



Ecological Impact Assessment

**Imberhorne Farm,
East Grinstead**

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Executive Summary

Ecosupport Ltd was instructed by Vistry Group to undertake ecological survey work for the reserved matters application for Imberhorne Farm, East Grinstead (associated with outline application DM/23/2699) in order to identify any potentially important ecological features that may be affected by the proposed development. As part of the planning application the following surveys have been undertaken (see **References** for full document list):

2016

- Preliminary Ecological Appraisal (The Ecology Partnership, May 2016)
- Bat Activity Surveys (The Ecology Partnership, Aug-Sep 2016)
- Dormouse Surveys (The Ecology Partnership, June-Nov 2016)
- Reptile Surveys (The Ecology Partnership, September 2016)
- GCN eDNA Survey (The Ecology Partnership, 2016)
- GCN Population Survey (The Ecology Partnership, 2016)

2017

- Breeding Bird Surveys (The Ecology Partnership, Feb-May 2017)

2018

- Bat Activity Surveys (The Ecology Partnership, Apr-Oct 2016)
- Dormouse Surveys (The Ecology Partnership, Oct 2018 – Oct 2019)
- 
- GCN eDNA Survey (The Ecology Partnership, 2018)
- GCN Population Survey (The Ecology Partnership, 2018)

2019

- Reptile Surveys (The Ecology Partnership, April-May 2019)

2021

- Updated Preliminary Ecological Appraisal (The Ecology Partnership, 2021)

2024

- Desktop Request Submitted to the Sussex Biodiversity Record Centre (SxBRC) (April 2024) (Ecosupport Ltd)
- Extended Phase I Habitat Survey (April 2024) (Ecosupport Ltd)
- Preliminary Roost Assessment (Trees) (April 2024) (Ecosupport Ltd)
- Reptile Surveys (2024)
- Dormouse Surveys (2024)
- Nighttime Bat Walkovers (NBW) (April-September 2024)
- Static Monitoring Surveys (April-September 2024)
- Breeding Bird Surveys (March-June 2024)
- Great Crested Newt presence/absence surveys (March-May 2024)

2025

- Updated walkover (November 2025)
- Habitat Suitability Indexes (HSIs) on ponds (November 2025)
- Biodiversity Net Gain Assessment (November 2025)

The following important ecological features were identified on site following the conclusion of the above survey work and may be subject to adverse impacts in the absence of suitable mitigation / compensation:

- Regional value for foraging and commuting bats
 - [REDACTED]
 - [REDACTED]
- Low population of Slow Worms on site
- Low population of Common Lizards on site
- Low population of Grass Snakes on site
- Low population of GCN in ponds within 500m of the site
- Dormice recorded on site (max count 1 nest)
 - European Protected Species License (EPSL) required for Dormice
- A total of 8 Red-listed and 13 Amber-listed Birds of Conservation Concern recorded using, or likely using the site as a resource

In the absence of any mitigation measures, the proposed development is anticipated to result in certain adverse impacts although mitigation / compensation measures will be employed to minimise the scale of the impact. It should be considered that previous mitigation and compensation was suggested within the previous reports, however recommended measures will be adapted.

