

Heathlands Packhouse
Honey Hill
Wokingham
Berkshire
RG40 3BG

Preliminary Ecological Appraisal (incl. BNG Assessment)

Report ref.: R2910_PEA_a

<i>Report Quality Control Information</i>	
<i>Author</i>	<i>Vicky Potts MCIEEM</i>
<i>Reviewer</i>	<i>John Wenman MCIEEM</i>

April 2025



1 Diesel House, Honey Hill, Wokingham, Berkshire RG40 3BL
Telephone: 0118 327 1810 Mobile: 07979 403099 E-mail: info@wenman-ecology.co.uk
www.wenman-ecology.co.uk

John Wenman Ecological Consultancy LLP is a limited liability partnership registered in England and Wales with registered number OC339057.
Registered office: 1 Diesel House, Honey Hill, Wokingham RG40 3BL where you may look at a list of members' names.

CONTENTS PAGE

CONTENTS PAGE	2
1 EXECUTIVE SUMMARY	3
2 INTRODUCTION.....	5
2.1 Project Background	5
2.2 Site Location and Context.....	5
2.3 Report Objectives	5
3 LEGISLATIVE BACKGROUND	7
3.1 Relevant Legislation	7
3.2 European Protected Species Mitigation Licensing	7
4 PLANNING POLICY	9
4.1 National Planning Policy	9
4.2 Local Planning Policy	10
5 SURVEY METHODOLOGY	12
5.1 Desk Study	12
5.2 Field Survey	12
5.3 Biodiversity Net Gain Approach	13
6 DESK STUDY FINDINGS	15
6.1 Designated Sites and Habitats.....	15
6.2 Protected and Notable Species	16
6.3 Historic and Current Land Use.....	19
7 UK HABITAT CLASSIFICATION SURVEY.....	21
7.1 Overview	21
7.2g4 - Modified grassland	21
7.3u1b5 – Buildings.....	21
7.4u1c – Artificial unvegetated, unsealed surface	22
7.5u1e – Built linear feature.....	22
7.6510 – Bare ground.....	23
7.7h2a – Native hedgerow.....	24
8 DISCUSSION.....	26
8.1 Designated Sites for Nature Conservation	26
8.2 Habitats	26
8.3 Bats	27
8.4 Great Crested Newt (and other amphibians)	28
8.5 Hazel Dormouse.....	28
8.6 Reptiles	29
8.7 Birds.....	29
8.8 Badgers (and other mammals)	30
8.9 Invertebrates	30
8.10 Invasive Non-native Species	31
9 RECOMMENDATIONS.....	32
9.1 Overview	32
9.2 Habitats	32
9.3 Reptiles, Amphibians and Small Mammals - Reasonable Avoidance Measures.....	32
9.4 Biodiversity Enhancement Measures.....	33
10 BIODIVERSITY NET GAIN ASSESSMENT	34
10.1 Overview.....	34
10.2 Baseline Habitat.....	34
10.3 Proposed Habitat	34
10.4 Calculation Result	35
11 REFERENCES AND BIBLIOGRAPHY	37
APPENDIX 1 – LEGISLATIVE BACKGROUND.....	38
APPENDIX 2 – PROPOSED SITE LAYOUT.....	41

1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by Hall Hunter Partnership to undertake a Preliminary Ecological Appraisal (PEA) and Biodiversity Net Gain (BNG) Assessment at Heathlands Packhouse in Wokingham, Berkshire, in connection with a planning application to extend the existing warehouses.
- 1.1.2** The survey methodology included a desk study (comprising a TVERC 1km data search) and a field survey (using UKHab Classification) carried out by Vicky Potts MCIEEM and Verity West (a qualifying member of CIEEM).
- 1.1.3** The desk study revealed that the application site is not statutorily designated for its wildlife interest and therefore is not currently recognised as being of international, national or county level conservation significance. The site falls within the Impact Risk Zones (IRZ) for statutorily designated sites, i.e. Sites of Special Scientific Interest (SSSI), but the planning proposals do not fall into any categories specified in the IRZs for the sites and therefore no adverse impacts are likely.
- 1.1.4** The application site covers an area of 0.15 ha to the south of the warehouses at Heathlands Packhouse with the following UKHab habitats present: Artificial unvegetated, unsealed surface (u1c), built linear features (u1e), Building (u1b5), Modified grassland (g4), bare ground (510) and native hedgerow (h2a).
- 1.1.5** The proposals will lead to changes in the use of the land with the loss of a native hedgerow, a bank covered in rubble, a dirt track and area of modified grassland, and have the potential to impact other protected or notable species or habitats. **Section 9** provides recommendations regarding habitat and species protection measures such as precautionary avoidance measures for amphibians and reptiles and ecological enhancements.
- 1.1.6** The results from the Biodiversity Metric calculation tool shows a total onsite net habitat units change of -92.51% (a loss of 0.70 habitat units) and an onsite net hedgerow change of +25.32% (39 in hedgerow units). There is a 0.77 deficit in habitat units required to achieve a 10% biodiversity net gain. The increase in hedgerow units is delivered onsite by planting an 88 m native hedgerow.
- 1.1.7** there is no scope to achieve habitat units onsite. The deficit in habitat units could be created 'offsite' using land within the ownership boundary or by purchasing offsite units. To meet the requirements within the ownership boundary, the improvement of an area of 0.4 ha of bare ground or modified grassland (low distinctiveness habitats) to other

neutral grassland (medium distinctiveness habitat), expected to reach a minimum 'poor' condition in 1 year, would result in a 10.04% net gain.

- 1.1.8** This report will likely be 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 Hall Hunter Partnership to undertake a Preliminary Ecological Appraisal (PEA) and Biodiversity Net Gain (BNG) Assessment at Heathlands Packhouse in Wokingham, Berkshire, in connection with a planning application to extend the existing warehouses.

2.1.2 The PEA and BNG assessment were commissioned to accompany a planning application seeking consent for the construction of a new agricultural barn (see Proposed Site Layout in **Appendix 2**).

2.2 Site Location and Context

2.2.1 The application site covers an area of 0.15 hectares (ha) to the south east of Wokingham, Berkshire (Central OS grid reference: SU 82897 66341). The site comprises warehouse buildings, surrounded by hard standing, an access track, with a small area of modified grassland on the edge of a field of solar panel arrays, and a bund with bare ground separating the built-up areas and field. Large piles of rubble had been left along the bank which was partially covered in matting and a native hedgerow which had been recently cut to ground level.

2.2.2 The site is in a rural setting within Heathlands Farm and is surrounded by fruit fields and polytunnels with established hedgerows and tree lines, and a field of solar panels to the south. Gorrick Plantation - a conifer plantation woodland - is situated 450 m to the southwest. Several patches of deciduous woodland and traditional orchards are situated within Heathlands Farm towards the east, including a patch 50 m to the east beyond static homes, which are Habitats of Principle Importance for conservation (HPI) as defined under Section 41 of the NERC Act 2006. The surrounding landscape consists of a series of ponds and ditches, and lakes.

