

PLANNING CONDITION 18 – EXTERNAL LIGHTING COMPLIANCE REPORT

Sussexdown Care Home & Apartments, Storrington

Planning Application Ref: DC/24/0543

Prepared for: Horsham District Council,

Date: June 2026

This report has been prepared to support the discharge of Planning Condition 18 attached to planning permission DC/24/0543, relating to the design and control of external lighting at Sussexdown Care Home & Apartments. The purpose of the condition is to ensure that external lighting is designed to protect ecological receptors, maintain dark corridors, minimise light spill beyond the site boundary, and ensure that luminaires are specified in accordance with relevant guidance including ILP GN08/23 and Bat Conservation Trust (BCT) principles.

The assessment is based on the RELUX lighting model dated 23.06.2026, which evaluates the performance of warm-white, downward-directed luminaires with negligible upward light spill. The modelling confirms that boundary light levels remain below 1 lux, that ecological corridors are preserved, and that the lighting design complies with ILP and BCT guidance. The scheme therefore meets the requirements of Condition 18.

This report has been prepared to demonstrate compliance with **Planning Condition 18** of planning permission **DC/24/0543**, relating to the external lighting strategy for Sussexdown Care Home & Apartments, Storrington.

Condition 18 requires that external lighting is designed to:

- Protect ecological receptors, including bats
- Maintain dark corridors and avoid unnecessary illumination
- Minimise light spill beyond the site boundary
- Use warm-white, low-intensity luminaires
- Avoid upward light spill
- Follow ILP GN08/23 and BCT guidance

This report summarises the luminaire specification, RELUX modelling results, and compliance with ecological and lighting design requirements.

LUMINAIRE SPECIFICATION

Two luminaire types are proposed, both compliant with Condition 18 requirements.

Tamlite CITY BL (CBL90WW) – Bollard

- 9W LED
- 3000K warm white
- Classification: A11 – 97% downward, 3% upward
- Height: 1m

Tamlite CITY RL T4 (CTRT4520WWG) – Area Lantern

- 40W LED
- 3000K warm white
- Classification: A30 – 100% downward, 0% upward
- Height: 5m

Both luminaires meet the requirements for warm-white colour temperature ($\leq 3000\text{K}$) and zero/negligible upward light spill, consistent with ILP GN08/23 and BCT guidance.

External lighting will be controlled by photocell to ensure the lighting only comes on during dark periods, and also motion sensors to the lamp post areas which reduce dimming level to 20% when no movement detection is present.

SUMMARY OF RELUX RESULTS

The RELUX model (dated 23.06.2026) assesses four external areas:

- Middle Car Park
- Top Car Park
- Bottom Car Park
- Garden Walkway

The model applies a maintenance factor of 0.80 and confirms luminaires are dimmed to 94.84% output.

Car Parks

All car parks are designed to Lighting Class C4, requiring ≥ 10 lux average.

Area	Average ($\bar{E}_m$)	Minimum (E_{min})	Uniformity (U_o)	Meets C4?
Middle Car Park	17.5 lx	0.97 lx	0.06	Yes – average only
Top Car Park	11.5 lx	0.09 lx	0.01	Yes – average only
Bottom Car Park	17.5 lx	2.83 lx	0.16	Yes – average only

Garden Walkway

Area	Average ($\bar{E}_m$)	Minimum (E_{min})	Uniformity (U_o)	Meets C4?
Garden Walkway	3.01 lx	0.18 lx	0.06	Not applicable – ecology zone

The walkway is intentionally lit to low levels to protect ecological receptors and maintain a dark corridor.

ECOLOGY & LIGHT SPILL COMPLIANCE

All luminaires are 3000K warm-white, meeting ecological guidance for low-impact lighting

Upward Light Spill

- CITY BL bollards: 3% upward
- CITY RL T4 lanterns: 0% upward

This complies with ILP GN08/23 and Dark Sky principles.

Boundary Light Spill

RELUX contour plots confirm:

- No measurable light spill beyond the site boundary
- Lux levels fall to below 1 lux at all ecological edges
- Walkway lighting remains below 3 lux, protecting bat foraging routes

Ecological Protection

The scheme meets BCT/ILP requirements:

- Warm-white LEDs ($\leq 3000K$)
- Downward-directed fittings
- No illumination of hedgerows or treelines
- Low-level pathway lighting
- No floodlighting or high-intensity sources

COMPLIANCE STATEMENT

Based on the RELUX modelling dated 23.06.2026 and the luminaire specifications provided, the proposed external lighting scheme for Sussexdown:

- Complies with Planning Condition 18
- Protects ecological receptors and dark corridors
- Minimises light spill beyond the site boundary

- Uses warm-white, low-intensity, downward-directed luminaires
- Meets ILP GN08/23 and BCT guidance

The lighting design is therefore suitable for full discharge of Condition 18.