1.0 INTRODUCTION

1.1 Brief

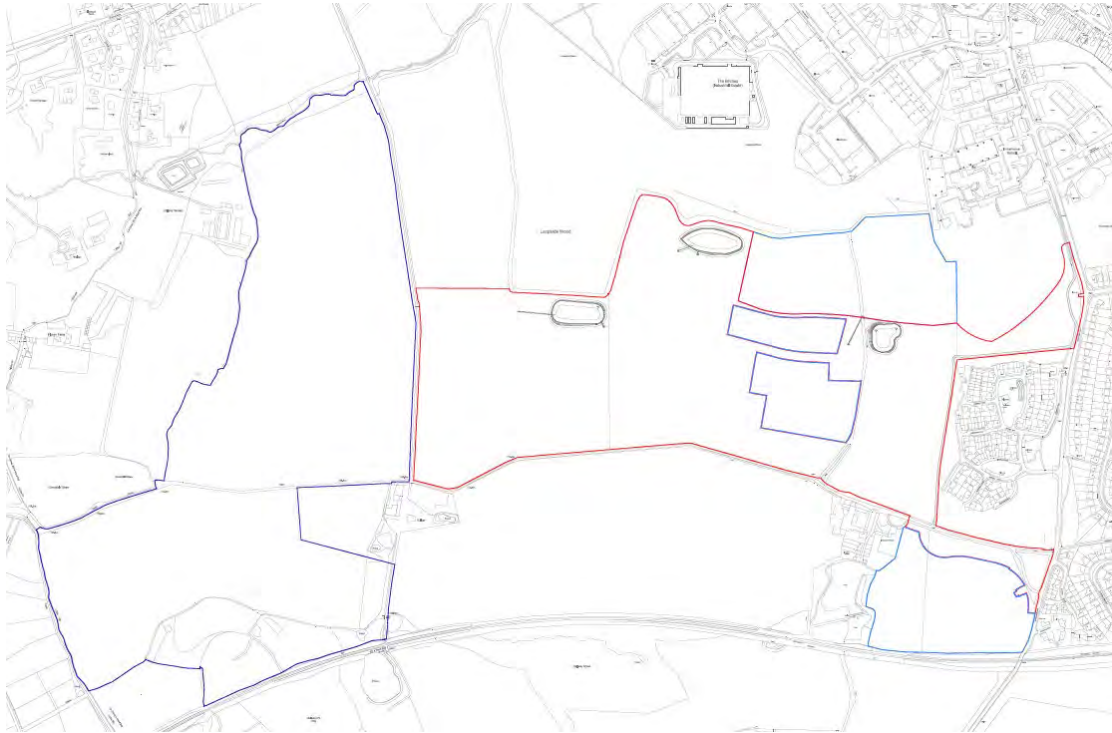
Ecosupport Ltd was commissioned by Vistry Group to conduct an Updated Preliminary Ecological Appraisal (PEA) of the site Imberhorne Farm, East Grinstead. The purpose of this survey was to assess any ecological impacts that may arise as a result of the proposed development. The objectives of the survey were as follows:

- Assess the ecological value of the site
- Identify any signs of protected species and potential features that may support them
- Make recommendations for further survey work as appropriate.

1.2 Site Description & Location

The site comprises of several arable parcels separated by boundary hedgerows and trees with a parcel of woodland on the southwest. The site is located to the east of Imberhorne Lane, East Grinstead, West Sussex, RH19 1RP (centred on OS grid reference TQ 36810 38625) (**Figure 1**). The site is situated west of the town of East Grinstead and is immediately surrounded by woodland compartments, agricultural fields and residential development.

Figure 1. The approximate redline boundary of the site (Cooper Baillee Ltd, 2024).



1.3 Proposed Development

Reserved matters application for the construction of 550 residential housing units with associated infrastructure and landscaping. The development will be considered in conjunction with the SANGS proposals to the east.

2.0 RELEVANT LEGISLATION AND POLICY

2.1.1 *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations (2019)*

This instrument makes changes to the three existing instruments which transpose the Habitats and Wild Birds Directives so that they continue to work (are operable) upon the UK's exit from the European Union (EU). These include The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. This instrument also amends section 27 of the Wildlife and Countryside Act 1981 to ensure existing protections continue. The intention is to ensure habitat and species protection and standards as set out under the Nature Directives are implemented in the same way or an equivalent way when the UK exits the EU.

This transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

2.1.2 *The Wildlife and Countryside Act (1981) (as amended)*

This is the primary piece of legislation by which biodiversity is protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

The Wildlife & Countryside Act (1981) states that it is an offence to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9 part II of the Act. This list includes over 30 plants including Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Parrot's Feather (*Myriophyllum aquaticum*).

2.1.3 *The Countryside and Rights of Way Act (2000)*

This Act strengthens the Wildlife & Countryside Act by the addition of "reckless" offences in certain circumstances, such as where there is the likelihood of protected species being present. The Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

2.1.4 *Natural Environment and Rural Communities Act (2006)*

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must

consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the *UK Post – 2010 Biodiversity Framework*.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

2.1.6 The Environment Act (2021)

The Environment Act 2021 is the UK's new legislation for environmental protection in the UK, which includes protection of water quality, clean air, and biodiversity among other key protections. This Act provides the government power to set targets to reach long-term aims relating to the environment, which will be periodically reviewed and updated. This legislation also establishes a new environmental watchdog organisation, the Office for Environmental Protection (OEP), which will hold the government accountable on environmental issues.

