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Ref: Solar panel installation at Princess Royal Hospital.

To whom it may concern,

The Ecology Co-op undertook a bat scoping assessment at Princess Royal Hospital, Haywards Heath on the 4th of March 2026 at the request of Batcheller Monkhouse. This assessment was undertaken further to a proposal to install solar panels at various points on the hospital roof. The survey was undertaken in accordance with best practice guidance produced by the Bat Conservation Trust¹.

The site is situated near the southern edge of Haywards Heath in a suburban setting. The entire main building of the hospital comprises the development site, and given the nature and small scale of the proposals, this assessment has focussed upon localised site impacts only. The site location is shown in Figure 1, Appendix 1.

The proposal involves installing solar panels on areas of flat corrugated metal roof, and areas of hipped roof featuring bitumen lining and factory-formed interlocking clay tiles. During this process, clay tiles will be temporarily removed while the panels are affixed to the rafters/battens beneath. The proposals for the site are shown in Figure 2, Appendix 1.

Table 1 below summarises the structures assessed for bat roosting potential. Both the exterior and interior of the building were inspected as part of the survey.

¹ Collins, J.(ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edn). The Bat Conservation Trust, London.

Table 1. Summary of structures assessed for Potential Roost Features (PRFs) on the building.

Building section	Description of features	Assessment of suitability ¹
Hospital interior – plant rooms	The upper levels of the hospital features many plant rooms housing extensive building services infrastructure (e.g. electrical panels, insulated pipework and ventilation ducting). These rooms are well-lit, accessed regularly and are very noisy due to the continuous running of electrical equipment and cooling systems. The flat roofs of corrugated metal construction leave small gaps above the outer walls which could provide access to bats, but with no internal lining on the underside of the metal, these rooms lack traversable surfaces and enclosed cavities for roosting bats.	No bat roost suitability
Hospital interior – roof voids	A number of large roof voids are interspersed between the plant rooms, internal corridors and other rooms on the top floor. These spaces were accessed internally and are largely empty, containing some scattered services infrastructure (predominantly insulated pipework). Each void is around 2-3m in height at its tallest, with sloped sections around the edges of the building. The voids contain partially boarded concrete floors with extensive mineral fibre insulation. The central portion of the roof is of flat, corrugated metal construction, and the hipped outer edges are timber framed, covered with bitumen-lined clay interlocking tiles. The lining is visibly in good condition, with no significant tears or gaps offering access to/from the tiles. There are visible daylight gaps at the eaves which could act as an access point for bats. However, with the sloping roof lining leading to flat, well-sealed corrugated metal roofing, the voids offer little in the way of roosting opportunities for bats. Occasional rodent droppings were observed (both rat and mouse), but no signs of bats were identified during the survey.	Low bat roost suitability – unaffected by proposed works
Hospital exterior	The exterior of the hospital is constructed largely of brick walls, with a complex and irregular roof reflecting the large and composite nature of the building itself. The roof is predominantly flat and comprises sections of corrugated metal sheeting and concrete/gravel-covered surfaces. Many of the flat roof sections terminate at shallow hipped edges clad in tiles. In addition, several lower tiled pitched roofs are present, creating a tiered roof profile across parts of the building. The factory-form clay interlocking tiles are generally in good condition, with no gaps created by lifted/warped/broken tiles around the vast majority of the building. A small number of gaps were noted beneath broken and/or lifted tiles near to the roof apex on the southern and eastern roof faces in the southeastern portion of the building, although these tiles lay outside the zone of influence of the proposed construction. Due to the height and context of the roof, it was not possible to photograph these gaps. No gaps were identified within areas to be affected by the works.	Low bat roost suitability

The site offers limited suitability for foraging and commuting bats. High levels of artificial lighting and regular human activity are likely to act as barriers to bat movement and reduce the attractiveness of the site for sustained foraging activity. While some linear external features may provide occasional foraging

opportunities, it is more likely that bats utilise these features primarily for commuting between roost sites and more suitable foraging habitats in the surrounding area.

Overall, the suitability of the zone of impact of the proposed works to support roosting bats is rated as 'negligible', although the whole roof would be considered to have 'low' potential. This assessment considers the condition of the building and its context within suitable foraging habitat for bats. As such, it is concluded that the proposed development will not impact on roosting bats, and no further surveys are recommended in this instance.

Given the 'low' suitability of the roof as a whole, it is important that all tiles are removed carefully and by hand. In the unlikely event that a bat is discovered, the feature must be 'made good' where possible, works would need to cease immediately and a licensed ecologist be contacted. Work would likely not be able to continue until an EPS mitigation licence has been obtained.

To mitigate disturbance to foraging and commuting bats from artificial lighting, the proposed development should include an 'ecologically sensitive lighting scheme' in accordance with guidance produced by the Bat Conservation Trust (summarised in Appendix 3).

Additionally, the site can be enhanced for bats by incorporating the features below into the fabric of the building. Where bat access tiles are used, only a Type 1F bitumen lining must be used instead of modern breathable membranes such as Tyvec, which over time fray and entangle bats. The bat boxes and features should be installed under the instruction of a suitably licensed ecologist to ensure that the positioning is optimal, but generally locations above 3.5m in the most southeasterly facing aspect of the building would be best.