2.3 Report Objectives

- 2.3.1** The aim of the 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.

2.3.2 The aim of the BNG assessment is to demonstrate that a minimum of 10% on-site net gain in biodiversity can be achieved as part of the proposals. The key objectives are to:

- detail the approach taken for the BNG calculation (i.e. the Statutory Biodiversity Metric);
- describe and map the baseline habitats and important ecological features on site;
- describe and map the proposed habitats based on post-development design;
- complete the biodiversity metric tool with supporting condition assessment sheets; and
- outline the implementation of the design concepts and the long-term management to deliver BNG.

2.3.3 This BNG Assessment report should be read in conjunction with the completed Statutory Biodiversity Metric calculation tool and habitat condition assessment excel spreadsheets.

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
- 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.

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, sets out the Government's planning policies for England and how they should be applied. Section 15 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. Paragraph 193 sets out the principles LPAs should apply when determining planning applications, as follows:

'When determining planning applications, local planning authorities should apply the following principles:

a) 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 planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should

be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'

4.1.4 In England, Biodiversity Net Gain (BNG) is mandatory from the 12th February 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. A Biodiversity Gain Plan detailing BNG management and monitoring over a 30 year period will be required as a condition following the grant of planning permission; the development cannot commence until the Plan has been approved in writing by the LPA.

4.1.5 The selection of excerpts taken from Section 15 referring to Biodiversity Net Gain (BNG) in addition to paragraph 193 above are as follows:

'Paragraph 187. Planning policies and decisions should contribute to and enhance the natural and local environment by: [...] d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs [...]

Paragraph 192. To protect and enhance biodiversity and geodiversity, plans should: [...] b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity [...]

4.2 Local Planning Policy

4.2.1 The Wokingham Borough Council website states that 'Information about the existing biodiversity on site, sometimes called a baseline assessment, will need to be submitted by applicants. If planning permission is granted, a plan to create at least a 10% improvement of biodiversity, from the baseline assessment, will need to be provided. The biodiversity net gain requirement has been agreed by the Government and is additional to existing local and national policy and guidance. If permission is granted then a statutory condition, called the General Biodiversity Gain Condition, is applied – this condition cannot be changed or removed. A metric has been developed by the Government that will allow all the relevant information to be submitted. The metric tool will help work out the value of the biodiversity on the site and measure this in 'units'. This

will mean the 10% increase in 'units' can be shown as part of a planning application. The metric will need to be supported with other information including whether if the increase in biodiversity will be provided on or off site and/or if there is an exceptional ecological reason to not follow the metric. Where the improvement to biodiversity is provided on the site, it is expected this will be in place for a minimum of 30 years and will be monitored over this time. The Council will likely use planning conditions or a legal agreement to make sure this is the case. The Council will also have to provide a report on the status of biodiversity net gain at least every five years. Where the improvement to biodiversity is provided off the site, a legal agreement will be required to secure this, and the improvement will need to be registered with Natural England. If it isn't possible to provide biodiversity improvement on or off the site, it will be possible to purchase 'credits' from the government.'

5 SURVEY METHODOLOGY

5.1 Desk Study

- 5.1.1** A desktop study was conducted by Vicky Potts (MIEEM). 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 Record 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 inside the 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 development 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 on site.
- 5.1.5** The type of soil on site was inferred using geological information taken from the British Geological Survey and on-site interpretation.

5.2 Field Survey

UK Habitat Classification Survey

- 5.2.1** A site walkover was undertaken on the 25th March 2025 by Vicky Potts 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 the Guidelines for Preliminary Ecological Appraisal (2nd Edition) (CIEEM 2017). Habitat condition assessments were conducted in accordance with the Statutory Biodiversity Metric (DEFRA 2024). 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 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.

5.2.3 This report will likely be valid for up to 18 months; after which point a professional ecologist may need to undertake a site visit and update the desk study and then review the report's validity (CIEEM 2019b).

5.3 Biodiversity Net Gain Approach

5.3.1 This Biodiversity Net Gain (BNG) Assessment uses the Statutory Biodiversity Metric (February 2024) to calculate the losses and gains in biodiversity unit value resulting from the proposals. The biodiversity metric tool has been used to guide the proposed site layout and landscaping in order to deliver a minimum 10% net gain for biodiversity.

5.3.2 The biodiversity metric rules must be followed for a valid biodiversity net gain and are as follows:

***Rule 1:** The trading rules of this biodiversity metric must be followed.*

***Rule 2:** Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.*

***Rule 3:** To accurately apply the biodiversity metric formula, you must use the statutory biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites.*

The tools remove the need for a user to manually calculate the change in biodiversity value.

The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.

***Rule 4:** In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.*

5.3.3 The biodiversity metric principles inform the use of the biodiversity metric tool and are as follows:

‘Principle 1: *The metric assessment should be completed by a competent person.*

Principle 2: *The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.*

Principle 3: *This biodiversity metric should be used in accordance with established good practice guidance and professional codes.*

Principle 4: *This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.*

Principle 5: *Biodiversity units are a proxy for biodiversity and should be treated as relative values.*

Principle 6: *This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.*

Principle 7: *Habitat interventions need to be realistic and deliverable within a relevant project timeframe.*

Principle 8: *Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.*

Principle 9: *This biodiversity metric does not enforce a minimum habitat size ratio for compensation of losses. Proposals should aim to:*

- *maintain habitat extent - supporting more, bigger, better and more joined up ecological networks*
- *ensure that proposed or retained habitat parcels are of sufficient size for ecological function’*

6 DESK STUDY FINDINGS

6.1 Designated Sites and Habitats

- 6.1.1** The desk study showed one internationally designated statutory site within a 5km radius of the application site, two nationally designated statutory sites within a 2km radius and one locally designated non-statutory sites, i.e. Local Wildlife Sites (LWS), within a 1km radius - see **Tables 1a & 1b** below.

Table 1a. Statutorily designated sites within the vicinity of the site (Source: TVERC).

