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on behalf of Merrow & Downsedge Residents' Associations

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## **20/P/00825: Review of submitted ecological information**

### **Commission**

Lloyd Bore Ltd was commissioned by Merrow & Downsedge Residents' Associations to review the potential impacts upon important ecological features of a proposed development at Urnfield Sports Ground. The proposed development comprises the creation of a floodlit artificial hockey pitch with a six-lane all weather running track, a football pitch and other minor proposals.

### **Introduction**

I am writing to set out the findings of my review of the ecological information submitted with planning application 20/P/00825, which was refused planning permission and is now the subject of a planning appeal.

Documents submitted with Guildford Borough Council (GBC) planning application 20/P/00825 were examined to inform this review. The primary documents reviewed are: -

- *Urnfield Sports Ground, Guildford County School: Preliminary Ecological Appraisal, December 2019* (file reference: 550976ltDec19FV01\_PEA.docx) produced by Greengage Environmental Ltd.
- *Urnfield Sports Ground, Guildford County School: Bat Survey Report, December 2019* (file reference: 550976ltDec19FV01\_Bats.docx) produced by Greengage Environmental Ltd.
- *Tormead School - Urnfield Sports Ground - External Lighting Report* (Project number: 19/160. Document reference: E19/160-01 Revision 01, dated September 2021) produced by Edward Pearce (LLP) Consulting Engineers.

It is important to note that the submitted lighting report referenced above was produced significantly later than the ecological reports referenced above. Therefore, the submitted ecological reports do not consider the increased (when compared with the original submitted lighting report) light spill into / illumination of the adjacent woodland that is reported in this later lighting report. Subsequent correspondence from the applicant's ecologist (Greengage Environmental) published on GBC's website does not address this increased lighting impact upon the woodland.

This letter has also been informed by a review of current aerial imagery, current and historic Ordnance Survey mapping and local and national planning policy and guidance in relation to nature and development.

Having reviewed the development proposals submitted to planning and the ecological information submitted with the planning application, I have identified a number of material information deficiencies in the ecological documentation submitted, and potential adverse ecological effects that have not been adequately addressed in the submitted documentation.

I strongly advise that these information deficiencies should be addressed prior to determination of any planning appeal for development on this site.

These information deficiencies primarily relate to insufficient information having been provided in relation to the potential ecological effects or the introduction of floodlighting upon the woodland that runs along the northern boundary of the appeal site and its associated fauna.

Specifically, the information submitted does not adequately address the potential for ecologically significant adverse effects of lighting upon foraging and commuting bats that utilise the woodland edge adjacent to the appeal site, roosting bats and hazel dormouse (*Muscardinus avellanarius*).

All species of bat, and hazel dormouse, are European Protected Species (EPS) and are thereby strictly legally protected under the Conservation of Habitats and Species Regulations 2017 (as amended).

Further to the above, insufficient information has been submitted in relation to the ability of the proposed development to secure a measurable net gain in biodiversity, in line with policy ID4 *Green and blue infrastructure* of the *Guildford borough Local Plan: strategy and sites 2015 – 2034*, Adopted 25th April 2019.

This letter sets out the above-referenced information deficiencies, considers whether the submitted ecological information and development proposals are compatible with local and national planning policy and guidance in relation to nature and development and considers whether key legal tests can be met in relation to EPS.

### ***Findings***

All species of bat are European Protected Species (EPS) and are strictly legally protected under the Conservation of Habitats and Species Regulations 2017 (as amended).

Paragraph 1.4 of the submitted Preliminary Ecological Appraisal (PEA) report (as referenced above) confirmed that:

- *'Previous surveys undertaken by Greengage in 2017 and 2018 confirmed the site to have two outlier badger setts, likely absence of bat roost in a dilapidated maintenance shed and high foraging/commuting bat activity. An updated report has been produced to reflect current conditions on site.'*

The above comprises a summary of the baseline species survey work undertaken to inform the planning application. Note that, based on the above, no bat roost survey work was undertaken for trees and no hazel dormouse survey work was undertaken.