These enhancement measures will help illustrate that the proposals are in adherence of Paragraphs 187 (d) of the National Planning Policy Framework (NPPF) and should therefore be considered favourably within the planning process.

If you have any queries about the findings of this assessment, then please do not hesitate to contact me.

Kind regards,

A handwritten signature in black ink, appearing to read 'Andy Fry', with a stylized flourish at the end.

Andy Fry

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APPENDIX 1 – Figures



Figure 1. Aerial image showing the location of Princess Royal Hospital, Haywards Heath. Image produced courtesy of Google maps (map data ©2026 Google).

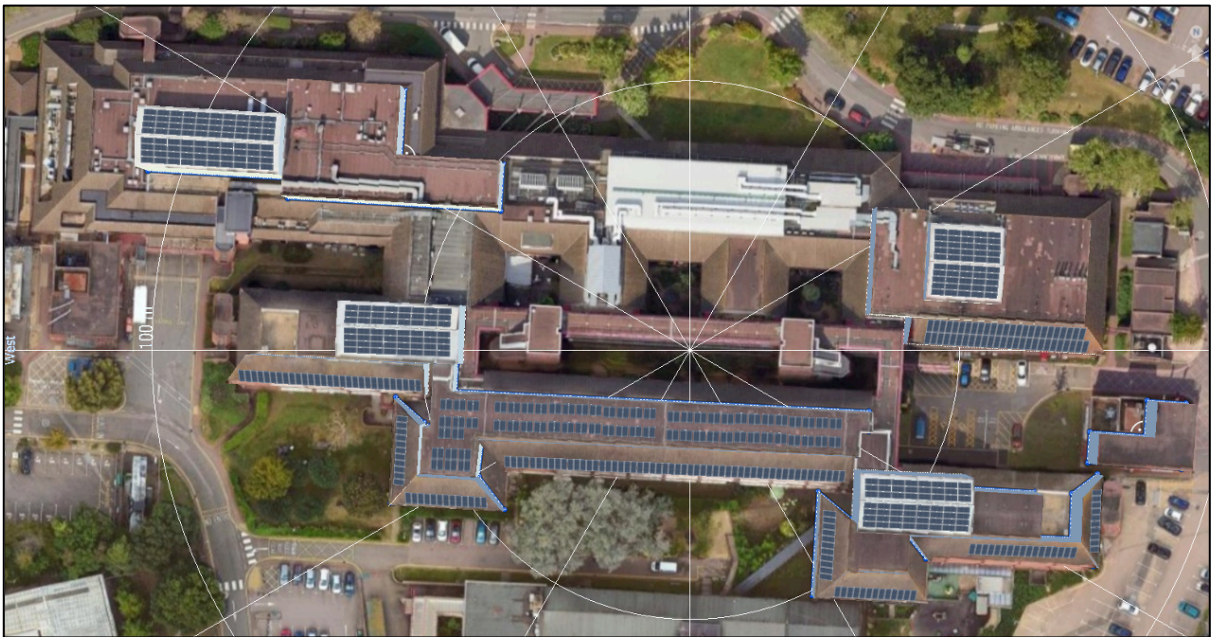
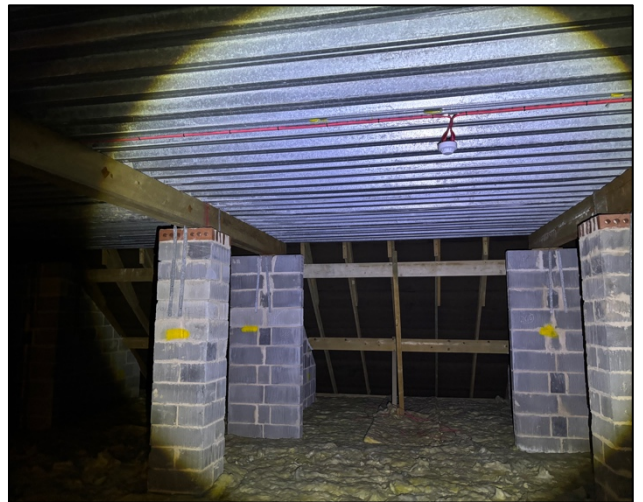


Figure 2. Proposed solar panel locations, provided by the architect Dowds Group, dated 11.02.2026.

APPENDIX 2 – Site Photographs



Photograph 1a and 1b. Example of the plant rooms scattered across the top floor of the hospital.



Photograph 2a and 2b. Example of the roof voids scattered across the top floor of the hospital, including services infrastructure (left) and the underside of the bitumen-lined tiles (right).



Photograph 3a and 3b. Example of the tiled roof hips on the outer edges of the building.

APPENDIX 3 – Reducing Impacts of Artificial Light

Bright external lighting can have a detrimental impact upon foraging and commuting bat flight paths, but more importantly can also cause bats to remain in their roosts for longer. Artificial lighting can also cause significant impacts to other nocturnal species, most notably moths and other nocturnal insects. It can also result in disruption of the circadian rhythms of birds, reducing their fitness.