Site name	Designation	Description	Distance from nearest site boundary (m)
Thames Basin Heaths	Special Protection Area (SPA)	This area includes the Thames Basin Heaths SAC and the area between Bracknell and Ascot including Swinley Park and Brick Pits SSSI and Englemere Pond SSSI. To the west it includes a band of land south of Crowthorne and Wokingham where there are more heathland and bog sites such as Sandhurst to Owlsmoor Bogs and Heaths and a group of sites with remnants of these habitats.	446 W
Heath Lake	Site of Special Scientific Interest (SSSI) and Local Nature Reserve (LNR)	An area of 6.1 ha comprising a small, shallow lake, surrounded by birch and pine woodland with areas of relict heathland. Heath Lake is a long-established open water habitat supporting specialist communities of native plants and animals. Of particular interest are populations of some uncommon and rare aquatic plant species.	817 S
Heath Lake	Local Nature Reserve (LNR)	An area of 22.27 ha comprising woodland and heathland. The shallow 7 acre lake is the only acid lake in Berkshire. This means it has a naturally high pH which supports several rare plants, including the water-milfoil and the 6 stemmed water crowfoot.	978 S

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

Site name	Designation	Description	Distance from nearest site boundary (m)
Gorrick Plantation	Berkshire Local Wildlife	An area of 77.88 ha comprising mainly woodland habitats with a little dry heath and acid grassland in a few places. The ride edges also have species indicative of heath and acid grassland. Scots Pine plantations dominate this working plantation. There are also other conifers including Western Hemlock-spruce and Corsican Pine. Ground flora can include Rhododendron, Bracken and Purple Moor-grass. Deciduous woodland is more prevalent at the edges of the site. In the 2023 survey, there were 20 indicator species of woodland, 12 typical species of lowland fen plus 16 typical species of acid grassland. There are relatively recent records of reptiles: Adder, Common Lizard and Slowworm.	446 W

- 6.1.2** The application site contains no irreplaceable habitats (e.g. Ancient Semi-natural Woodland) or priority habitats (NERC Act 2006 Section 41 habitats of principle importance).

6.1.3 There is deciduous woodland priority habitats located 50 m to the east of the application site and within the ownership boundary 125 m to the south, and a traditional orchard is situated within the ownership boundary 65 m to the west.

6.1.4 The most extensive underlying geology is the freely draining slightly acid loamy soils; habitats associated with this soil type include neutral and acid pastures and deciduous woodlands; acid communities such as bracken and gorse in the uplands.

6.2 Protected and Notable Species

6.2.1 The search of the TVERC database revealed a range of protected and notable species records starting from 1994. Only recent records (defined as fewer than ten years old) are included in this report (see **Tables 2a & 2b**).

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

Common name	Scientific name	No. of records	Most recent record	Nearest record (m)	Precision (m)	Status
Amphibians						
Common Frog	<i>Rana temporaria</i>	2	2021	1000 S	10	HabDir-A5, WACA-Sch5-s9.5a
Common Toad	<i>Bufo bufo</i>	2	2021	1000 S	10	NERC-S41, WACA-Sch5-s9.5a
Birds						
Black-headed gull	<i>Chroicocephalus ridibundus</i>	4	2020	1080 S	100	WACA-Sch1-p1
Brambling	<i>Fringilla montifringilla</i>	2	2019	1080 S	100	WACA-Sch1-p1
Bullfinch	<i>Pyrrhula pyrrhula</i>	1	2021	1080 S	100	NERC-S41, Bird-Amber
Common Tern	<i>Sterna hirundo</i>	2	2019	444 NW	100	BirdsDir-A1, Bird-Amber
Crossbill	<i>Loxia curvirostra</i>	7	2021	949 SW	100	WACA-Sch1-p1
Cuckoo	<i>Cuculus canorus</i>	1	2018	912 SW	1000	NERC-S41 Bird-Red
Firecrest	<i>Regulus ignicapilla</i>	2	2017	912 SW	1000	WACA-Sch1-p1
Gadwall	<i>Mareca strepera</i>	7	2021	1080 S	100	Bird-Amber
Greenfinch	<i>Chloris chloris</i>	1	2023	957 SW	100	Bird-Amber
Grey Wagtail	<i>Motacilla cinerea</i>	1	2017	964 SW	1000	Bird-Amber
Herring Gull	<i>Larus argentatus</i>	3	2022	1080 S	100	NERC-S41 Bird-Red
Hobby	<i>Falco subbuteo</i>	1	2015	1610 SW	1000	WACA-Sch1-p1
House Martin	<i>Delichon urbicum</i>	2	2019	1080 S	100	Bird-Red
Kestrel	<i>Falco tinnunculus</i>	1	2018	362 NW	1000	Bird-Amber
Kingfisher	<i>Alcedo atthis</i>	5	2023	1080 S	100	BirdsDir-A1, WACA-Sch1-p1
Lapwing	<i>Vanellus vanellus</i>	8	2022	362 NW	1000	NERC-S41 Bird-Red
Linnet	<i>Linaria cannabina</i>	1	2021	1610 SW	1000	NERC-S41 Bird-Red
Little Egret	<i>Egretta garzetta</i>	1	2021	1080 S	100	BirdsDir-A1
Mallard	<i>Anas platyrhynchos</i>	10	2022	1020 SW	100	Bird-Amber
Mistle Thrush	<i>Turdus viscivorus</i>	1	2023	964 SW	1000	Bird-Red

