



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.

- EQUIPMENT SPECIFIC**
- Street lighting column according to Bellway Homes lighting layout drg. no.: HLS-880-Draft-6
 - Proposed 5m galvanised steel raise & lower column manufactured by CU Phosco Lighting ref no.: RM505T01DL2NL/PW/GFR with glass flake root (GFR) protection. Column to receive a post top mounted lantern manufactured by CU Phosco ref.: P852k-12-R3B-NW-CB200-9W, 4000K, c/w 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-9W-N19**
 - Proposed 6m galvanised post top tubular column manufactured by CU Phosco Lighting ref no.: FR2506T01/GFR with glass flake root (GFR) protection. Column to receive a post top mounted lantern manufactured by CU Phosco ref.: P852k-12-R2B-NW-CB350-15W, 4000K, c/w 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-15W-M19**
 - As above but lantern ref.: P852k-12-R2B-NW-CB500-20W, 4000K, c/w 7pin NEMA socket and LED driver factory pre-programmed to SGC's approved dimming regime. Lantern to be set to 5° tilt. CU ordering code: **SGC-CU-S-20W-M19**
 - As above but lantern ref.: P852k-12-F2-NW-CB500-20W, 4000K, c/w 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-20W-W19**

- ORDNANCE SURVEY**
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- NOTES**
- All dimensions are in metres unless noted otherwise.
 - The road lighting installation is to comply with South Gloucestershire Council's requirements in accordance with the Developer Specification and Street Lighting Policy.
 - The new lighting columns and their DNO / dNO 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).
 - All equipment and installation works shall comply with relevant British Standards. For this development, 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.
- EQUIPMENT GENERAL**
- Unless otherwise shown the columns shall be installed to the Type 2 foundation (see standard drawing no.: SGSD/1300/01A) in the rear of the footpath or similar off-set when in verge. Column pots 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.: SGSD/1300/01A). They shall be installed behind and out of the footpath with a 0.5m clearance from the back edge of the path, if possible.
 - 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 Westrie Technology Ltd type 8480 set to switch on at 35 lux unless otherwise stated in Equipment Specific. (Elexon's MLSD Charge Code: 99 0001 0000 100)
 - All street lighting lanterns are to be fitted with an electronic LED driver, factory pre-programmed to CLO operation and SGC's approved dimming regime set out by the Street Lighting Policy:
 - 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 MLSD switch regime: D90)
 - All electrical supplies for the road lighting equipment and illuminated road traffic signs shall be provided by a DNO / dNO 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.
 - The lighting equipment identification numbering shall be according to standard drawing no SGSD/1300/20. 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.
 - 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.
 - Existing columns: Where lanterns are to be replaced on existing columns, the cut outs will be changed to DPI/1F, 2F or 3F depending on no. of lanterns/outgoing circuits etc.
 - Council supplies denoted to street lighting furniture shall be highway ducted cabling installed to the council specification.
 - Ducting Requirements:
 - Carriageway: minimum 100mm internal ø ducting laid at 750mm depth to cover.
 - Footway / Cycleway / Verge: minimum 50mm internal ø ducting laid at 450mm depth to cover.
 - Local Authority street lighting cabling shall have orange ducting.
 - DNO / dNO cabling shall have black ducting.
 - All ducting to have a 6mm² draw rope.
 - Carriageway crossings shall have a minimum of 2 ducts laid.
 - Equipment above ground base compartments to be provided with DPI cut-outs manufactured by Tofo Ltd product reference DPI/1F, 2F or 3F. In refuge islands there will be separate sub-fused supplies to adjacent individual signage.
 - 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 863982)

Where street lighting columns are shown in purple revision cloud, the area of adoption would need to be extended to incorporate proposed lighting column. 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/footway, the column will need to be offset by at least 500mm behind the edge of the carriageway or cycleway. 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:

- 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.
- 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 requirement 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.

LIGHTING CALCULATION RESULTS ACCORDING TO BS 5489-1:2013

Area Reference	E _{avg}	E _{min}	E _{max}	Uniformity	E _{min} /E _{max}	Lighting Class
Access Road	4.86 lux	17.65 lux	0.84 lux	6%	17%	P4
Parcel 5	4.20 lux	13.05 lux	0.89 lux	7%	21%	P4
Parcel 6	4.74 lux	15.30 lux	1.02 lux	7%	22%	P4
Parcel 7	4.25 lux	13.30 lux	0.80 lux	6%	19%	P4

NOTE GENERAL

- The developer will be responsible for ensuring columns or electrical equipment are tested to BS7671 and certified before connection of electricity board supplies. Columns connected to the electricity boards system will be advised to the council and forwarded to the SGC development section for control purposes.
- The final numbering system will be approved by SGC prior to the issuing of completion certs. Prior adoption the developer will provide up to date testing and inspection and the certificates issued will be consistent with the final numbering system.
- The developer is responsible for the ongoing maintenance of the lighting columns through to adoption.
- SGC will carry out a full street lighting inspection to ensure compliance to specification. Any remedial works required shall be carried out following the part one inspection. A part two inspection will be required to ensure the remedial works are satisfactory. Any subsequent or non-standard inspections will be recharged on a time basis to the developer.

Rev	Description	Drawn	App'd	Date
B	Updated site model and landscaping	PL	AP	05/12/23
A	Updated site model, extended path lighting, added landscaping	PL	AP	27/10/23

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Project: BERWICK GREEN PROJECT
TAYLOR WIMPEY - PARCELS 5 TO 7
CRIBBS CAUSEWAY

Title: STREET LIGHTING & ELECTRICAL REQUIREMENTS
S38

Development drawing ref:	22016 site model 01.27.dwg (29/11/2023)
Consultant	Taylor Wimpey
Scale @ A1	1:500
Date	August 2023
Dwg No.	SLD-599-001

Acad Ref.: \\stor1\shared\Community Services\broad lam\shared\STREET CARE\STREET LIGHTING\Design Requests\Parcel 5 - 7 - S38\Drawings\SLD-599-001-B.dwg (Doc. 06. 2023 - 7.30am)