed to CL0 operation and SGC's approved dimming regime set out by the Street Lighting Policy: <ul style="list-style-type: none"> - 75% until 11:00 pm (GMT) - 50% between 11:00 pm (GMT) and 6:00 am (GMT) - 75% from 6:00 am (GMT) (Elexon's M.LSD switch regime: D90) 4. All electrical supplies for the road lighting equipment and illuminated road traffic signs shall be provided by a DNO / eDNO unless otherwise stated in equipment specific. Street Lighting Furniture installed on refuge or traffic calming islands will receive local authority cabled supplies installed in accordance with South Gloucestershire Council's Developer Specification. 5. The lighting equipment identification numbering shall be according to standard drawing no. SGCSD1300/20. The SL numbering detailed upon the lay-out plan is for guidance and the actual numbering used shall be consecutive numbers applied for each separately addressed named road or footpath. The consecutive lighting numbering system applied shall be only numerical and commence in each road with the start of the adjacent property numbering system. 6. Any proposed amendments to the development layout and/or lighting scheme shall be approved by the Council prior to works commencing and/or completion on site. 7. Existing columns: Where lanterns are to be replaced on existing columns, the cut outs will be changed to DPH1, 2F or 3F depending on no. of lanterns/outgoing circuits etc. 8. Council supplies denoted to street lighting furniture shall be highway ducted cabling installed to the council specification. 9. Ducting Requirements: <ul style="list-style-type: none"> a) Carriageway: minimum 100mm internal a ducting laid at 750mm depth to cover. b) Footway / Cycleway / Verge: minimum 60mm internal a ducting laid at 450mm depth to cover. c) Local Authority street lighting cabling shall have orange ducting. d) DNO / eDNO cabling shall have black ducting. e) All ducting to have a 6mm² draw rope. f) Carriageway crossings shall have a minimum of 2 ducts laid. 10. Equipment above ground base compartments to be provided with DPU cut-outs manufactured by Infoclip Ltd product reference DPH1F, 2F or 3F. In refuge islands there will be separate sub-fused supplies to adjacent individual signage. 11. All street lighting furniture removed that is deemed to be re-usable will be returned to SGC's works depot at Engine Common Lane, Yale. Contact: Andy Porter (01454 863952). 																																									
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<p>LIGHTING CALCULATION RESULTS ACCORDING TO BS 5489-1:2020</p> <p>Isolux contour - 0.2 Lux Isolux contour - 5 Lux Isolux contour - 0.5 Lux Isolux contour - 10 Lux Isolux contour - 1 Lux Isolux contour - 15 Lux</p> <table border="1"> <thead> <tr> <th rowspan="2">Area Reference</th> <th colspan="2">Illuminance</th> <th colspan="2">Uniformity</th> <th rowspan="2">Lighting Class</th> </tr> <tr> <th>E_{min}</th> <th>E_{max}</th> <th>E_{min}/E_{max}</th> <th>E_{av}/E_{max}</th> </tr> </thead> <tbody> <tr> <td>Charlton Rd - S278</td> <td>10.02 lux</td> <td>27.15 lux</td> <td>2.50</td> <td>0%</td> <td>P2</td> </tr> <tr> <td>Charlton Rd Corridor - S278</td> <td>14.52 lux</td> <td>27.31 lux</td> <td>1.96</td> <td>31%</td> <td>C3 compromised</td> </tr> <tr> <td>Charlton Common - S278/S279</td> <td>1.77 lux</td> <td>27.25 lux</td> <td>1.54</td> <td>0%</td> <td>P3</td> </tr> <tr> <td>Charlton Rd (N) - S28</td> <td>0.77 lux</td> <td>17.36 lux</td> <td>1.10</td> <td>0%</td> <td>P4</td> </tr> <tr> <td>Charlton Rd (S) - S28</td> <td>0.78 lux</td> <td>17.14 lux</td> <td>1.07</td> <td>0%</td> <td>P4</td> </tr> </tbody> </table>		Area Reference	Illuminance		Uniformity		Lighting Class	E _{min}	E _{max}	E _{min} /E _{max}	E _{av} /E _{max}	Charlton Rd - S278	10.02 lux	27.15 lux	2.50	0%	P2	Charlton Rd Corridor - S278	14.52 lux	27.31 lux	1.96	31%	C3 compromised	Charlton Common - S278/S279	1.77 lux	27.25 lux	1.54	0%	P3	Charlton Rd (N) - S28	0.77 lux	17.36 lux	1.10	0%	P4	Charlton Rd (S) - S28	0.78 lux	17.14 lux	1.07	0%	P4	<p>Project: REDROW HOMES CHARLTON COMMON DEVELOPMENT</p> <p>Title: STREET LIGHTING & ELECTRICAL REQUIREMENTS S38 & S278</p> <p>Development drawing ref: RH5W 5310 PL01NMA Rev: F PURGED with S278 (25/04/2023)</p> <p>Consultant: Redrow Homes SGC Profress SLD-592</p> <p>Scale @ A0: 1:500 Drawn: PL</p> <p>Date: April 2023 Approved: AP</p> <p>Dwg No: SLD-592-001</p>	
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Scale Bar 1:500 (metres)