Moorhen	<i>Gallinula chloropus</i>	8	2019	964 SW	1000	Bird-Amber
Pochard	<i>Aythya ferina</i>	10	2021	964 SW	1000	Bird-Red
Red Kite	<i>Milvus milvus</i>	1	2023	957 SW	100	BirdsDir-A1, WACA-Sch1-p1
Redstart	<i>Phoenicurus phoenicurus</i>	1	2020	563 E	1000	Bird-Amber
Redwing	<i>Turdus iliacus</i>	2	2023	912 SW	1000	WACA-Sch1-p1,
Shoveler	<i>Spatula clypeata</i>	11	2022	1080 S	100	Bird-Amber
Skylark	<i>Alauda arvensis</i>	2	2021	563 E	1000	NERC-S41 Bird-Red
Song Thrush	<i>Turdus philomelos</i>	4	2019	1080 S	100	Bird-Amber
Sparrowhawk	<i>Accipiter nisus</i>	6	2019	444 NW	100	Bird-Amber
Starling	<i>Sturnus vulgaris</i>	1	2022	1080 S	100	NERC-S41 Bird-Red
Swift	<i>Apus apus</i>	3	2019	1080 S	100	Bird-Red
Tawny Owl	<i>Strix aluco</i>	4	2022	964 SW	1000	Bird-Amber
Wheatear	<i>Oenanthe oenanthe</i>	2	2021	563 E	1000	Bird-Amber
Whinchat	<i>Saxicola rubetra</i>	1	2020	563 E	1000	Bird-Red
Whitethroat	<i>Curruca communis</i>	1	2021	563 E	1000	Bird-Amber
Willow Warbler	<i>Phylloscopus trochilus</i>	2	2018	563 E	1000	Bird-Amber
Woodcock	<i>Scolopax rusticola</i>	8	2022	964 SW	1000	Bird-Red
Woodpigeon	<i>Columba palumbus</i>	10	2019	842 S	1	Bird-Amber
Wren	<i>Troglodytes troglodytes</i>	10	2023	886 W	100	Bird-Amber
Higher Plants						
Bell Heather	<i>Erica cinerea</i>	1	2023	1020 SW	100	RL-Eng- post2001-NT
Bluebell	<i>Hyacinthoides non-scripta</i>	1	2023	1020 SW	100	WACA-Sch8
Cross-leaved Heath	<i>Erica tetralix</i>	1	2023	1020 SW	100	RL-Eng- post2001-NT
Devil's-bit Scabious	<i>Succisa pratensis</i>	1	2023	1020 SW	100	RL-Eng- post2001-NT
Heather	<i>Calluna vulgaris</i>	1	2023	1020 SW	100	RL-Eng- post2001-NT
Lesser Spearwort	<i>Ranunculus flammula</i>	1	2023	1020 SW	100	RL-Eng- post2001-VU
Tormentil	<i>Potentilla erecta</i>	1	2023	1020 SW	100	RL-Eng- post2001-NT
Wild Strawberry	<i>Fragaria vesca</i>	1	2023	1020 SW	100	RL-Eng- post2001-NT
Wood-sorrel	<i>Oxalis acetosella</i>	1	2023	1020 SW	100	RL-Eng- post2001-NT
Invertebrates						
Stag Beetle	<i>Lucanus cervus</i>	8	2023	379 NW	100	NERC-S41
Red Wood Ant	<i>Formica rufa</i>	1	2023	1020 SW	100	RL-Global- post94-NT
Common Darter	<i>Sympetrum striolatum</i>	4	2020	1000 S	100	RL-GB-post2001-DD
Cinnabar	<i>Tyria jacobaeae</i>	1	2020	779 SE	100	NERC-S41
Olive Crescent	<i>Trisateles emortualis</i>	1	2017	1010 SE	1000	NERC-S41, RL-GB-pre94-R
Reptiles						
Common Lizard	<i>Zootoca vivipara</i>	1	2023	1020 SW	100	WACA-Sch5- s9.1k/s9.5a NERC-S41
Terrestrial mammals (excl. Bats)						
		5	2024	300 E	1000	

West European Hedgehog	<i>Erinaceus europaeus</i>	1	2023	982 SE	1	NERC-S41
Terrestrial mammals – Bats						
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	24	2023	312 NW	100	HabReg-Sch2, WACA-Sch5-s9.4b - s9.5b
Brown long-eared	<i>Plecotus auritus</i>	19	2023	217 E	10	HabReg-Sch2, WACA-Sch5-s9.4b - s9.5b, NERC-S4
Daubenton's Bat	<i>Myotis daubentonii</i>	2	2020	312 NW	100	HabDir-A4, HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a /s9.5b
Long-eared Bat species	<i>Plecotus</i>	11	2018	932 SW	1000	HabDir-A4, HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a /s9.5b, NERC-S41, RL-GB-post2001-EN
Myotis Bat species	<i>Myotis</i>	2	2023	817 N	10	HabDir-A4, HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a /s9.5b
Noctule	<i>Nyctalus noctula</i>	8	2022	217 E	10	HabDir-A4, HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a /s9.5b, NERC-S41
Pipistrelle	<i>Pipistrellus</i>	10	2024	50 W	10	HabDir-A4, HabReg-Sch2, WACA-Sch5-s9.4b - s9.5b, NERC-S41, RL-GB-post2001-NT
Serotine	<i>Eptesicus serotinus</i>	7	2023	589 E	1000	HabDir-A4, HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a /s9.5b, RL-GB-post2001-VU
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	26	2023	312 NW	100	HabDir-A4, HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a /s9.5b, 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.
Bird-Amber	Birds of Conservation Concern Amber list
HabReg-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.
HabDir-A5	Habitats Directive, Annex V – Species whose taking in the wild and exploitation may be subject to management measures
NERC-S41	Priority Species listed under Section 41 of the Natural Environment and Rural Communities Act 2006.
Badgers-1992	Protection of Badgers Act 1992 – Badgers and their setts are protected; making it illegal to kill, injure or take, possess or cruelly ill-treat badgers or to interfere

	with a badger sett
WACA-Sch1-p1	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended) – Birds protected from disturbance at their nests, or their dependent young.
WACA-Sch5-s9.5a	Schedule 5 Section 9 Parts 5a of the Wildlife and Countryside Act 1981 (as amended) - Animals which are protected from being sold, offered for sale or being held or transported for sale either live or dead, whole or part.
WCA_5s94b/c	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.
WACA-Sch8	Wildlife & Countryside Act 1981 Schedule 8 - Plants which are protected
RL-GB-post2001-DD	IUCN Red List of Threatened Species - Data Deficient
RL-GB-post2001-EN	IUCN Red List of Threatened Species – Endangered
RL-Eng-post2001-NT	IUCN Red List of Threatened Species - Near Threatened
RL-GB-pre94-R	IUCN Red List of Threatened Species - Rare
RL-Eng-post2001-VU	IUCN Red List of Threatened Species – Vulnerable

6.2.2 A search on MAGIC revealed six bat mitigation licences have been granted within a 2-kilometre radius of the application site, covering licensable works affecting the following species: soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*) and whiskered/Brandt's (*Myotis mystacinus/brandtii*). The closest licence was for the destruction of a resting place for common pipistrelle, soprano pipistrelle and whiskered/Brandt's bats and breeding site for brown long eared bats at a property 140m east of the site (Case ref.: 2014-4527-EPS-MIT).

6.2.3 The application site falls within a 'Red' GCN Habitat Zone – these zones contain suitable habitat and are the most important areas for GCN (except areas that are nationally important sites designated for GCNs). Mapping shows that there were no waterbodies present in the application site; however, during the walkover survey a drain was present, which was considered unsuitable for use by GCNs. The site had some areas of rubble that could provide habitats of suitability for GCNs to shelter and hibernate.

6.2.4 There are eight waterbodies within a 500m radius of the application site, with the closest being 132 m north of the boundary of the application site. TVERC held no pre-existing records for Great Crested Newt (*Triturus cristatus*) (GCN) and a search of MAGIC returned no mitigation licences or GCN Class Survey Licence returns within a 1km radius.

6.3 Historic and Current Land Use

6.3.1 Historical mapping dating back to 1985 shows that the application site has been managed as an agricultural field and a parcel of woodland was present historically.

- 6.3.2** Google Satellite imagery dating to 2023 shows the hedgerow on site to be present and the field to the south was covered with polytunnels. The hedgerow was shown on mapping from 2010, however, it did not exist in 2005 and the site comprised of more areas of bare ground around the field edges.

