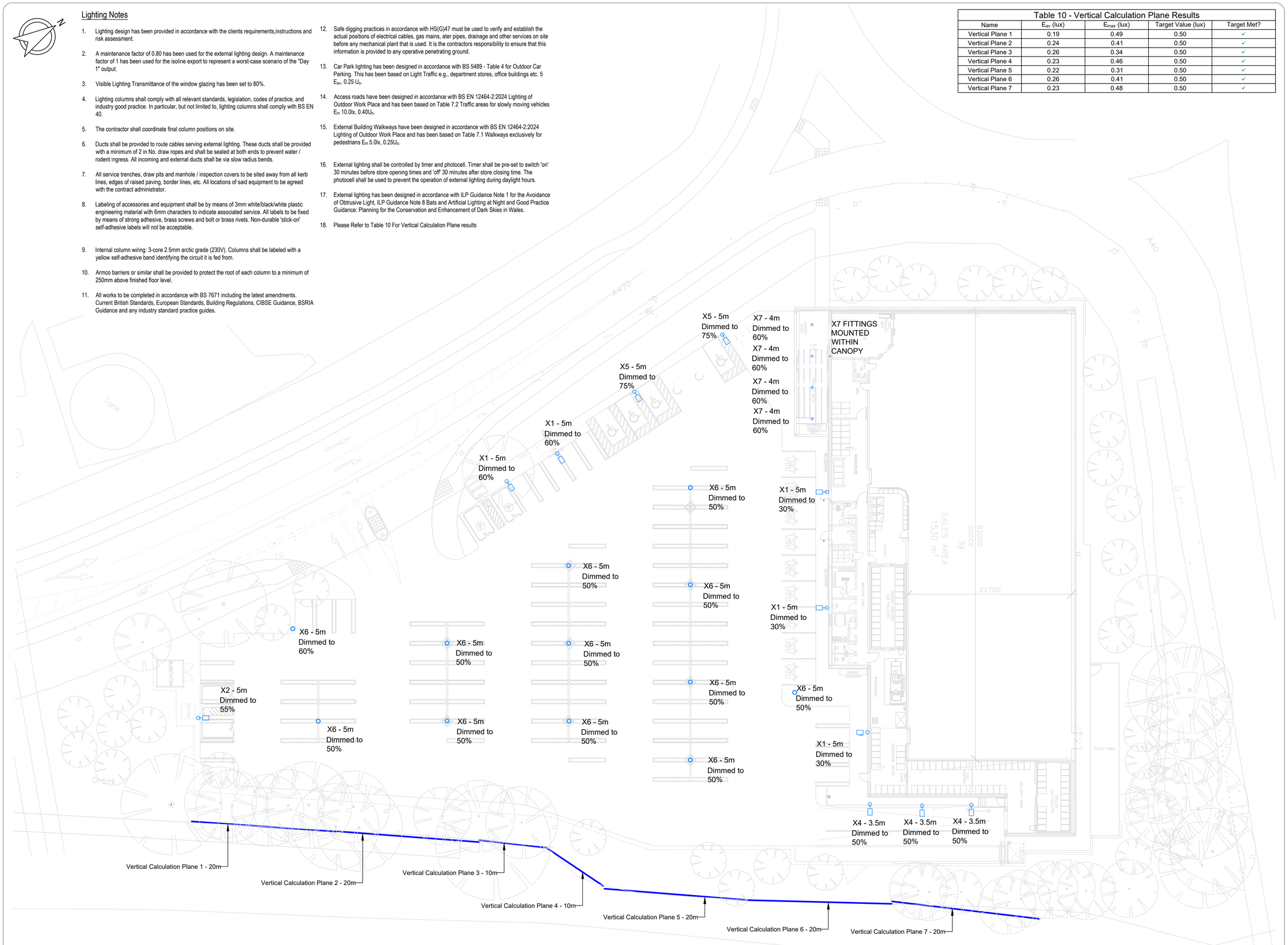
A1

Lighting Notes

1. Lighting design has been provided in accordance with the clients requirements,instructions and risk assessment.
2. A maintenance factor of 0.80 has been used for the external lighting design. A maintenance factor of 1 has been used for the isoline export to represent a worst-case scenario of the "Day 1" output.
3. Visible Lighting Transmittance of the window glazing has been set to 80%.
4. Lighting columns shall comply with all relevant standards, legislation, codes of practice, and industry good practice. In particular, but not limited to, lighting columns shall comply with BS EN 40.
5. The contractor shall coordinate final column positions on site.
6. Ducts shall be provided to route cables serving external lighting. These ducts shall be provided with a minimum of 2 in No. draw ropes and shall be sealed at both ends to prevent water / rodent ingress. All incoming and external ducts shall be via slow radius bends.
7. All service trenches, draw pits and manhole / inspection covers to be sited away from all kerb lines, edges of raised paving, border lines, etc. All locations of said equipment to be agreed with the contract administrator.
8. Labeling of accessories and equipment shall be by means of 3mm white/black/white plastic engineering material with 6mm characters to indicate associated service. All labels to be fixed by means of strong adhesive, brass screws and bolt or brass rivets. Non-durable 'stick-on' self-adhesive labels will not be acceptable.
9. Internal column wiring: 3-core 2.5mm arctic grade (230V). Columns shall be labeled with a yellow self-adhesive band identifying the circuit it is fed from.
10. Armco barriers or similar shall be provided to protect the root of each column to a minimum of 250mm above finished floor level.
11. All works to be completed in accordance with BS 7671 including the latest amendments. Current British Standards, European Standards, Building Regulations, CIBSE Guidance, BSRIA Guidance and any industry standard practice guides.
12. Safe digging practices in accordance with HS(G)47 must be used to verify and establish the actual positions of electrical cables, gas mains, ater pipes, drainage and other services on site before any mechanical plant that is used. It is the contractors responsibility to ensure that this information is provided to any operative penetrating ground.
13. Car Park lighting has been designed in accordance with BS 5489 - Table 4 for Outdoor Car Parking. This has been based on Light Traffic e.g., department stores, office buildings etc. 5 E_{av}, 0.25 U_o.
14. Access roads have been designed in accordance with BS EN 12464-2:2024 Lighting of Outdoor Work Place and has been based on Table 7.2 Traffic areas for slowly moving vehicles E_m 10.0lx, 0.40U_o.
15. External Building Walkways have been designed in accordance with BS EN 12464-2:2024 Lighting of Outdoor Work Place and has been based on Table 7.1 Walkways exclusively for pedestrians E_m 5.0lx, 0.25U_o.
