

Mr Andrew Thompson
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Dear Andrew

Palmer Park, Reading – Lighting

Introduction

Further to the submission of a lighting plan to discharge condition 23 of the planning consent (201735) for a leisure centre extension to include a 25m 6 lane pool, fitness suite, cafe, activity room, parking spaces and landscaping, and the refurbishment of the existing grandstand to include demolition of the existing entrance lobby, internal works and roof works issued by Reading Borough Council, I write to set out my assessment of the likely impacts of the lighting on wildlife as follows:

Ecological background

An ecological appraisal completed by John Wenman Ecological Consultancy LLP in summer 2019 included the findings of a search of pre-existing bat records for Palmer Park and the surrounding area within a 1km radius. The survey showed that there were no pre-existing records of bats at Palmer Park at that time but there were records seven bat species in the surrounding area. Of these, three species common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and noctule (*Nyctalus noctula*) have been recorded within the grid square within which the Park is situated. Common and soprano pipistrelle were recorded roosting at a property 450m from the Park and were the closest records of bats. The Park largely comprises amenity grassland with scattered broadleaved trees and is predominantly urban setting with

Lighting specification

The lighting will comprise primarily of 6m high columns with Holophane LED lamps directed downwards. The lamps will be 3000K warm white LEDs. As specified by planning condition 23, the lights will not be illuminated more than 30 minutes outside of the opening hours of the leisure centre i.e., 06:00 to 23:00 Monday to Saturdays and 06:00 to 18:00 Sundays and Bank Holidays.

Consideration of the impact of lighting on bats and other wildlife

The lighting proposed will make use of warm white LEDs of 3000k. This is in accordance with the recommendations for minimising impacts on bats set out in guidance, and in turn other wildlife affected by lighting with UV or blue lights such as invertebrates (Bat Conservation Trust/Institute of Lighting Engineers 2018).

Lighting has been shown to have an adverse impact on bats and other wildlife. The light spill diagram provided to discharge condition 23 shows that lighting will be primarily concentrated in the built-up areas immediately around the building and car parking, where habitats are poor and there is existing lighting e.g. sports pitches and lighting columns, and as such impacts are likely to be minimal. Some light will spill into surrounding parkland habitats; however, the light spill levels will be below 10lux and extend is a very small proportion of the parkland. Lighting at this level is unlikely to affect light tolerant, earlier emerging species such as common and soprano pipistrelle and noctule bats recorded in the area of the park - levels of 14 lux or below is the best indication of emergence times for pipistrelle bats (Fure 2006) - and the species most likely to be found in the park. Furthermore, there will be no light spill on established tree lines on the Park's boundaries. If light intolerant species such as long eared bat species (*Plecotus* sp.) and *Myotis* species feed or commute within the Park, the light levels spilling onto the small areas of parkland would deter these species from these areas; however, the timing restrictions i.e. lighting on no

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later than 23:30, and availability of unlit areas will limit the impacts to short periods after emergence during the main period of summer activity.

Conclusion

Overall, the lighting scheme will make use of warm white LED lamps that are appropriate for minimising impacts on bats and other nocturnal wildlife, but some light spill will onto parkland areas will occur, but the overall impact is likely to be minimal for the bat species most likely to be present and in the context of the Park as a whole.

Your sincerely



John Wenman MCIEEM
Partner

References

Bat Conservation Trust & Institute of Lighting Engineers (2018). *Guidance note 08/18 Bats and artificial lighting in the UK – Bats and the built environment series.*

Fure, A. (2006). Bats and lighting. *The London Naturalist*. No. 85, 2006.

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