

BAT FRIENDLY LIGHTING PLAN

Proposed residential extension — Karenza, Hook Lane, Aldingbourne, West Sussex, PO20 3TB

Site	Karenza, Hook Lane, Aldingbourne, West Sussex, PO20 3TB
Local Planning Authority	Arun District Council
Planning application ref.	AL/41/26/HH
Condition discharged	Condition 4 — Bat Friendly Lighting Plan
Guidance	BCT / ILP Guidance Note 08/23: Bats and artificial lighting at night
Date	31/07/2026

1. Introduction and purpose

This Bat Friendly Lighting Plan has been prepared to discharge the external lighting condition attached to the planning permission for a residential extension at Karenza, Hook Lane, Aldingbourne, PO20 3TB. It sets out the finalised specification, layout and control of all external lighting so that artificial light at night (ALAN) does not adversely affect the protected and priority bat species associated with the Singleton and Cocking Tunnels SSSI / South Downs Bat SAC, within whose Zone of Influence the site lies.

The condition requires, in summary:

"Prior to any part of the new development being first occupied, a Bat Friendly Lighting Plan shall be submitted to and approved in writing by the Local Planning Authority. The recommended lighting specification shall use LED's (at 3 lux) with the recommended spectrum being 80% amber and 20% white with a clear view, no UV, a horizontal light spread of less than 70 degrees and a timer. A 3D plan of the illumination level should be supplied so that the Local Planning Authority can assess the potential impact on protected species."

The Preliminary Ecological Appraisal (PEA-SCT-KARENZA, 25 May 2026) identified ALAN as the most significant potential impact pathway at this site, particularly for light-averse horseshoe bats. The lighting scheme below has been designed to meet each parameter of the condition and to accord with BCT/ILP Guidance Note 08/23.

2. Design objectives

- Meet every numerical parameter of the condition: LED sources, a 3 lux maximum, an 80% amber / 20% white spectrum, no UV, a horizontal spread of less than 70°, and timed control.
- Maintain 0 lux (dark) at the boundary hedgerows, the bat box and the bird boxes, protecting the dark commuting and foraging corridors relied upon by SAC bat species.
- Light only what is necessary, only when necessary — no decorative lighting, and no lighting of boundaries or elevations beyond functional access points.
- Provide the Local Planning Authority with a 3D predictive illuminance plan so the residual impact on protected species can be assessed.

3. Lighting specification

The table below confirms how each requirement of the condition is met. Where a proprietary product is named at detailed design, it will meet or exceed this specification and its photometric data will support the illuminance plan (Section 5).

Condition requirement	Specification adopted	Purpose
Lamp type — LED	All external luminaires are LED. No metal-halide, fluorescent or high-pressure sodium sources.	Controllable spectrum and optics; instant on/off for timed control.
Illuminance — 3 lux	Maximum maintained illuminance of 3 lux at any task/access area; 0 lux (unlit) maintained at boundary hedgerows, the bat box and bird boxes.	Keeps light levels below the threshold that deters light-averse SAC bat species.
Spectrum — 80% amber / 20% white	Amber-dominant bat-friendly LED, 80% amber to 20% white as specified; warm, low-blue output (effectively ≤ 2200 K appearance).	Amber/low-blue light minimises disturbance to bats and other nocturnal wildlife.
No UV	Luminaires emit no ultraviolet component.	Avoids attracting insects and the associated indirect disturbance to bats and foraging.
Horizontal light spread < 70°	Luminaires have a clear, controlled optic with a horizontal spread of less than 70°; downward-directional, cowled/shielded, 0° upward tilt, mounted low.	Confines light to the target area and prevents trespass onto commuting/foraging corridors.
Timer	All external lighting on a timer, supplemented by PIR occupancy control with a short (e.g. 1–2 minute) run-on and a night-time curfew.	Removes unnecessary illumination and eliminates continuous lighting through the night.

4. Luminaire schedule and 3D illumination levels

Each external luminaire is set out below with its specification and a space to insert the corresponding elevation or lighting design. Every external fitting must comply with the Section 3 specification. There will be no other external lighting, and no lighting is directed at the boundary hedgerows or the bat and bird boxes. All luminaires are also shown on the Lighting Layout Plan 3D elevations shown below.

4.1 Front entrance / door (L1)

Specification: LED pendant, 80% amber / 20% white, no UV, clear controlled optic with a horizontal spread of less than 70°, full cut-off, downward. Mounting height 2-3 m. Maximum 3 lux. Control: timer + PIR with a night-time curfew.



4.2 Side / secondary access (L2)

Specification: No external lighting (0 lux) as this lies within a bat sensitive area.