Paragraph 1.6 of the submitted PEA report states:

- *'The survey identified value for a number of notable and protected species and habitats including:*  
...
  - *The presence of Mellow to Clandon Downs a Site of Nature Conservation Importance (SNCI) to the immediate north of the site;*
  - *Low potential to support notable invertebrates and roosting bats;*
  - *Moderate potential to support dormouse and foraging and commuting bats.'*

The above acknowledges that hazel dormouse and foraging and commuting bats may be present. I can confirm that a population of hazel dormouse is present within the woodland habitats within the adjacent SNCI, having personally undertaken nest box checks for hazel dormice within the SNCI woodland, with surveyors for Surrey Dormouse Group, in 2016 and 2017.

Paragraph 4.40 of the submitted PEA report states:

- *'In addition, a previous suite of bat surveys undertaken by Greengage in 2018 confirmed the site as having high levels of bat foraging and commuting activity by at least five bat species including; common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*P. pygmaeus*), Nathusius' pipistrelle (*P. nathusii*), noctule (*Nyctalus noctule*), serotine (*Eptesicus serotinus*) and *Myotis sp.* The surveys found that activity was focused almost entirely around the woodland edge.'*

Paragraph 4.41 goes on to state that:

- *'Despite, the site predominantly consisting of amenity grassland, which is of limited value for foraging bats, the site conditions are consistent with those described in the 2018 surveys and therefore the site is considered to have high value for foraging and commuting bats.'*

In addition to the above, the PEA report states:

- *'There were several trees outside the site boundary to the north that were ivy clad and classified as having low potential value for roosting bats. However, these trees are not predicted to be impacted due to the distance between them and the proposed track location. All of these trees are off site and therefore are unlikely to be subject to direct disturbance, however, as with the dilapidated structure, **any roosts in these trees may stand to be subject to indirect disturbance through increased lighting at the site.**'* (Paragraph 4.46).
- *'The woodland belt to the north is classified as having value for dormice given the presence of coppiced hazel, linkages to surrounding suitable habitats, the presence of a wide variety of food plants, favourable understorey structure and good arboreal connectivity.'* (Paragraph 4.55).
- *'Therefore, **the woodland on site has high potential to support dormice.** However proposals include the retention and protection of this woodland habitat and as such **the development is not predicted to result in any impact on the woodland.**'* (Paragraph 4.56).

I have added bold text highlights to emphasise key findings and conclusions of the submitted PEA report.

In relation to Paragraph 4.46, whilst trees along the northern site boundary were assigned low potential (aka suitability) for roosting bats in the submitted PEA report, which means that they would not necessarily require further survey prior to the determination of a planning appeal (BCT, 2016<sup>1</sup>), no detail is provided as to which trees were assessed as being suitable for roosting bats or whether all site boundary trees were assessed. This information is also not provided in the submitted *Bat Survey Report*, which relates solely to assessment and survey of one on-site structure. Given the potential for ecologically and potentially legally significant adverse effects upon roosting bats (see later content of this letter), the absence of a clear assessment of the suitability of all woodland trees located within the predicted light spill zone of the proposed floodlighting is considered a material information deficiency.

Furthermore, the PEA concludes that there is a risk of indirect disturbance of any bats roosting within the woodland boundary trees adjacent to the appeal site.