7 UK HABITAT CLASSIFICATION SURVEY

7.1 Overview

7.1.1 The application site covers an area of 0.15 ha to the south of the warehouses at Heathlands Packhouse comprising an access road leading up to a warehouse and hard standing with temporary storage buildings, a bank with a recently cut hedgerow, a track, and field of modified grassland on the edge of a solar panel array. The habitats recorded onsite included very-low and low distinctiveness habitats: Artificial unvegetated, unsealed surface (u1c), Built linear features (u1e), Building (u1b5), Modified grassland (g4), Bare ground (510) and native hedgerow (h2a).

7.1.2 The UKHab primary habitats and secondary codes are described alongside photographs (**Photographs 1 – 14**) and a survey plan (see **Figure 1**) as follows:

7.2 g4 - Modified grassland

7.2.1 The site comprised a field of modified grassland with a short sward and patches of bare ground where it had been cleared around the solar panels, which were off site to the south (**Photographs 1 & 2**). The grassland had widespread grass species dominant including fescue (*Festuca* sp.), cock's-foot (*Dactylis glomerata*), and a meadow grass (*Poa* sp.). Forbs were occasional in the sward and included yarrow (*Achillea millefolium*), chickweed (*Stellaria media*), ragwort (*Senecio jacobaea*), groundsel (*Senecio vulgaris*), sow thistle (*Sonchus oleraceus*), nettle (*Urtica dioica*), dandelion (*Taraxacum officinale* agg.), thistle (*Cirsium* sp.) and red dead nettle (*Lamium purpureum*).



Photograph 1. Modified grassland.



Photograph 2. Modified grassland..

7.3 u1b5 – Buildings

7.3.1 Large metal sheet warehouses were present to the north of the site with delivery areas (**Photographs 3 & 4**).



Photograph 3. Warehouse towards the north of the site.



Photograph 4. Warehouse towards the north of the site.

7.4 u1c – Artificial unvegetated, unsealed surface

- 7.4.1 A dirt track extended around the edge of the field of solar panels and provided access around the farm (**Photograph 5**).



Photograph 5. Dirt track between the bank and field.

7.5 u1e – Built linear feature

- 7.5.1 A tarmac road provided vehicular access to the warehouses via Heathlands Road (**Photograph 6**). A few temporary storage areas were present on the hard standing and stored items including pallets (**Photograph 7**).



Photograph 6. Road access to the warehouse.



Photograph 7. Temporary building.

7.6 510 – Bare ground

- 7.6.1** A bank was present between the hard standing and field, which had been partially covered in matting to prevent vegetation growth and had patches of ruderal vegetation growing in places (**Photographs 8, 9 & 10**). The bank had been used to store rubble along the base (**Photographs 11 & 12**). A steep sided drain covered with a metal grid used to catch run-off from the adjacent field was present along the bank (**Photograph 13; TN1**). Grasses on the bank included Yorkshire fog (*Holcus lanatus*) and fescue (*Festuca* sp.). Forbs present included dandelion (*Taraxacum officinale* agg), ragwort (*Senecio jacobaea*), ribwort plantain (*Plantago lanceolata*), read dead nettle (*Lamium purpureum*), yarrow (*Achillea millefolium*), dove's foot cranesbill (*Geranium molle*), groundsel (*Senecio vulgaris*), dock (*Rumex* sp.), buddleia (*Buddleja davidii*), cleavers (*Galium aparine*) and bramble (*Rubus fruticosus* agg.).



Photograph 8. Bank covered in matting in places.



Photograph 9. Bank with Vegetation growing in places.



Photograph 10. Bank with Vegetation growing in places.



Photograph 11. Rubble at the base of the bank.



Photograph 12. Rubble at the base of the bank



Photograph 13. Drain at the base of the bank.

7.7 h2a – Native hedgerow

- 7.7.1 A young recently cut hedgerow was present along the top of the bund and this included blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*) and dogwood (*Cornus sanguinea*) (**Photograph 14**).



Photograph 14. Recently cut hedgerow.