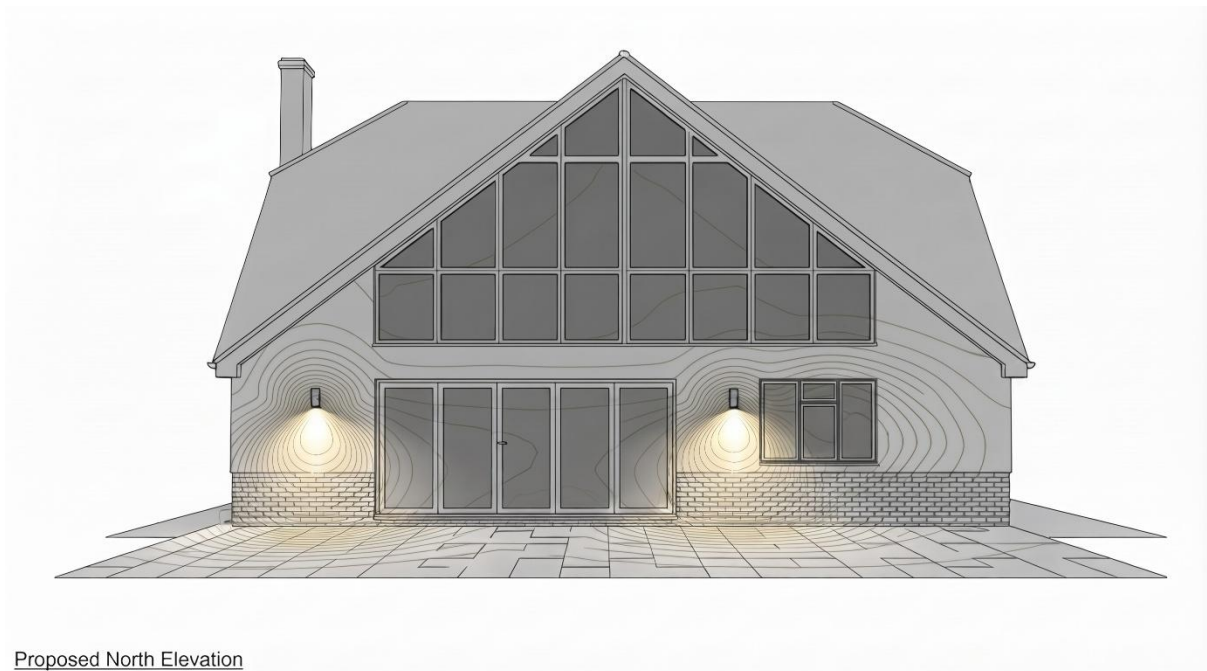


4.3 Rear / garden access (L3)

Specification: LED downlight / bulkhead, 80% amber / 20% white, no UV, clear controlled optic with a horizontal spread of less than 70°, full cut-off, downward. Mounting height [INSERT] m. Maximum 3 lux. Control: timer + PIR with a night-time curfew.

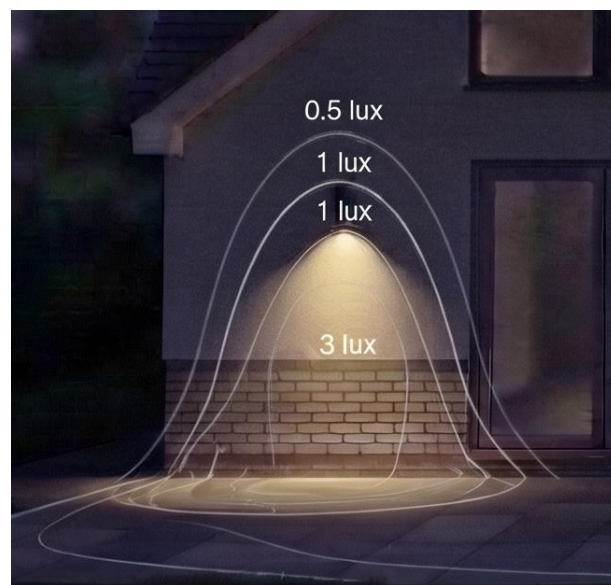


Proposed North Elevation



Proposed North Elevation

Close up of light spread/distribution:



5. Controls, curfew and construction lighting

- All external lighting is controlled by a timer, with PIR occupancy sensing and a short run-on so lights are off when not in use.
- A night-time curfew will apply; there will be no continuous or dusk-to-dawn lighting.
- No luminaire will be re-aimed, uplit, or fitted with a higher-output lamp than specified.
- Any temporary lighting during construction will be directional, task-specific, switched off when not in use, and kept away from the boundary hedgerows.

6. Retention and management

The approved lighting scheme, spectrum, optics and controls will be retained for the lifetime of the development. Replacement luminaires and lamps will match the approved specification, and no additional external lighting will be installed without the further approval of the Local Planning Authority.

7. Policy and legislative compliance

This plan enables the Local Planning Authority to discharge its duties under:

- **the Conservation of Habitats and Species Regulations 2017 (as amended)** — by controlling ALAN, the scheme avoids a likely significant effect on the South Downs Bat SAC;
- **the Wildlife and Countryside Act 1981 (as amended)** — avoiding disturbance to bats and other protected species;
- **Section 40 of the Natural Environment and Rural Communities Act 2006** — the duty to conserve and enhance priority habitats and species; and
- **Arun Local Plan Policy ENV DM5 (Development and Biodiversity).**

8. Summary

The external lighting for the development uses LED luminaires limited to 3 lux, with an 80% amber / 20% white spectrum, no UV, a horizontal spread of less than 70°, and timed/curfewed control, keeping the boundary corridors and wildlife features dark. Subject to written approval, the scheme will be implemented prior to first occupation and retained thereafter, in accordance with the condition and with Arun Local Plan Policy ENV DM5.