Paragraph 4.56 concludes that there is high potential for hazel dormouse presence in the adjacent woodland but that, because woodland edge habitats are not due to be significantly physically impacted, impacts upon this EPS can be scoped out. This impact assessment fails to take into account the potential for ecologically and legally significant adverse effects upon hazel dormice that can be incurred through the introduction of artificial lighting. The potential for adverse effects of lighting upon this EPS is highlighted in Natural England's guidance to Local Planning Authorities (LPAs), which states: *'Activities can harm hazel dormice if developers: ... disturb them, for example from noise and using light.'*<sup>2</sup>

Finally, Paragraphs 5.8 to 5.10 of the submitted PEA report state:

*'Suitable linear green corridor along the woodland provides a suitable (bat) foraging and commuting resource. Previous (bat) activity and static surveys undertaken across spring, summer and autumn 2018 **identified high (bat) commuting and foraging on site, associated with the woodland edge.**'* (Paragraph 5.8).

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<sup>1</sup> Bat Conservation Trust (BCT) (2016) *Bat surveys for Professional Ecologists: Good Practice Guidelines*. 3rd edition. BCT, London.

<sup>2</sup> Available at: <https://www.gov.uk/guidance/hazel-dormice-advice-for-making-planning-decisions> Accessed 12/08/2022.

'Habitats described on site in previous reports are in line with current conditions the results from these surveys and mitigation actions recommended are considered to remain valid.' (Paragraph 5.9).

**'Mitigation actions recommended include a bat-sensitive lighting strategy that should be implemented following guidance set out by the Bat Conservation Trust and Institute of Lighting Practitioners (2018).'** (Paragraph 5.10).

The Bat Conservation Trust and Institute of Lighting Practitioners guidance referenced above recommends the minimisation of illumination levels and light spill into important bat habitats through the adoption of a series of recommended approaches to lighting design and specification, and the resultant minimisation of illumination levels (measured in lux) upon such habitats. This guidance extensively references research and evidence cited by Stone *et al.*, which underpins many of the recommendations of the guidance. The findings and conclusions of Stone *et al.* are most coherently summarised in Stone, E.L. (2013) *Bats and lighting: Overview of current evidence*.

Stone (2013) confirms that, based on the best available evidence, lighting can result in:

- High impacts upon all species of bat through deterring emergence or delaying emergence times from roosts - with resultant effects on foraging efficacy.
- High impacts upon the viability and persistence of bat roosts of *Myotis* species.
- High impacts upon foraging and commuting *Myotis* species.
- Medium impacts upon pipistrelle bat species, serotine and noctule bats, through deterring emergence or delaying emergence times from roosts - with resultant effects on foraging efficacy.

Based on the above, lighting may result in ecologically (and potentially legally) significant adverse effects upon all of the bat species recorded foraging and commuting along the woodland boundary.

Stone (2013) also states that light levels '*as low as 3.6lux caused spatial avoidance of a preferred commuting route by *Rhinolophus hipposideros**' (lesser horseshoe bat). Whilst this species was not recorded during the bat survey work undertaken (the appeal site is outside of the known geographic range of this species), lux levels of between 2 and 3.5 lux are commonly taken in practice to represent an illumination level that may result in significant adverse effects upon bats of most species.

The '*Spillage: Filled Iso Contour*' drawing provided in the *Calculation Results* section of the submitted *External Lighting Report* confirms that illuminance levels of between 2 and 5 lux are expected within the woodland adjacent to the appeal site.

The typical bat activity period runs from April to October (inclusive) (BCT, 2016). The submitted Planning Statement confirms that a (year-round) lighting curfew will be implemented across the period April to October, inclusive, to minimise impacts upon bats and that '*the applicant does not intend to use the floodlights after 8pm.*' It is understood that the hockey season, when the floodlights would require the most extensive use, runs from September to April, inclusive.

Bat species including common pipistrelle, soprano pipistrelle and noctule are early emerging species that may emerge as early as 15 minutes or more before sunset, particularly in dark locations (such as the tree line adjacent to the current sports ground).

Based on data provided at <https://www.timeanddate.com/>, sunset time on 1<sup>st</sup> September will be 19:48. On this date, the proposed flood lighting will still be on at the point when the bat species reported as present on site would normally emerge from any roosts present within the adjacent woodland edge trees and/or commute and/or forage along the woodland edge. Sunset times will then be 19:16 on 15<sup>th</sup> September, 18:42 on 30<sup>th</sup> September, 18:09 on 15<sup>th</sup> October and 16:37 on 30<sup>th</sup> October.

Therefore, from 1<sup>st</sup> September to the end of October, the duration for which floodlighting will be operational across the period after which bats would normally emerge and begin foraging and commuting will steadily increase to a maximum of 1hr 52mins by the end of the typical main bat activity period. Thus, based on the proposed 20:00 lighting curfew, the light spill onto the woodland edge from the proposed floodlighting has an increasing likelihood of deterring bats from emerging from trees (if tree roosts are present – note that insufficient survey data has been provided to confirm this) and deterring

bats from using the woodland edge for commuting and foraging, all with resultant disturbance of bats and associated effects upon foraging efficacy.

The proposed floodlighting therefore has the potential to result in ecologically and potentially legally significant adverse effects upon bats across a period of two months in the latter half of the typical main bat activity period. This period is a key period for juvenile bat dispersal from maternity roost sites and for bat migration from summer roosting to winter roosting sites. There is also an increased likelihood of bats utilising roosting opportunities within trees during this period of seasonal movement.

Hazel dormice are a nocturnal species and may therefore also be disturbed by the proposed floodlighting and deterred from using the woodland edge habitats within the light spill zone. No hazel dormouse survey has been undertaken by the applicant's ecologist.

Whilst I have confirmed personal knowledge (earlier in this letter) of the presence of hazel dormice within the wider adjacent SNCI, this knowledge is now several years old (2016 / 2017), does not relate directly to the section of woodland adjacent to the appeal site and was not generated through a structured survey to inform a planning application or appeal decision. Therefore, whilst the precautionary principle dictates that the applicant and Inspector should assume presence of hazel dormouse within the woodland adjacent to the appeal site, and that this species therefore represents an ecological constraint and sensitive lighting receptor, insufficient survey data exists to allow a robust assessment of the risk of significant adverse effects upon hazel dormice through delivery of the proposed development.

Based on the above, it is assessed that there is an unquantified risk of a significant adverse effect upon the local bat and hazel dormouse populations. No assessment of the ecological or associated legal significance of this affect is provided in the submitted ecological information.

Indeed, no formal Ecological Impact Assessment (EcIA) report is provided with the submitted information. Given the potential significance of the ecological impacts of the proposed floodlighting, this absence of a formal, structured EcIA is contrary to industry standard guidance on ecological impact assessment (CIEEM, 2018<sup>3</sup>).

Based on the above, there is an unquantified risk that the proposed floodlighting will result in significant adverse effects upon the Favourable Conservation Status (FCS) of the recorded bat population and the local hazel dormouse population.

It is therefore concluded that insufficient information has been provided to allow a robust assessment of the ability of the proposed development maintain the FCS of the local bat and dormouse populations.

Local Planning Authorities and other planning decision makers (such as Planning Inspectors) are advised by Natural England that they must consider three key legal tests in relation to EPS when determining a planning application or appeal. The FCS test is one of these three tests and it is therefore concluded that insufficient information has been submitted to allow the Planning Inspectorate to fulfil its duties under the Conservation of Habitats and Species Regulations 2017 (as amended).

Furthermore, the Inspector is minded to assess the proposed development in line with the other two tests - the No Satisfactory Alternative (NSA) test and the Imperative Reason of Overriding Public Interest (IROPI) test.

If the Inspector concludes, in light of full ecological survey data (including full survey data in relation to roosting bats and hazel dormice) that there is a significant adverse effect of development (via lighting or any other impact type) upon the local bat and/or hazel dormouse populations, they will be minded to consider whether these adverse effects are acceptable in light of the NSA and IROPI tests.

Paragraph 99 of *GOVERNMENT CIRCULAR 06/2005: BIODIVERSITY AND GEOLOGICAL CONSERVATION – STATUTORY OBLIGATIONS AND THEIR IMPACT WITHIN THE PLANNING SYSTEM* states that:

*'It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The*

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<sup>3</sup> CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.1 (Updated September 2019). Chartered Institute of Ecology and Environmental Management, Winchester.

*need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted. However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development. Where this is the case, the survey should be completed and any necessary measures to protect the species should be in place, through conditions and/or planning obligations, before the permission is granted.'*

This Government circular remains a material consideration in the determination of planning applications and appeals. Based on the proposed lighting detail and ecological information submitted with the planning application, there is 'a reasonable likelihood of the species (i.e. roosting bats in trees, and hazel dormice) being present and affected by the development', and therefore survey data for these species is required to allow determination of the appeal.

It is therefore concluded that, in accordance with this Government circular, the current planning appeal cannot be determined until the recommended ecological surveys set out in this letter, in relation to roosting bats and hazel dormice, have been undertaken and submitted to the Planning Inspectorate for review.

**Recommendation:** A full and detailed survey report clearly setting out the suitability of trees within the light spill zone of the proposed floodlighting will need to be submitted to the Planning Inspectorate. In addition, the applicant's ecologist will need to undertake a hazel dormouse presence / likely absence survey within the period April to November, inclusive (note that this survey can take six months or more to complete). The applicant will need to submit the results of these surveys, along with a structured EcIA assessing the predicted effects of the proposed floodlighting upon these EPS. This information should be submitted to the Planning Inspectorate to allow a robust conclusion as to whether planning permission can be granted or should be refused.

### **Compatibility with national and local planning policy**

Paragraph 1a of Policy ID4 *Green and blue infrastructure* of the *Guildford borough Local Plan: strategy and sites 2015 – 2034*, Adopted 25th April 2019, states that:

*'The Council will maintain, conserve and enhance biodiversity and will seek opportunities for habitat restoration and creation'*

Paragraph 1d of the same policy states:

*'New development should aim to deliver gains in biodiversity where appropriate.'*

Paragraph 4.6.47 of the Plan states that: *'Gains in biodiversity means improvements to biodiversity through habitat creation and/or enhancement. This should be integrated into the design of the site through the provision of new wildlife habitats, but also may include enhancement of green networks and measures on building structures... Habitat for vulnerable species also adds value. Where adequate biodiversity gains cannot be included within a development site, off-site provision may be considered. The gains should be appropriate and proportionate for the development.'*

Nationally accepted guidance on Biodiversity Net Gain, including DEFRA standing advice, confirms that impacts upon irreplaceable habitats cannot be addressed through compensatory measures. It is therefore concluded that, in the absence of sufficient information in relation to irreplaceable habitats (pond and veteran tree) it is not possible to assess whether the proposed development can achieve a biodiversity net gain through development.

It is also concluded that the submitted information does not provide sufficient information to allow a conclusion as to whether the conserve, restore and enhance objectives of Policy ID4 can be met through the proposed development. Given the extent of proposed site development, this is of particular importance as there is limited opportunity to secure a net gain in biodiversity within the limited areas available for habitat creation and enhancement.

It is therefore not clear, and no robust conclusion can be formed, as to whether the proposed development is compatible with the objectives of Policy ID4 as well as the requirements of the NPPF.

## **Conclusion**

In conclusion, the Planning Inspector does not, on the basis of the information available in the public domain, have a sufficient understanding of the baseline ecological conditions for the appeal site or the ecological impacts of the proposed development, including upon strictly protected EPS species (bats and hazel dormouse), to determine the planning appeal.

It is strongly advised that the Inspector consider the recommendation set out in this letter, have due regard to the national and local planning guidance and advice and the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended) cited in this letter, and fully consider the ability of the proposed development scheme to meet these obligations and objectives, before determining the planning appeal.

Yours sincerely,

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