16. External lighting shall be controlled by timer and photocell. Timer shall be pre-set to switch 'on' 30 minutes before store opening times and 'off' 30 minutes after store closing time. The photocell shall be used to prevent the operation of external lighting during daylight hours.
17. External lighting has been designed in accordance with ILP Guidance Note 1 for the Avoidance of Obtrusive Light, ILP Guidance Note 8 Bats and Artificial Lighting at Night and Good Practice Guidance: Planning for the Conservation and Enhancement of Dark Skies in Wales.
18. Please Refer to Table 10 For Vertical Calculation Plane results

Table 10 - Vertical Calculation Plane Results				
Name	E_{av} (lux)	E_{max} (lux)	Target Value (lux)	Target Met?
Vertical Plane 1	0.19	0.49	0.50	✓
Vertical Plane 2	0.24	0.41	0.50	✓
Vertical Plane 3	0.26	0.34	0.50	✓
Vertical Plane 4	0.23	0.46	0.50	✓
Vertical Plane 5	0.22	0.31	0.50	✓
Vertical Plane 6	0.26	0.41	0.50	✓
Vertical Plane 7	0.23	0.48	0.50	✓



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SAFETY, HEALTH & ENVIRONMENTAL

Risk Level:
- Very Low
- Low
- Moderate
- High
- Very High

This drawing should be read in conjunction with the 'Designers risk assessment schedule', document number: 08998L-SDS-ZZ-ZZ-RG-E-70820008

All works should be carried out to an approved risk assessment and method statement.

FIRE SAFETY AND CONFORMITY

All fixings within fire compartments (including fasteners, nuts, bolts, screws, anchors, cavity fixings, suspension fixings, beam clamps, pipe clamps, base plates, rod fixings, wire hangers, clips, and ties) shall be fire-rated for the specified fire resistance period of the compartment. Each type of fixing shall be accompanied by a fire-rated certificate of compliance and a Declaration of Conformity (DoC) or Certificate of Conformity (CoC). Additionally, photographic evidence must be provided to demonstrate that the installation complies with all relevant UK fire safety standards and regulations.

Legend

Refer to Luminaire Schedule 08624L-SDS-ZZ-ZZ-SH-E-7082007 for more information on External Luminaires.

- Vertical Calculation Plane (Reference + Length)
- X1 — Column mounted Fitting (see luminaire Schedule for information)
- X2 — Column mounted Fitting (see luminaire Schedule for information)
- X3 — Column mounted Fitting (see luminaire Schedule for information)
- X4 — Column mounted Fitting (see luminaire Schedule for information)
- X5 — Column mounted Fitting (see luminaire Schedule for information
- X6 — Column mounted post top (see luminaire Schedule for information)
- X7 — Downlight Fitting (see luminaire Schedule for information)

Rev	Details:	By / Chkd / App	Date
P03	Further Comments	KT / MFW / EH	07.10.2026
P02	Updates from Comments	KT / EH	24.09.2026
P01	Preliminary Issue	KT / EH	28.08.2026

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CLIENT

PROJECT TITLE
Brecon Lidl
Land off A470
Brecon, Powys, LD3 8LA

DRAWING TITLE
Site Key Plan Layout
Lighting Impact Assessment
External Lighting

SCALE AT A1
1:300

DISCIPLINE
Lighting

DRAWING NUMBER
08998L-SDS-ZZ-EX-D-E-7082003
Project - Originator - Zone - Level - Type - Role - NBS class - Sequential Number

STATUS	SUITABILITY	ISSUE
Review & Accepted	S5	P03