Guidelines issued by the Bat Conservation Trust² should be referred to when designing the lighting scheme. Note that lighting designs in very sensitive areas should be created with consultation from an ecologist and using up-to-date bat activity data where possible. The guidance contains techniques that can be used on all sites, whether a small domestic project or larger mixed-use, commercial or infrastructure development. This includes the following measures:

Avoid lighting key habitats and features altogether

There is no legal duty requiring any place to be lit. British Standards and other policy documents allow for deviation from their own guidance where there are significant ecological/environmental reasons for doing so. It is acknowledged that in certain situations lighting is critical in maintaining safety, such as some industrial sites with 24-hour operation; however, in the public realm, while lighting can increase the perception of safety and security, measurable benefits can be subjective. Consequently, lighting design should be flexible and be able to fully consider the presence of protected species.

Apply mitigation methods to reduce lighting to agreed limits in other sensitive locations – lighting design considerations

Where bat habitats and features are considered to be of lower importance or sensitivity to illumination, the need to provide lighting may outweigh the needs of bats. Consequently, a balance between a reduced lighting level appropriate to the ecological importance of each feature and species, and the lighting objectives for that area will need to be achieved. The following are techniques which have been successfully used on projects and are often used in combination for best results:

- dark buffers, illuminance limits and zonation;
- sensitive site configuration, whereby the location, orientation and height of newly built structures and hard standing can have a considerable impact on light spill;
- consideration of the design of the light and fittings, whereby the spread of light is minimised ensuring that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required. Consideration should be given to the height of lighting columns. It should be noted that a lower mounting height is not always better. A lower mounting height can create more light-spill or require more columns. Column height should be carefully considered to balance task and mitigation measures. Consider no lighting solutions where possible such as white lining, good signage, and LED cat's eyes. For example, light only high-risk stretches of roads, such as crossings and junctions, allowing headlights to provide any necessary illumination at other times;
- screening, whereby light spill can be successfully screened through soft landscaping and the installation of walls, fences and bunding;
- glazing treatments, whereby glazing should be restricted or redesigned wherever the ecologist and lighting professional determine there is a likely significant effect upon key bat habitat and features;
- creation of alternative valuable bat habitat on site, whereby additional or alternative bat flightpaths, commuting habitat or foraging habitat could result in appropriate compensation for any such habitat being lost to the development;
- dimming and part-night lighting. Depending on the pattern of bat activity across the key features

² Bat Conservation Trust and Institute for Lighting Professionals (2018) Guidance note 8. Bats and Artificial Lighting. <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

identified on site it may be appropriate for an element of on-site lighting to be controlled either diurnally, seasonally or according to human activity. A control management system can be used to dim (typically to 25% or less) or turn off groups of lights when not in use.

Demonstrate compliance with illuminance limits and buffers

- *Design and pre-planning phase*; it may be necessary to demonstrate that the proposed lighting will comply with any agreed light-limitation or screening measures set as a result of your ecologist's recommendations and evaluation. This is especially likely to be requested if planning permission is required.
- *Baseline and post-completion light monitoring surveys*; baseline, pre-development lighting surveys may be useful where existing on or off-site lighting is suspected to be acting on key habitats and features and so may prevent the agreed or modelled illuminance limits being achieved.
- *Post-construction/operational phase compliance-checking*; as a condition of planning, post-completion lighting surveys by a suitably qualified person should be undertaken and a report produced for the local planning authority to confirm compliance. Any form of non-compliance must be clearly reported, and remedial measures outlined. Ongoing monitoring may be necessary, especially for systems with automated lighting/dimming or physical screening solutions.

Lighting Fixture Specifications

The Bat Conservation Trust recommends the following specifications for lighting on developments to prevent disturbance:

- lighting spectra: peak wavelength >550nm
- colour temperature: <2700k (warm)
- reduction in light intensity
- minimal UV emitted
- upward light ratio of 0% and good optical control.

Further reading:

Buglife (2011) A review of the impact of artificial light on invertebrates.

Royal Commission on Environmental Pollution (2009) Artificial light in the environment. HMSO, London. Available at: <https://www.gov.uk/government/publications/artificial-light-in-the-environment>

Rich, C., Longcore, T., Eds. (2005) Ecological Consequences of Artificial Night Lighting. Island Press. ISBN 9781559631297.

CPRE (2014) Shedding Light: A survey of local authority approaches to lighting in England. Available at: <http://www.cpre.org.uk/resources/countryside/dark-skies/item/3608-shedding-light>

Planning Practice Guidance guidance (2014) When is light pollution relevant to planning? Available at: <https://www.gov.uk/guidance/light-pollution>

Institution of Lighting Professionals (2021) Guidance Notes for the Reduction of Obtrusive Light GN01:2011. Available at: <https://www.theilp.org.uk/resources/free-resources/>

Voigt, C.C., Azam, C., Dekker, J., Ferguson, J., Fritze, M., Gazaryan, S., Hölker, F., Jones, G., Leader, N., Lewanzik, D. and Limpens, H., 2018. *Guidelines for consideration of bats in lighting projects*. Unep/Eurobats. Available at:

