

**The Ridgeway Primary School  
Hillbrow  
Reading  
Berkshire  
RG2 8JD**

## **Preliminary Ecological Appraisal**

Report ref.: R309\_PEA\_b

| <b>Report Quality Control Information</b> |                                                       |
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**August 2026**



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## **1 EXECUTIVE SUMMARY**

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by ACG Architects to undertake a Preliminary Ecological Appraisal (PEA), at The Ridgeway Primary School in Reading (SU 72979 70419). The aim of the PEA is to determine the actual or potential impacts to protected/notable species and habitats that may be present both on- and off-site and establish appropriate mitigation measures in accordance with the mitigation hierarchy. The proposals are for new parking, landscaping and boundary treatment at the site – see proposed landscape plan in **Appendix 2**.
- 1.1.2** The desk study (including a TVERC 1 kilometre data search) revealed that the application site is not statutorily or non-statutorily designated for its wildlife interest and there are no protected/notable species records for the site. The site is adjacent to The Cowsey Local Wildlife Site (LWS).
- 1.1.3** The application site forms part of the Ridgeway Primary School and comprises the educational buildings and surrounding managed land. The application site forms part of the wider school site, but this Preliminary Ecological Appraisal has assessed the entire school site to form a robust impact assessment. The school site comprised of multiple buildings surrounded by hard standing and a large area of modified grassland and other neutral grassland to the west of the school buildings and a parcel of lowland mixed deciduous woodland used for forest school on the northwest boundary and a second parcel to the south adjacent to the school access. The habitats observed included u1b5 Buildings; u1b Developed land, sealed surface; g4 Modified grassland; g3c Other neutral grassland; h3h Mixed scrub; h3j Willow scrub; g~27 Traditional orchard; u1~847 Introduced shrub; and individual urban trees (including a veteran oak tree).
- 1.1.4** The site supports habitats of ecological value at the site and local level, but the majority of land directly adjacent to existing built development and to be impacted by the proposals is of low and very low value at the site level. The veteran oak tree in the north of the site holds up to county level importance and the young orchard holds up to local level importance. Through appropriate mitigation measures during construction, no adverse impacts are anticipated on existing habitats or the adjacent LWS. The proposals do not meet the exemption criteria for mandatory biodiversity net gain (BNG), and therefore the development will need to achieve the

mandatory minimum of 10% BNG.

**1.1.5** Section 9 of this report provides the following recommendations:

- Protection of on-site trees, orchard and off-site woodland habitats;
- Precautions to protect existing trees and compensatory planting/relocation;
- Sensitive lighting scheme to lessen impacts on bats and other wildlife;
- Precautions for nesting birds and small mammals; and
- Biodiversity enhancements.

**1.1.6** This type of report is typically valid for up to 18 months; after which point a professional ecologist may need to review the report's validity (CIEEM 2019b).

## **2 INTRODUCTION**

### **2.1 Project Background**

- 2.1.1** John Wenman Ecological Consultancy LLP was instructed by ACG Architects to undertake a Preliminary Ecological Appraisal (PEA), at The Ridgeway Primary School in Reading, Berkshire.
- 2.1.2** The PEA was commissioned to determine the actual or potential impacts to protected/notable species and habitats that may be present both on- and off-site and establish appropriate mitigation measures in accordance with the mitigation hierarchy. The proposals are for new parking, landscaping and boundary treatment at the site - see proposed landscape plan in **Appendix 2**.

### **2.2 Site Location and Context**

- 2.2.1** The application site forms part of The Ridgeway Primary School and its associated grounds in Reading, Berkshire (OS Grid Reference: SU 72979 70419).
- 2.2.2** The school grounds comprise a 2.8 hectare school site comprised of multiple buildings surrounded by hard standing and a large area of modified grassland and other neutral grassland to the west of the school buildings and a parcel of lowland mixed deciduous woodland used for forest school on the northwest boundary and a second parcel to the south adjacent to the school access. The land immediately surrounding the school site is predominantly residential to the west and The Cowsey LWS borders the site boundaries to the north, west and south. In the wider area, it is the urban conurbation of Reading town between the Whitley and Earley areas.

### **2.3 Report Objectives**

- 2.3.1** The aim of this PEA is to understand the nature of the site and assess its ecological value. The key objectives are to:
- identify any likely ecological constraints associated with the planning proposals;
  - establish appropriate mitigation measures in accordance with the mitigation hierarchy (i.e. avoid > mitigate > compensate);
  - determine any additional surveys that may be required following on from this preliminary stage; and
  - recognise opportunities to deliver ecological enhancements in line with national and local planning policy.

### 3 LEGISLATIVE BACKGROUND

#### 3.1 Relevant Legislation

**3.1.1** The following legislation is considered relevant for the purpose of this Preliminary Ecological Appraisal (PEA):

- Wildlife and Countryside Act (W&CA) 1981 (as amended)
- Conservation of Habitats and Species Regulations ('Habitat') Regulations 2017 (as amended)
- Countryside and Rights of Way (CROW) Act 2000
- Natural Environment and Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

**3.1.2** These acts hold relevance to both protected and invasive species and the degree of protection varies depending on faunal/floral group or species. For example, some species of European importance receive full protection in England and Wales under the Habitat Regulations (e.g. bats), whereas others may only be afforded protection through national legislation such as the W&CA 1981 (as amended) (e.g. common lizard). For a detailed overview of species-specific legislation, please refer to Appendix 1.

#### 3.2 European Protected Species Mitigation Licensing

**3.2.1** The Government's statutory nature conservation advisory organisation, Natural England, is responsible for issuing European Protected Species (EPS) mitigation licences that permit activities that would otherwise lead to an infringement of the Habitat Regulations. An EPS mitigation licence can be issued if the following three tests derived from Regulation 55 have been satisfied:

- (2)(e) – the derogation is for the purposes of *'preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.'*
- (9)(a) – there is *'no satisfactory alternative'* to the derogation; and
- (9)(b) – *'the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.'*

- 3.2.2** Local Planning Authorities (LPAs) have a statutory duty under Regulation 7(3)(e) of the Habitat Regulations consider and determine whether these three tests are likely to be satisfied by planning proposals affected EPS before granted planning permission. If an EPS mitigation licence is necessary, a licence can be sought once all the necessary planning consents have been granted. Natural England aims to issue a decision on licence applications within 30 working days of submission.
- 3.2.3** The Bat Mitigation Class Licence (BMCL) scheme allows ecologists to apply to become Registered Consultants to use this licence for low conservation status roosts, i.e. roosts comprising small numbers of seven commonly occurring species. A site registration form must be completed as a condition of the licence and submitted to Natural England at least three weeks before the licensable activities are due to start; Natural England aims to register sites within two weeks of submission.
- 3.2.4** Baseline survey information supporting EPS mitigation licence applications or BMCL site registrations must be up-to-date and have been completed within the current or most recent optimal season. A suitably experienced ecologist will be required to undertake a site walkover/check within three months prior to application/registration submission to confirm that conditions have not changed since the most recent survey.
- 3.2.5** The District Level Licensing (DDL) scheme is an alternative approach to traditional mitigation licensing which authorises developments that adversely affect GCNs. Instead of relying solely on site-specific mitigation and compensation, a 'Conservation Payment' can be made to fund a net increase in GCN habitat elsewhere. Please refer to the NatureSpace guidance for more details.

## **4 PLANNING POLICY**

### **4.1 National Planning Policy**

- 4.1.1** The biodiversity duty imposed through the Environment Act 2021 states that Local Planning Authorities (LPAs) must consider what action they can take to conserve and enhance biodiversity in England.
- 4.1.2** The ODPM Circular 06/2005 provides guidance on the application of the law relating to planning and nature conservation in England, stating that ‘the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.’
- 4.1.3** The revised National Planning Policy Framework (NPPF), published in December 2024 and last updated in August 2026, sets out the Government's planning policies for England and how they should be applied. Section 19 of the NPPF sets out the approach local authorities should adopt to conserve and enhancing the natural environment when preparing planning policy and when considering planning applications. N2: Improving the natural environment sets out the principles LPAs should apply when determining planning applications, as follows:

*‘To contribute positively to the natural environment, and support nature’s recovery, development proposals should:*

- a. Consider the environmental qualities of land proposed for development, including habitats, landscape character and the natural beauty of the countryside, and identify opportunities for those qualities to be conserved or enhanced (including through requirements for biodiversity net gain where these apply);*
- b. Take into account the quality of agricultural land (including that classified as best and most versatile agricultural land, and its grade), and if significant development of agricultural land is necessary, use areas of poorer quality land where possible;*
- c. Take suitable opportunities to connect to and strengthen ecological networks that extend beyond the site, drawing on the measures proposed by Local Nature Recovery Strategies, National Forest Strategies and Community Forest Plans, where present, and other relevant assessments;*

*d. Conserve and enhance existing natural features of visual, historic or nature conservation value (such as established trees and hedgerows) where possible; and use appropriate landscaping to help create a well-designed place and integrate the development into its surroundings;*

*e. Use green infrastructure provided as part of the scheme and nature-based solutions to secure multiple benefits: such as for biodiversity; surface water and pollution management (including maintaining flow rates and water quality); climate change mitigation and adaptation, and recreation;*

*f. Minimise any adverse impacts on biodiversity and include features which support priority or threatened species such as swifts, bats and hedgehogs. Development proposals should incorporate integrated nest boxes (commonly known as swift bricks) into their construction unless there are compelling technical reasons which prevent their use, or would make them ineffective; and*

*g. Ensure that green infrastructure and other features to support nature are located and designed to minimise risk of future failure, and that appropriate measures are in place for any necessary long-term management.*

*2. If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated or, as a last resort, compensated for, then the development should be refused.*

*3. Development proposals may incorporate biodiversity enhancements which exceed the statutory objective for biodiversity net gain, but this should only be a requirement where it is set out in up-to-date development plan policies for specific site allocations. Decision makers should not give weight to other development plan policies which require biodiversity gains which go beyond the statutory framework, including where a policy requires gains for development proposals which are exempt.'*

**4.1.4** In England, BNG became mandatory for major development from the 12th February 2024 and for minor development (small sites) from the 2nd April 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). In practice, planning permission in England is now subject to a condition to secure a minimum 10% net gain for biodiversity, unless the

development is a type that is exempt from mandatory BNG requirements.

## **4.2 Local Planning Policy**

**4.2.1** Planning policy within the Reading Borough is defined by the policies within the Local Plan (adopted Nov 2019). The policy relevant to biodiversity and natural environment is as follows:

### *‘EN12: BIODIVERSITY AND THE GREEN NETWORK*

*a) The identified Green Network, the key elements of which are shown on the Proposals Map, shall be maintained, protected, consolidated, extended and enhanced. Permission will not be granted for development that negatively affects the sites with identified interest or fragments the overall network. The Green Network comprises:*

- Sites with identified biodiversity interest - Local Wildlife Sites, Local Nature Reserves, Biodiversity Opportunity Areas, protected and priority species and their habitats, Priority and Biodiversity Action Plan habitats, and the River Thames and all its tributaries (including the River Kennet and the Kennet & Avon Canal); and*
- Areas with potential for biodiversity value and which stitch the Green Network together – designated Local Green Space and open green spaces, and existing and potential Green Links.*

*New development shall demonstrate how the location and type of green space, landscaping and water features provided within a scheme have been arranged such that they maintain or link into the existing Green Network and contribute to its consolidation. Such features should be designed to maximise the opportunities for enhancing this network. All new development should maximise opportunities to create new assets and links into areas where opportunities are as yet unidentified on the Proposals Map.*

*b) On all sites, development should not result in a net loss of biodiversity and geodiversity, and should provide a net gain for biodiversity wherever possible. Development should:*

- *Protect and wherever possible enhance features of biodiversity interest on and adjacent to the application site, incorporating and integrating them into development proposals wherever practicable; and*
- *Provide new tree planting, wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable.*

*In exceptional circumstances where the need for development clearly outweighs the need to protect the value of the site, and it is demonstrated that the impacts cannot be: 1) avoided; 2) mitigated or; 3) compensated for on-site; then new development will provide off-site compensation to ensure that there is “no net loss” of biodiversity. Provision of off-site compensation shall be calculated in accordance with nationally or locally recognised guidance and metrics. It should not replace existing alternative habitats and should be provided prior to development.’*

- 4.2.2** With regards to mandatory BNG for Reading Borough Council, an addendum to the validation requirements was published in February 2024 and gives a full description of how the biodiversity gain condition will function and provides links to relevant government guidelines outlining how it will work in practice and the requirements for both developers and the local authority.

## **5 SURVEY METHODOLOGY**

### **5.1 Desk Study**

- 5.1.1** A desktop study was conducted by Sarah Foot MCIEEM and the study utilised data from the local environmental records centre and open access online resources to acquire information on the nature of the site and its surroundings and highlight any potential ecological features.
- 5.1.2** Thames Valley Environmental Records Centre (TVERC) was commissioned to undertake a search of pre-existing records of protected and/or notable species and non-statutorily designated wildlife sites held by them within a 1km radius around a central point in the school site.
- 5.1.3** The DEFRA Data Services Platform was used to obtain geospatial datasets for designated sites (i.e. RAMSAR, SPA, SAC, SSSI) and important habitats (i.e. Priority Habitat Inventory, Ancient Woodland Inventory) to be analysed in QGIS. The Multi-Agency Geographical Information Centre (MAGIC) website was examined for granted European Protected Species (EPS) licence applications. These geospatial datasets and Google Earth satellite imagery were used to determine the extent and connectivity of habitats, how the site is linked to the surrounding landscape and whether the proposals could have wider scale impacts on biodiversity.
- 5.1.4** Historical OS maps and Google Earth satellite imagery were consulted to provide insight into historic and current land use; such information helps contextualise the continuity of habitats and determine the importance of existing ecological features.

### **5.2 Field Survey**

#### *UK Habitat Classification Survey*

- 5.2.1** A site walkover was undertaken on the 30<sup>th</sup> June 2025 by Steve Foot MCIEEM and Verity West (a qualifying member of CIEEM). The site was surveyed using the UK Habitat Classification (UKHab) system (UKHab Ltd 2023) in accordance with 'Guidelines for Preliminary Ecological Appraisal 2nd Edition' (CIEEM 2017). Particular attention was given to evidence of protected and priority species (NERC Act 2006 Section 41 species of principal importance) and the site's potential to support such species.
- 5.2.2** There were no significant PEA survey constraints because full access was available to the site. The survey was subject to seasonal constraints because not all plant and animal species are visible throughout the year and therefore the report represents a

snapshot of the site at the time of the survey only.

### **5.3 Report Validity**

- 5.3.1** This type of report is typically valid for up to 18 months; after which point a professional ecologist may need to review the report's validity (CIEEM 2019b).

## 6 DESK STUDY FINDINGS

### 6.1 Designated Sites and Habitats

- 6.1.1 The desk study returned no internationally designated sites within a 5km radius and two nationally designated statutory sites within a 2km radius. Two locally designated non-statutory sites, i.e. Local Wildlife Site (LWS), were highlighted within a 1km search radius – see **Tables 1a and 1b** below.

Table 1a. Statutory designated sites within 2km of the site (Source: DEFRA).

| Site name          | Designation                | Description                                                                                                                                                                                                                                              | Distance from nearest site boundary (m) |
|--------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Pearman's Copse    | Local Nature Reserve (LNR) | A 6.89ha parcel of ancient woodland surrounded by community woodland that links with Dinton Pastures Country Park. The ancient woodland comprises ash ( <i>Fraxinus excelsior</i> ), hazel ( <i>Corylus avellana</i> ) and oak ( <i>Quercus robur</i> ). | 1056 S                                  |
| Maiden Erlegh Park | Local Nature Reserve (LNR) | A 10.15ha site with parcels of ancient and semi-natural woodland, lowland deciduous woodland and eutrophic open water.                                                                                                                                   | 1700 NE                                 |

Table 1b. Non-statutory designated sites within 1km of the site (Source: TVERC)

| Site name                   | Designation               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Distance from nearest site boundary (m) |
|-----------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| The Cowsey                  | Local Wildlife Site (LWS) | A 17.8ha west-facing hillside that is covered by mature scrub and broadleaved woodland. There are natural springs and ponds which support a network of wetland plants. Some grassland areas are damp and support rushes. There are fragmented sections of richer grassland which supports birds-foot trefoil ( <i>Lotus corniculatus</i> ), agrimony ( <i>Agrimonia eupatoria</i> ), lesser stitchwort ( <i>Stellaria graminea</i> ), common knapweed ( <i>Centaurea nigra</i> ), meadow vetchling ( <i>Lathyrus pratensis</i> ), creeping cinquefoil ( <i>Potentilla reptans</i> ), common sorrel ( <i>Rumex acetosa</i> ) and hard rush ( <i>Juncus inflexus</i> ). | 0 (Site boundary)                       |
| Shinfield Park, Nore's Hill | Local Wildlife Site (LWS) | A 7.5ha site with a mixture of woodland including areas of semi-natural ancient woodland. These areas have a canopy of ash and oak with hazel coppice below. Dormouse has been recorded at this site in 1987. Woodland species present include yellow pimpernel, three-nerved sandwort, yellow archangel and bluebell.                                                                                                                                                                                                                                                                                                                                                | 735 S                                   |

### 6.2 Important Habitats

- 6.2.1 There is a veteran oak tree on site which is an irreplaceable habitat and lowland mixed deciduous woodland – a priority habitat (Section 41 NERC Act 2006 Habitats of Principle Importance (HPI)) on the northwestern side and southern corner of the

site.

### 6.3 Protected and Notable Species

**6.3.1** The search of the TVERC database revealed a range of protected and notable species records starting from 1960. Only recent records, defined as from within the last ten years, are included in this report (see **Tables 2a & 2b** below).

*Table 2a. Recent protected and/or notable species records within the vicinity of the site (Source: TVERC)*

| Common name                      | Scientific name                  | No. of records | Closest record (m) | Most recent record | Status                                    |
|----------------------------------|----------------------------------|----------------|--------------------|--------------------|-------------------------------------------|
| <b>Amphibians &amp; Reptiles</b> |                                  |                |                    |                    |                                           |
| Common frog                      | <i>Rana temporaria</i>           | 1              | 185                | 2022               | WCA Sch5 s9.1k, UK BAP Priority, NERC S41 |
| <b>Birds</b>                     |                                  |                |                    |                    |                                           |
| Brambling                        | <i>Fringilla montifringilla</i>  | 3              | 1km record         | 2019               | WACA-Sch1-p1                              |
| Cetti's Warbler                  | <i>Cettia cetti</i>              | 12             | 1km record         | 2022               | WACA-Sch1-p1                              |
| Fieldfare                        | <i>Turdus pilaris</i>            | 6              | 1km record         | 2017               | WACA-Sch1-p1, Bird-Red                    |
| Firecrest                        | <i>Regulus ignicapilla</i>       | 25             | 1km record         | 2020               | WACA-Sch1-p1                              |
| Greenshank                       | <i>Tringa nebularia</i>          | 1              | 1km record         | 2019               | WACA-Sch1-p1                              |
| Herring gull                     | <i>Larus argentatus</i>          | 24             | 1km record         | 2021               | NERC S41, Bird-Red                        |
| House Sparrow                    | <i>Passer domesticus</i>         | 7              | 1km record         | 2022               | NERC S41, Bird-Red                        |
| Kingfisher                       | <i>Alcedo atthis</i>             | 15             | 1km record         | 2023               | WACA-Sch1-p1                              |
| Lapwing                          | <i>Vanellus vanellus</i>         | 2              | 1km record         | 2018               | NERC S41, Bird-Red                        |
| Marsh Tit                        | <i>Poecile palustris</i>         | 1              | 1km record         | 2015               | NERC S41, Bird-Red                        |
| Peregrine                        | <i>Falco peregrinus</i>          | 2              | 1km record         | 2016               | WACA-Sch1-p1                              |
| Red Kite                         | <i>Milvus milvus</i>             | 138            | 1km record         | 2023               | WACA-Sch1-p1                              |
| Redwing                          | <i>Turdus iliacus</i>            | 65             | 1km record         | 2023               | WACA-Sch1-p1                              |
| Skylark                          | <i>Alauda arvensis</i>           | 1              | 1km record         | 2015               | NERC S41, Bird-Red                        |
| Spotted Flycatcher               | <i>Muscicapa striata</i>         | 1              | 1km record         | 2015               | NERC S41, Bird-Red                        |
| Starling                         | <i>Sturnus vulgaris</i>          | 38             | 1km record         | 2023               | NERC S41, Bird-Red                        |
| <b>Mammals – Terrestrial</b>     |                                  |                |                    |                    |                                           |
| Hedgehog                         | <i>Erinaceus europaeus</i>       | 1              | 180                | 2023               | NERC S41                                  |
| Badger                           | <i>Meles meles</i>               | 4              | 1050               | 2024               | Badgers-1992                              |
| <b>Mammals - Bats</b>            |                                  |                |                    |                    |                                           |
| Brown long-eared                 | <i>Plecotus auritus</i>          | 3              | 370                | 2018               | WCA Sch5 s9.4b/s9.4c, NERC S41            |
| Common Pipistrelle               | <i>Pipistrellus pipistrellus</i> | 30             | 370                | 2021               | WCA Sch5 s9.4b/s9.4c                      |

|                      |                              |    |     |      |                                |
|----------------------|------------------------------|----|-----|------|--------------------------------|
| Daubenton's bat      | <i>Myotis daubentonii</i>    | 10 | 540 | 2016 | WCA Sch5 s9.4b/s9.4c           |
| Noctule              | <i>Nyctalus noctula</i>      | 11 | 540 | 2022 | WCA Sch5 s9.4b/s9.4c, NERC S41 |
| Serotine             | <i>Eptesicus serotinus</i>   | 1  | 540 | 2017 | WCA Sch5 s9.4b/s9.4c           |
| Soprano Pipistrelle  | <i>Pipistrellus pygmaeus</i> | 19 | 450 | 2021 | WCA Sch5 s9.4b/s9.4c, NERC S41 |
| <b>Invertebrates</b> |                              |    |     |      |                                |
| Buff Ermine          | <i>Spilosoma lutea</i>       | 2  | 430 | 2016 | NERC S41                       |
| Cinnabar             | <i>Tyria jacobaeae</i>       | 4  | 430 | 2019 | NERC S41                       |
| Dot Moth             | <i>Melanchra persicariae</i> | 2  | 430 | 2015 | NERC S41                       |
| Dusky Thorn          | <i>Ennomos fuscantaria</i>   | 7  | 430 | 2019 | NERC S41                       |
| Feathered Gothic     | <i>Tholera decimalis</i>     | 1  | 430 | 2015 | NERC S41                       |
| Ghost Moth           | <i>Hepialus humuli</i>       | 1  | 430 | 2015 | NERC S41                       |
| Knot Grass           | <i>Acronicta rumicis</i>     | 3  | 430 | 2018 | NERC S41                       |
| Mottled Rustic       | <i>Caradrina morpheus</i>    | 8  | 430 | 2019 | NERC S41                       |
| Rustic moth          | <i>Hoplodrina blanda</i>     | 7  | 430 | 2018 | NERC S41                       |
| Stag Beetle          | <i>Lucanus cervus</i>        | 56 | 500 | 2020 | WACA-Sch5-s9.5a, NERC S41      |
| White ermine         | <i>Spilosoma lubricipeda</i> | 2  | 430 | 2017 | NERC S41                       |

Table 2b. Species status key.

| Abbreviation        | Legislation                                                                                                                                                                                                                                                                                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bird-red            | Birds of Conservation Concern Red list – Globally threatened according to IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown substantial recovery.                                                                                                              |
| Hab Reg Sch2        | Schedule 2 of Conservation of Habitats and Species Regulations 2010 (European Protected Species animal) – It is an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2.                                                                                                                  |
| NERC S41            | Priority Species listed under Section 41 of the Natural Environment and Rural Communities Act 2006.                                                                                                                                                                                                                                                       |
| Badgers-1992        | Protection of Badgers Act 1992.                                                                                                                                                                                                                                                                                                                           |
| WCA Sch1 sp1        | Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended) – birds protected from disturbance at their nests, or their dependent young.                                                                                                                                                                                                      |
| WCA Sch5 s9.1k      | Schedule 5 Section 9 Part 1 (taking) of the Wildlife and Countryside Act 1981 (as amended) – Animals which are protected from being intentionally killed or injured.                                                                                                                                                                                      |
| WCA Sch5 s9.4b/s9.4 | Schedule 5 Section 9 Parts 4b/c of the Wildlife and Countryside Act 1981 (as amended) – Animals which are protected from intentional disturbance while occupying a structure or place used for shelter or protection / Animals which are protected from their access to any structure or place which they use for shelter or protection being obstructed. |

**6.3.2** European Protected Species (EPS) mitigation licences that have been granted inside a 2km radius of the application site in the last 10 years, are detailed in **Table 3** below.

*Table 3. Bat mitigation licences granted within a 2km radius of the property (Source: MAGIC).*

| <b>Case Reference of<br/>Granted Licence</b> | <b>Species on the<br/>Licence</b>                          | <b>Licensable<br/>Period</b> | <b>Distance<br/>from site (m)</b> | <b>Licensable Works</b>                   |
|----------------------------------------------|------------------------------------------------------------|------------------------------|-----------------------------------|-------------------------------------------|
| 2014-3941-EPS-MIT-2                          | Common pipistrelle & soprano pipistrelle                   | 26/01/2015 - 30/09/2019      | 1880 N                            | Destruction of a resting place            |
| 2014-535-EPS-MIT-3                           | Brown long-eared, common pipistrelle & soprano pipistrelle | 06/11/2015 - 01/09/2018      | 1925 S                            | Damage and destruction of a resting place |

**6.3.3** The NatureSpace District Level Licensing impact risk map for Reading Brough Council shows the application site falling within an amber zone, i.e. suitable habitat where GCN may be present. No potential breeding ponds were identified on OS mapping within a 500m radius of the site.

## **6.4 Historic and Current Land Use**

**6.4.1** Google Satellite imagery dating from back to 2003 depicts the site as largely unchanged from the existing condition and use as a school and outdoor recreation space. The school site was expanded between 2014-2017, with the addition of two buildings to the western side of the site, as well as an expansion of outdoor sport pitches within the grassland.

## 7 UK HABITAT CLASSIFICATION SURVEY

### 7.1 Overview

- 7.1.1** The 2.8 hectare site comprised of multiple buildings on hard standing with a large area of modified grassland and other neutral grassland to the west and a parcel of lowland mixed deciduous woodland on the northwest boundary and adjacent to the school access in the southeast corner.
- 7.1.2** The following UK Habitat Classification (UKHab) habitats were observed during a site walkover on the 30<sup>th</sup> June 2025: u1b5 Buildings; u1b Developed land, sealed surface; g4 Modified grassland; g3c Other neutral grassland; h3h Mixed scrub; h3j Willow scrub; w1f Lowland mixed deciduous woodland; g~27 Traditional orchard; u1~847 Introduced shrub; h2a Native hedgerow; w1g~32 Individual urban trees and w1g~33 Line of trees.
- 7.1.3** The UKHab primary habitats and secondary codes are described alongside photographs (see **Photographs 1-24**) and a survey plan (see **Figure 2**), as follows:

### 7.2 u1b5 Buildings

- 7.2.1** The site was dominated by multiple school buildings in the eastern half of the site. None of these buildings are to be impacted by the proposals in this application and therefore were not assessed for bat roost suitability.

### 7.3 u1b Developed land, sealed surface

- 7.3.1** The majority of the site was a sealed hard standing surface surrounding the buildings with areas of artificial surface in playgrounds and some areas were covered by open canopies. There was a large hard standing sports pitch and artificial surfaced sports pitch in the southwest (**Photographs 1-4**).



*Photograph 1. Tarmac and artificial grass sport pitches to the west of the school buildings (u1b).*



*Photograph 2. Artificial grass beneath play area to the west of the buildings (u1b).*



Photograph 3. Hard standing within the courtyard between the school buildings (u1b).



Photograph 4. Access road to the school at the south-eastern corner of the site (u1b).

## 7.4 g4 Modified grassland

- 7.4.1 There was an area of managed grassland at the south-western side of the site and to the south of the sport pitches and southern boundary (**Photograph 5**). The grass was cut short and dominated by species typical of regularly managed modified grassland swards: perennial ryegrass (*Lolium perenne*), yorkshire fog (*Holcus lanatus*), white clover (*Trifolium repens*) and common daisy (*Bellis perennis*).



Photograph 5. Modified grassland at the south-western side of the site (g4).

## 7.5 g3c Other neutral grassland

- 7.5.1 There were several areas of grassland present across the site which were less managed and featured a higher number of herbaceous species. The grassland bordering the access road at the south-eastern corner of the site had the following species: soft brome (*Bromus hordeaceus*), red fescue (*Festuca rubra*), cocksfoot (*Dactylis glomerata*), false oat grass (*Arrhenatherum elatius*), creeping bent (*Agrostis stolonifera*), annual beard grass (*Polypogon monspeliensis*), yarrow (*Achillea millefolium*), ribwort plantain (*Plantago lanceolata*), nipplewort (*Lapsana communis*), ragwort (*Senecio jacobaea*), birds-foot trefoil (*Lotus corniculatus*), creeping cinquefoil (*Potentilla reptans*), dandelion (*Taraxacum officinale*), bristly oxtongue (*Helminthotheca echinoides*), field bindweed (*Convolvulus arvensis*), nettle (*Urtica*

*dioica*), dove's-foot crane's-bill (*Geranium molle*), perennial ryegrass, yorkshire fog and daisy (**Photograph 6**). There were further areas of other neutral grassland present at the northern end of the site, bordering the woodland to the west of the buildings (**Photographs 7 & 9**). Additional species observed within these areas included white clover, red clover (*Trifolium pratense*), smooth meadow grass (*Poa pratensis*), barren brome (*Bromus sterilis*), timothy grass (*Phleum pratense*), self-heal (*Prunella vulgaris*) and common cat's-ear (*Hypochaeris radicata*).



Photograph 6. Other neutral grassland bordering the access paths at the south-east of the site (g3c).



Photograph 7. Area of other neutral grassland at the northern end of the site (g3c).



Photograph 8. Other neutral grassland in front of the woodland on the northern side of the site (g3c).

## 7.6 h3h Mixed scrub & h3j Willow scrub

- 7.6.1** At the northern side of the site there was a parcel of mixed scrub, with a dominant cover of bramble (*Rubus fruticosus*), and occasional holly (*Ilex aquifolium*), blackthorn (*Prunus spinosa*), yew (*Taxus baccata*), elm (*Ulmus procera*), elder (*Sambucus nigra*) and pear (*Pyrus communis*) trees (**Photograph 9**). The ground flora present included similar species to that found in the adjacent parcel of other neutral grassland, with the addition of ruderal species including hogweed (*Heracleum sphondylium*), great willowherb (*Epilobium hirsutum*), hedge mustard (*Sisymbrium officinale*), black medick (*Medicago lupulina*), mayweed (*Anthemis cotula*), oxeye daisy (*Leucanthemum vulgare*), poppy (*Papaver rhoeas*) and burdock (*Arctium lappa*). Within the area of other neutral grassland to the west of the school buildings, there

was a small parcel of willow (*Salix* sp.) scrub (**Photograph 10**).



Photograph 9. Area of mixed scrub on the northern boundary of the site (h3h).



Photograph 10. Area of willow scrub within parcel of other neutral grassland (h3j).

## 7.7 w1f Lowland mixed deciduous woodland

- 7.7.1** There were two parcels of woodland present within the site boundary. One parcel was situated to the south of the access road in the south-eastern corner of the site, with an abundance cover of oak (*Quercus robur*), hawthorn (*Crataegus monogyna*), ash (*Fraxinus excelsior*), yew (*Taxus baccata*), cherry (*Prunus* spp.), silver birch (*Betula pendula*), sycamore (*Acer pseudoplatanus*), horse chestnut (*Aesculus hippocastanum*) and willow (*Salix* sp.), with two bat boxes present on a willow and oak tree (**Photographs 11 & 12**). The ground flora included bramble, creeping bent, field bindweed, nettle, ivy (*Hedera helix*), dog rose (*Rosa canina*), wood dock (*Rumex sanguineus*), wood avens (*Geum urbanum*), pendulous sedge (*Carex pendula*), cherry laurel (*Prunus laurocerasus*), lords and ladies (*Arum maculatum*), herb-robert (*Geranium robertianum*), rough meadow grass (*Poa trivialis*), and hazel (*Corylus avellana*).



Photograph 11. Woodland parcel to the southern end of the site (w1f).



Photograph 12. Woodland parcel to the southern end of the site (w1f).

- 7.7.2** The north-western boundary of the site had woodland present that was used by the school for forest school and so was fenced off from the rest of the site and linked to the off-site Cowley Woods LWS to the north (**Photographs 13 & 14**). The species present were similar to those in the southern parcel of woodland, with an abundant

cover of ash present, mature hazel and included hybrid black poplar (*Populus x canadensis*).



Photograph 13. Woodland parcel to the northern end of the site (w1f).



Photograph 14. Clearing for forest school within woodland parcel at the northern end of the site (w1f).

## 7.8 g~27 Traditional orchard

- 7.8.1 Within the other neutral grassland to the west of the buildings, there were a group of young fruit trees (**Photograph 15**). The species present included apple (*Malus* sp.) and plum (*Prunus* sp.).



Photograph 15. Group of young fruit trees within grassland to the west of the buildings (c1e).

## 7.9 u1~847 Introduced shrub

- 7.9.1 There were several areas of introduced shrubs around the school buildings and within raised beds in the grassland adjacent to the orchard (**Photographs 16 & 17**). The species present around the school buildings included hebe (*Veronica* sp.), snowberry (*Symphoricarpos* sp.) and *Ceanothus* species.



Photograph 16. Introduced shrubs along school building (u1 847).



Photograph 17. Raised planter beds and filled rubber tyres within neutral grassland (u1 847).

## 7.10 h2a Native hedgerow

- 7.10.1 A native hornbeam (*Carpinus betulus*) hedgerow was present along the fenceline between the car park and grassland at the northern end of the site (**Photograph 18**).



Photograph 18. Hornbeam hedgerow along fence line between carpark and grassland (h2a).

## 7.11 w1g~32 Line of trees

- 7.11.1 There were lines of trees on the eastern boundaries of the site, along the edges of the on-site modified grassland (**Photographs 19 & 20**). Species present included hybrid poplar, oak and elm.



Photograph 19. Line of trees on the north-western boundary of the grassland (w1g 32).



Photograph 20. Line of trees on the western boundary of the grassland (w1g 32).

## 7.12 w1g~33 Individual urban trees

- 7.12.1** Several individual trees were present across the site including; a mature and veteran oak at the northern end of the site (**Photographs 21 & 22**); an early mature pear at the eastern side of the site; several semi-mature callery pear (*Pyrus calleryana*) trees within the courtyard in the centre of the school buildings (**Photograph 23**); and a number of young and semi-mature scattered trees in the other neutral grassland and raised beds which included cherry (*Prunus* sp.), callery pear, grey willow (*Salix cinerea*) and hornbeam.



Photograph 22. Mature oak tree situated to the north of the school buildings (w1g 33).



Photograph 22. Veteran oak tree on the northern boundary of the site (w1g 33).



Photograph 23. Scattered semi-mature trees within courtyard (w1g 33).



Photograph 24. Scattered trees in raised planters to the northwest (w1g 33).

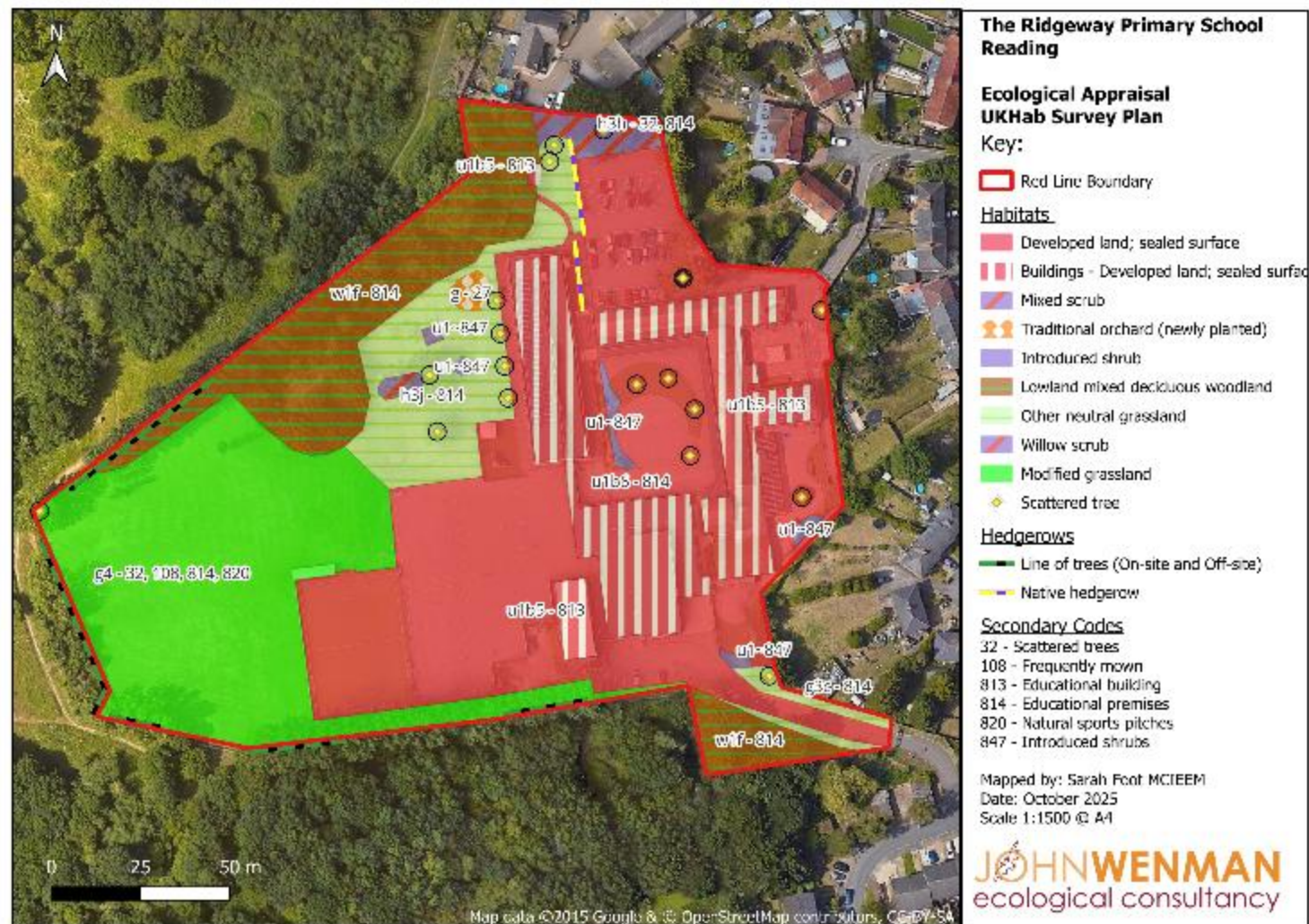


Figure 2. UKHab Survey Plan.

## 8 DISCUSSION

### 8.1 Designated Sites for Nature Conservation

#### *Evaluation of Baseline*

- 8.1.1** The desk study revealed that the site is not statutorily designated for its wildlife interest and therefore is not currently recognised as being of international or national level conservation significance. No internationally designated sites for nature conservation were identified within a 5km radius of the application site and the site does not fall within any Impact Risk Zones (IRZ) for Sites of Special Scientific Interest (SSSI). There are two nationally designated sites – Pearman's Copse and Maiden Erlegh Park Local Nature Reserves (LNRs) – situated within a 2km radius and two non-statutory designated sites – The Cowsey and Shinfield Park, Nore's Hill Local Wildlife Sites (LWSs) - situated within a 1km radius. The Cowsey LWS borders the school site to the north, west and south.

#### *Impact Assessment*

- 8.1.2** The application site does not fall within an IRZ and so the proposals are considered highly unlikely to have an impact on any local SSSIs. Therefore, it is recognised that consultation with Natural England on the likely impacts of development on terrestrial SAC/SPA/SSSIs is not required.
- 8.1.3** The application site is adjacent to The Cowsey LWS and therefore there is a risk of adverse impacts during construction activities due to the proximity of the non-statutorily designated site. However, the scale and nature of the proposals will remain unchanged from the existing use of the site and therefore no adverse impacts are foreseen post-development. Furthermore, the existing green palisade fencing around the school site provides a level of protective fencing preventing any construction machinery or storage of materials on the neighbouring LWS. To ensure there are no indirect impacts that could impact the integrity of the LWS such as soil compaction, avoidance and mitigation measures are recommended during the construction phase – refer to recommendations in **Section 9.2**.

## 8.2 Habitats

### *Evaluation of Baseline*

- 8.2.1** The application site is primarily characterised by urban habitats, i.e. hard standing and modified grassland – habitats of very low and low distinctiveness. The scattered trees (ranging from young to mature) and other neutral grassland are habitats of medium distinctiveness and hold ecological value at the site level. The traditional orchard is recently planted and of high distinctiveness and holds ecological value up to local level. The veteran oak tree in the north is an irreplaceable habitat and of very high distinctiveness and holds ecological value up to county level. The parcels of off-site lowland mixed deciduous woodland are priority habitat of high distinctiveness and hold ecological value at the local level.

### *Impact Assessment*

- 8.2.2** The majority of habitats on the application site surrounding the existing built development are of low and very low distinctiveness and the majority of proposed landscaping will be on existing built development or managed habitats. There is a small area of other neutral grassland of medium distinctiveness that will be lost to proposed hard landscaping in the northwest of the site and two small urban trees to be lost. There is lowland mixed deciduous woodland priority habitat (NERC Act 2006 Section 41 habitats of principle importance) off-site to the west and south, and a traditional orchard and veteran tree within the application site boundary, habitats of high and very high distinctiveness, however these areas will not be directly impacted by the proposed landscaping.
- 8.2.3** As the proposals will involve the loss/degradation of low/medium distinctiveness habitats greater than 25m<sup>2</sup>, i.e. modified grassland, other neutral grassland and scattered trees, the site will not qualify for the *de-minimis* exemption. As such, the development will need to achieve the mandatory minimum of 10% Biodiversity Net Gain (BNG).
- 8.2.4** Whilst two small trees are to be removed to accommodate for the proposed landscaping, the majority including the large, mature and veteran oaks (*Quercus robur*) are to be retained. As such, whilst the proposals will not result in the loss

of any priority habitats or habitats of importance beyond the site level, any trees to be retained should be protected during the course of the proposed works and the loss of trees should be compensated through relocation or new tree planting (refer to recommendations in **Section 9.2**).

**8.2.5** The proposals will not result in any direct loss of woodland off-site but the proposed regrading of ground levels for new hard outdoor PE area in the south-west corner may cause indirect impacts through degradation of woodland habitat, particularly off-site woodland to the south, i.e. root damage or soil compaction, in the absence of mitigation measures – refer to recommendations in **Section 9.2**. The survey has not identified any notable or protected species associated with the woodland parcels that would be adversely impacted by the proposals.

**8.2.6** There is potential for temporary minor impacts on the soil/root systems of the off-site woodland during the construction of the new hard outdoor PE area in the southwest corner of the site when machinery and materials will be transported onto site, but this can be avoided through precautions to avoid any residual effect. The small scale and temporary nature of the construction activities will not result in any air pollution or ground water pollutants and increased noise and vibrations from machinery will be temporary and minimal. Any low levels of dust from activities can be mitigated through precautionary measures.

**8.2.7** In summary, without mitigation, the temporary construction activities may cause minor adverse impacts on the woodland habitats off-site and therefore precautionary measures are recommended (refer to **Section 10.3**). The site is already used as an educational facility and therefore there will be no additional impacts from the use of the land on site post-development.

### **8.3 Amphibians (Great Crested Newt)**

#### *Evaluation of Baseline*

**8.3.1** The desk study found no recently granted great crested newt (GCN) (*Triturus cristatus*) licences within a 2km radius of the application site and TVERC holds no recent records for this species. The NatureSpace District Level Licensing impact risk map for Reading Borough Council shows the application site falling within an amber zone. The site is unlikely to support significant amphibian

populations due to a lack of suitable terrestrial habitat on site (restricted to the on-site woodland parcels that could be used for shelter) and records in the local area are limited to one record of common frog, further evidencing the likely unsuitability of the school site for amphibian populations.

- 8.3.2** The school site lacks any waterbodies and a review of publicly accessible online mapping shows there to be no ponds with 500m apart from a drain 100 metres to the northwest of the site boundary which is surrounded by suitable semi-natural habitat at The Cowsey LWS. Great crested newts typically utilise terrestrial habitat within 250 metres of breeding ponds; habitat beyond this is of much lower importance to populations (Langton et. al. 2001), and as such, the importance of the site to great crested newts, if present within the ditch to the north, is considered likely to be minimal on account of the limited amount of suitable habitat, when viewed in the context of the adjoining suitable semi-natural habitats in the LWS.

#### *Impact Assessment*

- 8.3.3** The proposals fall on habitats that are not suitable for amphibians, i.e. mown grassland, hard standing and existing footprint and therefore there is negligible risk of harming amphibians during the construction activities.

### **8.4 Bats**

#### *Evaluation of Baseline*

- 8.4.1** TVERC hold recent bat records within a 2km radius of the site and granted bat mitigation licences identified three species known to be roosting within a 2km radius of the site: common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pygmaeus pipistrellus*) and brown long-eared bat (*Plecotus auritus*).
- 8.4.2** The majority of scattered trees on site do not offer any roosting opportunities for bats but the mature/veteran oak trees on site may offer potential roosting opportunities. The buildings do have some potential roost features of low-moderate potential suitability, e.g. gaps under ridge tiles and at eaves but these will not be impacted by the proposals in this application.
- 8.4.3** The woodland parcels off-site, scattered medium/large trees on-site and line of trees both on-site and off-site offers good foraging habitat for bats in an

otherwise urban area. These habitats are also likely to be part of the wider suitable foraging resource used by local bat populations in The Cowsey LWS to the north, south and west of the site.

#### *Impact Assessment*

- 8.4.4** The proposals will not directly or indirectly impact any trees or buildings that have potential roost suitability for bats. The proposals will not adversely impact available foraging habitat as the small trees to be removed will be replaced/relocated within the scheme. The proposals are unlikely to result in significant increase to the level of artificial lighting at the site in comparison to current lighting, but to prevent adverse impacts from lighting, any new lighting should be designed to minimise its impact on bats and other nocturnal wildlife (refer to recommendations in **Section 9.3**).

### **8.5 Other mammals**

#### *Evaluation of Baseline*

- 8.5.1** The desk study data included no recent or historic records of hazel dormice (*Muscardinus avellanarius*) and a search of MAGIC returned no granted mitigation licences within a 2km radius. The application site primarily contains managed habitats typical of an urban environment fragmented by urban infrastructure. The site has very limited suitable habitat for hazel dormice (*Muscardinus avellanarius*) as they favour broadleaved woodlands with a dense understory of hazel (*Corylus avellana*), dense scrub and species-rich hedgerows with a variety of fruits and flowers. The woodland parcels lack the suitable understory and are therefore sub-optimal for dormice. Furthermore, there are no hedgerows on site which could potentially be used by dormice for foraging or nesting.
- 8.5.2** The site is urbanised and there was no evidence of badger (*Meles meles*) activity (i.e., setts trails, snuffle holes or mammal diggings) recorded during the field survey. As such it is unlikely that this species is found on site. Hedgehog (*Erinaceus europaeus*) – a priority species (NERC Act 2006 Section 41 Species of Principal Importance) – has been recorded locally and could use the woodland to take refuge or traverse around the edge of the site.

- 8.5.3** There are nearby records of otter (*Lutra lutra*) and water vole (*Arvicola amphibus*) along the River Kennet but the site offers no suitable habitat for these species.

*Impact Assessment*

- 8.5.4** Whilst the risk of protected mammal presence on site is mostly negligible, there is low potential that the locally recorded hedgehog (*Erinaceus europaeus*) may be on-site and harmed during any shrub clearance. Precautions are recommended to ensure no hedgehogs are harmed during the proposed work, with further enhancements also recommended to allow for the continued ecological permeability for hedgehogs along the eastern and western site boundaries (refer to recommendations in **Sections 9.4 and 9.6**).

**8.6 Birds**

*Evaluation of Baseline*

- 8.6.1** The desk study data returned recent records of protected bird species within 1km of the site including house sparrow (*Passer domesticus*), starling (*Sturnus vulgaris*) and red kite (*Milvus milvus*) that may be present on site. Swift (*Apus apus*) boxes were fixed to the eaves of the hall therefore providing suitable nesting opportunities for this species. The scattered trees and woodland off-site could provide further suitable nesting habitat for widespread and common bird species, but the site is highly unlikely to be of value to an assemblage of species of conservation importance beyond the scale of the site.

*Impact Assessment*

- 8.6.2** The site supports nesting opportunities for common and widespread nesting birds with potential for the presence of swift (*Apus apus*). The proposals are considered highly unlikely to have an adverse impact on the site's suitability for birds (including the swift nest boxes on the hall), especially with the retention of the denser sections of scrub and woodland off-site to the north of the application site and all notable features across the buildings on-site.

- 8.6.3** Any alterations to buildings, vegetation clearance or tree felling should be preceded by necessary precautions to avoid damaging and/or destroying bird nests and ensuring work is undertaken lawfully (refer to recommendations in

**Section 9.5).**

**8.7 Reptiles**

*Evaluation of Baseline*

- 8.7.1** The desk study data included no recent records of reptiles within a 1km radius of the application site. Whilst the urban habitats and regularly mown grassland are of negligible value for reptiles, the woodland edge could offer limited opportunities for reptiles to take refuge. However, these areas are regularly disturbed and would not comprise an important part of the wider resource used by reptiles in the local area.

*Impact Assessment*

- 8.7.2** It is highly unlikely that the habitats present on site would be able to support a reptile population and the works will only impact regularly cut grassland and urban habitats, i.e. habitats of negligible value for reptiles. Therefore, reptiles are highly unlikely to be affected by the proposed work.

**8.8 Invertebrates**

*Evaluation of Baseline*

- 8.8.1** The site offers very limited suitable habitats of both structural and species diversity that would support an important assemblage of invertebrates. Multiple recent records included stag beetle (*Lucanus cervus*) but there was no significant deadwood suitable for supporting the larval stage of the stag beetle.

*Impact Assessment*

- 8.8.2** The site does not offer habitats that can support an important assemblage of invertebrates and only urbanised habitats are being impacted, therefore there are no adverse impacts anticipated. The proposals offer an opportunity for enhancements for invertebrates – refer to **Section 9.6**.

## **9 RECOMMENDATIONS**

### **9.1 Overview**

- 9.1.1** This chapter provides the details regarding proposed avoidance, mitigation, compensation and enhancement measures, including measures to enable legislative compliance should development proposals be considered.

### **9.2 Designated Sites and Habitats**

- 9.2.1** The site is adjacent to The Cowsey LWS, and therefore in order to ensure there is no adverse impacts on the integrity of the LWS from construction activities including construction of the new hard PE court in the southwest corner, in particular dust contamination and soil compaction and disturbance of root systems, avoidance and mitigation measures are recommended (see **Section 9.2.2** below).

- 9.2.2** The on-site scattered trees and grassland and off-site woodland and neighbouring LWS, will be protected during the course of the work through compliance with the following avoidance and mitigation measures:
- Erection of Heras fencing in advance of site clearance with netting to reduce dust reaching or installation of netting on existing palisade fencing on site boundaries;
  - All access of machinery and materials will be via the existing entrance access points, avoiding soil impact on-site and off-site woodland of The Cowsey LWS;
  - Directing security/construction lighting away from woodland on- and off-site;
  - Storing equipment that could cause pollution safely and securely on hard standing away from habitats, ideally centrally on the existing hardstanding;
  - Adopting procedures to avoid pollution incidents, e.g. fuel spills or surface runoff;
  - Adopting construction techniques that minimise noise production and

using super silenced plant/machinery where feasible; and

- Stopping and seeking advice from a suitably qualified ecologist if protected species are encountered during construction.

**9.2.3** To compensate for the loss of trees, the trees should be relocated wherever feasible and planted in a location to be protected in the long-term. If tree relocation is not possible and new trees are to be planted, a native species of UK provenance should be chosen to maximise the ecological value of the planting.

**9.2.4** The proposals that will result in the loss of greater than 25m<sup>2</sup> of habitat, and therefore the development is subject to mandatory BNG. The proposals will need to deliver a minimum 10% net gain for biodiversity to ensure that more or better quality natural habitat is created post-development.

### **9.3 Bats**

**9.3.1** During construction, lighting should be kept to a minimum and if security lighting is required, this should be controlled by passive infra-red motion sensors. In the long-term, dark corridors should be retained where possible, thereby maintaining foraging and commuting opportunities for bats across the site. Light spillage on woodland and scattered trees should be avoided wherever possible but if essential, factors such as column height, light source, use of passive infra-red motion sensors and light spillage should be considered carefully when designing the lighting scheme. If brighter lighting is required, lighting with low or no UV content e.g., low pressure sodium lights, or warm LED lamps (2700K or less) should be used instead of mercury and metal halides, and luminaires or other directional light accessories should be used to ensure that light spillage onto the scattered trees and woodland is avoided (BCT and ILE, 2023). Existing lighting was primarily low-level and used for security purposes and did not cause any significant adverse impacts on bat activity on-site; there were dark areas around the recreational grounds and off-site LWS maintaining suitable foraging habitat for light-sensitive species.

**9.3.2** If any future arboricultural works are required on site as part of general maintenance, a ground level tree assessment for bats should be undertaken to avoid any adverse impacts on roosting bats, in particular the mature and veteran

oak trees on site.

## **9.4 Mammals**

**9.4.1** To avoid contravening the legislation and harming individual small mammals during the works, the following precautionary avoidance measures will be adopted during the construction:

- During works, any open excavations required for investigation works should be backfilled before nightfall or alternatively, escape ramps should be installed to allow individual animals to escape should they become trapped;
- Any building materials or materials excavated during the investigations that need to be stored on site prior to use/disposal will be raised off the ground on pallets or in skips to avoid them providing temporary resting places or hibernation sites; and
- The removal of any dense shrub will be carried out following an inspection by an ecologist to confirm no small mammals are currently present or will be harmed.

**9.4.2** Adhering to the simple avoidance measures outlined above should ensure that small mammals are protected from reckless killing and injury during any subsequent works.

## **9.5 Nesting Birds**

**9.5.1** The removal of any trees or woody vegetation should be completed outside of the peak bird nesting season (March to August) or alternatively, following an inspection by an ecologist confirming that there is no current nesting activity. If nesting birds are discovered prior to or during any work, work should stop immediately and should only continue once bird nesting has finished, i.e. young have fledged and left the nest.

## **9.6 Biodiversity Enhancement Measures**

**9.6.1** The planning proposals provide opportunities for the enhancement of the site's biodiversity value. The inclusion of the following recommendations would be of

ecological benefit and be in line with the National Planning Policy Framework (NPPF):

- Improving the ecological permeability around the site for hedgehogs (*Erinaceus europaeus*) (NERC Act 2006 Section 41 Species of Principal Importance) through the use of 13x13cm gaps in any new fencing defined with hedgehog highway signs above; and
- Additional planting of native species of UK provenance or wildlife beneficial plants, particularly pollinator friendly planting, to increase the ecological value of existing landscaped areas.

## 10 REFERENCES

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## APPENDIX 1 – LEGISLATIVE BACKGROUND

### *Amphibians*

The seven native species of amphibian receive protection under the W&AC 1981 (as amended). The four widespread and common amphibians (common frog, toad, smooth newt and palmate newt) receive only limited protection – making their sale illegal.

The great crested newt (*Triturus cristatus*) receives full protection under the W&CA 1981 (as amended) and under the Habitat Regulations 2019. The combined legislation makes it illegal to:

- intentionally or recklessly kill, injure or take a great crested newt;
- possess or control any live or dead specimen or anything derived from a great crested newt;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- intentionally or recklessly disturb great crested newts; in particular, any disturbance which is likely to impair their ability to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating animals, to hibernate or migrate.

Great crested newts (*T. cristatus*) and common toads (*Bufo bufo*) are species of principal importance for the conservation of biodiversity in England ('UKBAP Priority Species') under Section 41 of the NERC Act 2006.

### *Badgers*

Badgers are protected by the Protection of Badgers Act 1992. The Act makes activities such as development that would harm or disturb badgers or damage, obstruct or destroy their setts illegal. If badgers are to be affected by the proposed development, activities can be undertaken only under a licence issued by Natural England.

### *Bats*

All bat species in Britain are fully protected by the W&CA 1981 (as amended) and by the Habitat Regulations 2019. In summary, the combined legislation makes it an

offence to:

- damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a bat;
- deliberately, intentionally or recklessly disturb bats; in particular, any disturbance which is likely to impair the ability of bats to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating bats, to hibernate or migrate; or to significantly affect the local distribution or abundance of the species; and
- deliberately kill, injure or take any bat.

### *Birds*

All wild birds are protected under the W&CA 1981 (as amended). The Act makes it an offence to kill, injure or take a wild bird or to damage or destroy the nest of a wild bird whilst in use or being built. Species listed on Schedule 1 of the Act, such as barn owls and kingfishers, are afforded additional protection against disturbance while nesting.

### *Hazel dormice*

Hazel dormice receive full protection under the W&CA 1981 (as amended) and under the Habitat Regulations 2019. These make it illegal to:

- intentionally or recklessly kill, injure or take a dormouse;
- possess or control any live or dead specimen or anything derived from a dormouse;
- damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a dormouse; and
- intentionally or recklessly disturb dormice; in particular, any disturbance which is likely to impair their ability to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating animals, to hibernate or migrate.

### *Invasive non-native plants*

The W&CA 1981 (as amended) provides the primary controls on the release of non-native species into the wild in Great Britain. It is an offence under Section 14(2) of the Act to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9, Part II. The species listed in the Act include Japanese knotweed (*Fallopia japonica*), giant hogweed (*Heracleum mantegazzianum*) and Himalayan balsam (*Impatiens glandulifera*).

### *Otters*

Otters are fully protected by the W&CA 1981 (as amended) and by the Habitat Regulations 2017 (as amended). In summary, the combined legislation makes it an offence to:

- damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by an otter;
- deliberately, intentionally or recklessly disturb otters; in particular, any disturbance which is likely to impair the ability of otters to survive, breed or reproduce or nurture their young; or to significantly affect the local distribution or abundance of the species; and
- deliberately kill, injure or take any bat.

### *Reptiles*

The four widespread reptiles most likely to be encountered (adder, grass snake, slow worm and common lizard) are protected under the W&CA 1981 (as amended). The Act makes it an offence to intentionally kill, injure, possess or sell any of the species.

The aforementioned species are all listed as being of principal importance for the conservation of biodiversity in England ('UKBAP Priority Species') under Section 41 of the NERC Act 2006.

### *Water voles*

Since April 2008, water voles have received full protection under Section 9 in Schedule 5 of the W&CA 1981 (as amended). This makes it an offence to intentionally kill, injure or take water voles or to possess or control live or dead water

voles or derivatives. It is an offence to intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection or intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose.

The water vole is listed as being of principal importance for the conservation of biodiversity in England (*'UKBAP Priority Species'*) under Section 41 of the NERC Act 2006.

### *Wild mammals*

Under the Wild Mammals (Protection) Act 1996 it is an offence to intentionally inflict unnecessary suffering, as specified by the Act, on any wild mammal.

[illegible]