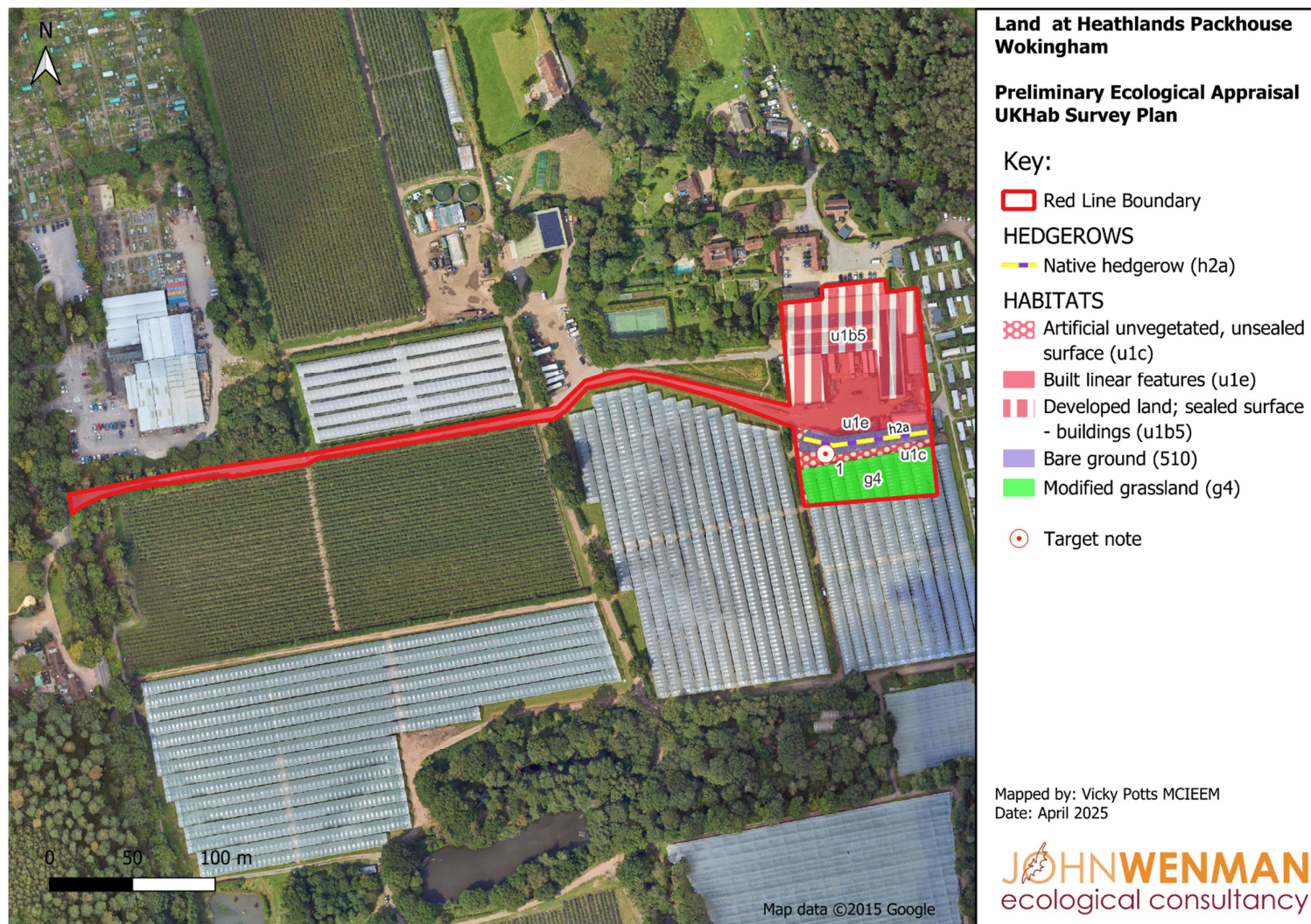


Figure 1. UKHab Survey Plan (Baseline Habitats).

8 DISCUSSION

8.1 Designated Sites for Nature Conservation

Evaluation of Baseline

8.1.1 The desk study revealed that the application site is not statutorily designated for its wildlife interest and therefore is not currently recognised as being of international, national or county level conservation significance. The site falls within the Impact Risk Zone (IRZ) for Heath Lake SSSI, situated approximately 817 m to the south and the Zone of Influence (Zol) for the Thames Basin Heaths Special Protection Area (SPA) which is 446 m to the west.

8.1.2 The desk study returned one non-statutorily designated Local Wildlife Site (LWS) within the search radius: Gorrick Plantation. Tye Plantation consists of woodland with patches of dry heath and acid grassland, which is situated approximately 446 m to the west of the application boundary.

Impact Assessment

8.1.3 The application site falls inside the Heath Lake SSSI IRZ but the proposals do not correspond with the categories of development that are likely to have an impact on the SSSI. The site is within the Zol for recreational pressure impacts to the Thames Basin Heaths SPA; however, the proposals do not involve a net increase in residential units and the proposed development is unlikely to have a harmful effect on the terrestrial sites. The proposal to build a new warehouse to replace the temporary buildings on the existing hard standing therefore does not fall into a category that would need a consultation with Natural England.

8.1.4 Furthermore, considering the nature, scale and distance of the proposals, no adverse effects are anticipated on the locally designated sites.

8.2 Habitats

Evaluation of Baseline

8.2.1 The application site is characterised by warehouses and the edge of a field used for solar panels, and a bank with recently cut native hedge between the habitats. The site is part of the larger 196 acres of farmland at Heathlands Farm, which produces fruit. Habitats on-site comprised artificial unvegetated unsealed surface, built linear features and developed land with buildings – habitats of very low distinctiveness, bare ground

and modified grassland – habitats of low distinctiveness - and a young recently cut native hedgerow – a habitat of medium distinctiveness.

- 8.2.2** The recently cut hedgerow had at least three native woody species and therefore meets the criteria for classification as a priority habitat (NERC Act 2006 Section 41 habitats of principle importance). There are no other priority habitats within the application site boundary, however, there are priority habitats: hedgerows, parcels of woodland and a traditional orchard all within the ownership boundary – with woodland approximately 125 m to the south and orchard 65m to the west of the site area for the proposed new warehouses. A further patch of woodland is situated offsite 50 m to the east.

Impact Assessment

- 8.2.3** The proposals will result in the loss of hedgerow priority habitat; other habitats affected e.g. modified grassland are not of importance beyond the site level. The proposed development will need to demonstrate a minimum of 10% net gain for biodiversity – refer to **Section 10**.
- 8.2.4** Furthermore, no impacts to offsite habitats such as the nearby lowland mixed priority woodland or orchard are anticipated as these are distant from the construction area and will be retained post development. Precautions are recommended to avoid pollution which could impact offsite habitats – refer to **Section 9.2**.

8.3 Bats

Evaluation of Baseline

- 8.3.1** The records of bats locally show that it is likely that bats are active on-site and within the surrounding area, however, the buildings on site provided no potential features for roosting bats. Furthermore, the habitats onsite were primarily species-poor and of limited suitability for foraging bats. Overall, in the context of the parcels of woodland within the ownership boundary and in the local area, the application site is considered unlikely to be of value to local populations.

Impact Assessment

- 8.3.2** The proposals for a new warehouse building will not have an adverse impact on the availability of foraging or commuting habitat for bats locally, as no habitats of importance for bats will be lost. Furthermore, there is unlikely to be any significant changes in the artificial lighting onsite and no impacts are foreseen on bats utilising offsite woodland and hedges as a resource for commuting and feeding.

8.4 Great Crested Newt (and other amphibians)

Evaluation of Baseline

8.4.1 The desk study data included no great crested newt (GCN – *Triturus cristatus*) records within a 1 kilometre radius of the application site, with two records of common toad (*Bufo bufo*) – a priority species (NERC Act 2006 Section 41 species of principle importance) and common frog (*Rana temporaria*) – approximately 1000m from the site. There are eight waterbodies within 500 m of the site, with the closest being 132 m north of the boundary of the application site of the application site. The application site itself had a deep sided drainage well that was considered sub-optimal for use by amphibians and therefore it is considered that the site is unlikely to offer breeding opportunities for amphibians, such as GCN.

8.4.2 The site falls inside the red risk zone (from NatureSpace modelling for GCN district licensing) but the modified grassland, bare ground and developed land offers unsuitable terrestrial habitat for GCN and other amphibians to move across. A search of MAGIC returned no mitigation licences or GCN Class Survey Licence returns within a 1km radius. However, there is still a possibility for GCN and other amphibians to be present within the piles of rubble along the bank to use it for sheltering and hibernating.

Impact Assessment

8.4.3 The risk of GCNs or other notable amphibians being onsite and affected by the proposed work is low, because although the bank provides sheltering opportunities, it is isolated from offsite ponds, woodlands and hedgerows by well used tracks and hard standing and heavily managed fields, and therefore no adverse effects on this species are anticipated, especially if precautionary avoidance measures are undertaken refer to **Section 9.3**.

8.5 Hazel Dormouse

Evaluation of Baseline

8.5.1 The desk study data included no records of hazel dormouse within a 1 kilometre radius of the application site. A search of MAGIC for granted EPS licence applications returned no records of hazel dormouse within a 5 kilometre radius of the site.

8.5.2 The application site does not have suitable habitat for hazel dormice (*M. avellanarius*), which is a species that uses woodland with a dense understory. There are parcels of

woodland and hedgerows present within the ownership boundary that offer habitat and connectivity that could support a population of this species; however, the proposals are small-scale and will only impact developed land, bare ground and modified grassland and the hedgerows and the woodland within the wider site will be retained, so no impacts on this species are foreseen.

8.6 Reptiles

Evaluation of Baseline

- 8.6.1** The desk study data included one recent record of common lizard (*Zootoca vivipara*) - 1020 m from the site - within the search area.
- 8.6.2** The site mostly comprised habitats that lacked the structural diversity suitable for common and widespread reptiles, such as common lizard, slow-worm and grass snake, apart from the piles of rubble, which provided potential opportunities for sheltering and hibernation. It is unlikely that the site provides habitats that would be support a reptile population as the piles of rubble were isolated from neighbouring habitats with very open and well used habitats surrounding the rubble. However, there is a very low risk, despite a lack of records, that common and widespread reptile species could opportunistically use the rubble on site if present in neighbouring habitats.

Impact Assessment

- 8.6.3** The likelihood of reptiles being on site is low. The small residual risk of harming reptiles that could use the site could be mitigated by adopting precautionary reasonable avoidance measures to prevent the contravention of legislation protecting common and widespread reptile species that could be in the neighbouring habitats – refer to **Section 9.3**.

8.7 Birds

Evaluation of Baseline

- 8.7.1** The desk study data returned recent records of 39 notable bird species that have been recorded within 1km radius of the site, including farmland species such as hobby (*Falco subbuteo*) and redwing (*Turdus iliacus*) – both Schedule 1 protected species (Wildlife & Countryside Act 1981) - and bullfinch (*Pyrrhula pyrrhula*) and lapwing (*Vanellus vanellus*) - both priority species (NERC Act 2006 Section 41 species of principle importance).

- 8.7.2** The site provides poor habitat for ground nesting farmland bird species and poor structural diversity for providing nesting opportunities for vegetation nesting species. Overall, the site is considered unlikely to be of more than site level value to bird assemblages, especially given the context of the nearby parcels of woodland, orchard and cropland across the ownership site.

Impact Assessment

- 8.7.3** The proposals do not result in any loss of trees or vegetation so no adverse effects on nesting birds are anticipated.

8.8 [REDACTED] (and other mammals)

Evaluation of Baseline

- 8.8.1** The desk study data included five recent records [REDACTED] with the closest record approximately 300m from the application site. No evidence of [REDACTED] [REDACTED] was identified within the application site. The habitats onsite provide poor suitable terrestrial habitat [REDACTED]
[REDACTED]

- 8.8.2** The desk study included a single record of the west European Hedgehog (*Erinaceus europaeus*) – a priority species (NERC Act 2006 Section 41 species of principle importance) – 982m from the site.

Impact Assessment

- 8.8.3** The development site involves the removal of areas of managed grassland (g4), built linear features (u1e), and bare ground (510) - areas of low potential for the use of badger and notable mammals. The likelihood of the presence of mammals within the development area is low, and the proposals will not affect the availability of the site for commuting and foraging individuals; therefore, no adverse effects are anticipated. The rubble along the edge of the bank could provide some sheltering opportunities for occasional use by small mammals - refer to **Section 9.3**.

8.9 Invertebrates

Evaluation of Baseline

- 8.9.1** The desk study data included records of at least five notable invertebrate species within the search radius, including the stag beetle (*Lucanus cervus*) - a priority species (NERC

Act 2006 Section 41 species of principle importance) – 379m from the site. The bare ground and modified grassland, which comprised most of the development site are species poor, and overall the site is unlikely to support important assemblages of invertebrates of more than site level value.

Impact Assessment

- 8.9.2** The proposed development is highly unlikely to have a significant impact on invertebrate populations.

8.10 Invasive Non-native Species

Evaluation of Baseline

- 8.10.1** No invasive non-native species listed under Schedule 9 of the Wildlife and Countryside Act 1981 were found on site.

Impact Assessment

- 8.10.2** The absence of any non-native species on site means there is no anticipated spread of invasive species by the proposals.

9 RECOMMENDATIONS

9.1 Overview

- 9.1.1** This chapter provides details regarding proposed avoidance, mitigation, compensation and enhancement measures, including measures to enable legislative compliance.

9.2 Habitats

- 9.2.1** All construction activities must comply with up-to-date pollution prevention guidelines and environmental protection legislation to mitigate impacts on surrounding habitats through ground disturbance, surface water flow, dust and chemicals.

9.3 Reptiles, Amphibians and Small Mammals - Reasonable Avoidance Measures

- 9.3.1** The following reasonable avoidance measures should be adopted to minimise the low risk of harming individual GCNs, reptiles and small mammals:

Before construction

- The area of modified grassland within and adjacent to the development site should be maintained as existing before the works to prevent reptiles, amphibians and small mammals from colonising the site and
- The piles of rubble on the site should be removed carefully by hand and timed to take place outside of the winter (late October through to February) to minimise the chance of disturbing animals sheltering beneath materials during the hibernation season.

During construction

- Any stored building materials or waste, such as bricks or debris etc., that might offer shelter for amphibians, reptiles or hedgehogs should be kept raised off the ground on pallets or on existing hard standing, and efforts should be made to process and removed from site as soon as possible; and
- Excavation works should be avoided after dusk and any open excavations or trenches backfilled (after a check for amphibian/reptile presence) or left with escape ramps to prevent amphibians, reptiles and hedgehogs from becoming trapped.

- 9.3.2** In the unlikely event that a GCN or reptile is found during construction, works should stop immediately and a licensed ecologist called onto site to ensure the GCN/reptile is not harmed and provide further advice on how to proceed; work will recommence only once further written advice has been received.

9.4 Biodiversity Enhancement Measures

9.4.1 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), local planning policy and be in addition to the species specific mitigation measures and achieving mandatory 10% Biodiversity Net Gain (refer to **Section 10**).

- Installation of bat boxes on the new building onsite or mature trees within the ownership boundary; and
- Installation of integral/external bird boxes on the new building; and
- Wildlife-friendly, native landscaping.

10 BIODIVERSITY NET GAIN ASSESSMENT

10.1 Overview

- 10.1.1** This chapter provides the details of the completed Statutory Biodiversity Metric calculation tool showing the pre-development and post-development biodiversity value of the onsite habitat.

10.2 Baseline Habitat

- 10.2.1** The UK Habitat Classification (UKHab) identified the following habitats onsite: Artificial unvegetated, unsealed surface (u1c), built linear features (u1e), Building (u1b5), Modified grassland (g4), bare ground (510) and native hedgerow (h2a).— refer to baseline habitat plan in **Figure 1**.

- 10.2.2** The bare ground on the bank was in a moderate condition, and the modified grassland was assessed as being in poor condition (see separate condition assessment sheet '*Heathlands Packhouse - Statutory Biodiversity Metric Condition Sheet (R2910_BNG_a)*').

10.3 Proposed Habitat

- 10.3.1** The post-development habitat on site is derived from the proposed site layout (see **Appendix 2**). 0.0402 ha of Artificial unvegetated, unsealed surface, 0.0974 ha of built linear features and 0.0861 ha of bare ground and 77m of native hedgerow will be lost to create the developed land; sealed surface for the new building— refer to **Figure 2** below.

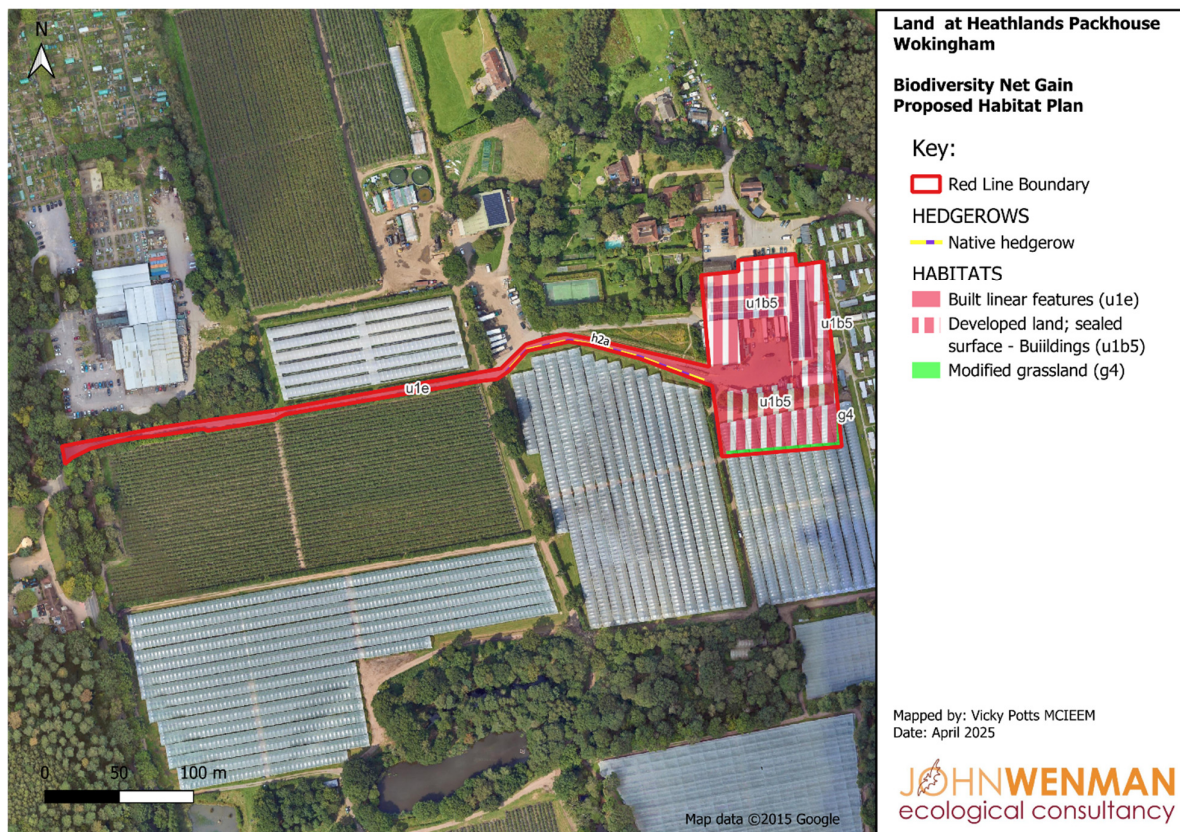


Figure 2. Biodiversity Net Gain proposed habitat plan

10.4 Calculation Result

10.4.1 The results from the Biodiversity Metric calculation tool shows a total onsite habitats net change of -92.51% (a loss of 0.70 habitat units), and this translates to a 0.77 deficit in habitat units required to achieve a 10% biodiversity net gain. There is scope to make up the required hedgerow units onsite by planting an 88 m hedgerow and this delivers an onsite net change of +25.32% (a gain of 39 hedgerow units). There is no scope to achieve the required habitat units onsite (see **Figure 3** below and refer to the metric calculation tool enclosed separately 'Heathlands Packhouse - Statutory Biodiversity Metric Calculation Tool (R2910_BNG_a)').

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.70		
	Hedgerow units	15.84		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-92.51%		
	Hedgerow units	10.29%		
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.75	0.83	0.77
Hedgerow units	10.00%	154.00	169.40	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Figure 3. Final Results taken from the Statutory Biodiversity Metric calculation tool.

- 10.4.2** The deficit in habitat units could be created 'offsite' using land within the ownership boundary or by purchasing offsite units from a habitat bank. To meet the requirements within the ownership boundary, the improvement of an area of 0.4 ha of bare ground or modified grassland (i.e. habitats of low distinctiveness) to other neutral grassland, expected to reach a minimum 'poor' condition in 1 year, would result in a 10.04% net gain.

11 REFERENCES AND BIBLIOGRAPHY

Bat Conservation Trust and Institute of Lighting Professionals (2023). *Guidance Note 08/23: Bats and artificial lighting at night*. ILP, Rugby.

Bright, P., Morris, P. & Mitchell-Jones T. (2006). *The dormouse conservation handbook – second edition*. English Nature.

CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM, Winchester.

Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists – Good Practice Guidelines*. 4th Edition. Bat Conservation Trust, London.

English Nature (2001). *Great crested newt mitigation guidelines*. English Nature, Peterborough.

Froglife (1999). Froglife Advice Sheet 10: *Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife, Halesworth.

Langton, T., Beckett, C. & Foster, J. (2001). *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.

Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield.

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3rd Edition)*. JNCC, Peterborough.

UKHab Ltd. (2023). The UK Habitat Classification User Manual Version 2.0 at <http://www.ukhab.org/>

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 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 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.

APPENDIX 2 – PROPOSED SITE LAYOUT



Existing Plan

© Copyright notes on the designs and information shown on this drawing. This drawing may be scaled to the scale bar for planning application purposes only. Do not scale for any other purpose, use figured dimensions only. Subject to site survey and all necessary consents. All dimensions to be checked by user and any discrepancies, errors or omissions to be reported to the Architect before work commences. This drawing is to be used in conjunction with all other relevant materials. OS Licence no. AG000083337.



Proposed Plan

OSP
architecture
Existing & Proposed Aerial Plan
Packhouse Extensions, Heathlands Farm
24036 / SK24
Scale 1:1000 @ A2 February 2025
OSP Architecture, Broadmead House, Farnham Business Park, Weydon Lane, Farnham, Surrey, GU10 2JF Tel: 01253 367678
www.osparchitecture.com