Part 6 of The Environment Act relates to nature and biodiversity. This section makes provision for biodiversity net gain to be a condition of planning permission in England and a requirement for nationally significant infrastructure projects. Biodiversity net gain will require maintenance for a period of at least 30 years after the completion of enhancement works to be achieved.

The legislation also includes updates to existing environmental legislation, such as the NERC Act 2006, to strengthen biodiversity enhancement rather than just conservation and includes a requirement for local, or relevant, authorities to publish biodiversity reports. Further, The Environment Act places a requirement on responsible authorities to prepare local nature recovery strategies, which will outline nature conservation sites and priorities and opportunities for recovering or enhancing biodiversity within the local area. Within England, the legislation also provides Natural England with the power to publish 'species conservation strategies' and 'protected site strategies' to identify activities that may affect a species or site's status and outline their opinions on measures that would be appropriate to avoid, mitigate or compensate any adverse impacts.

2.2 Policy

2.2.1 National

The National Planning Policy Framework (NPPF) (2025) sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

Chapter 15 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity, the wider benefits from natural capital and ecosystem services, minimising impacts on and providing net gains for biodiversity.

The NPPF states that plans should distinguish between the hierarchy of international, national and locally designated sites and that the scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

To protect and enhance biodiversity plans should:

identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;

and 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.

The NPPF states 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 SSSI, 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 SSSI;

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;

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.

2.2.2 Local: Mid Sussex District Council

Adopted in March 2018 the District Plan states nearly 50% of the District is within the High Weald Area of Outstanding Natural Beauty, and over 10% is within the South Downs National Park. Mid Sussex is the tenth most wooded District in the South East and two-thirds of this woodland is classified as 'ancient'. It also has many sites valued for their biodiversity including Sites of Special Scientific Interest, Sites of Nature Conservation Importance, Local Nature Reserves and Biodiversity Opportunity Areas.

Strategic Objectives to protect and enhance the environment include:

1. To promote development that makes the best use of resources and increases the sustainability of communities within Mid Sussex, and its ability to adapt to climate change
2. To promote well located and designed development that reflects the District's distinctive towns and villages, retains their separate identity and character and prevents coalescence
3. To protect valued landscapes for their visual, historical and biodiversity qualities
4. To protect valued characteristics of the built environment for their historical and visual qualities
5. To create and maintain easily accessible green infrastructure, green corridors and spaces around and within the towns and villages to act as wildlife corridors, sustainable transport links and leisure and recreational routes
6. To ensure that development is accompanied by the necessary infrastructure in the right place at the right time that supports development and sustainable communities. This includes the provision of efficient and sustainable transport networks

DP37: Trees, Woodland and Hedgerows

The District Council will support the protection and enhancement of trees, woodland and hedgerows, and encourage new planting. In particular, ancient woodland and aged or veteran trees will be protected.

Development that will damage or lead to the loss of trees, woodland or hedgerows that contribute, either individually or as part of a group, to the visual amenity value or character of an area, and/ or that have landscape, historic or wildlife importance, will not normally be permitted.

Proposals for new trees, woodland and hedgerows should be of suitable species, usually native, and where required for visual, noise or light screening purposes, trees, woodland and hedgerows should be of a size and species that will achieve this purpose.

Trees, woodland and hedgerows will be protected and enhanced by ensuring development:

- incorporates existing important trees, woodland and hedgerows into the design of new development and its landscape scheme; and
- prevents damage to root systems and takes account of expected future growth; and
- where possible, incorporates retained trees, woodland and hedgerows within public open space rather than private space to safeguard their long-term management; and
- has appropriate protection measures throughout the development process; and

- takes opportunities to plant new trees, woodland and hedgerows within the new development to enhance on-site green infrastructure and increase resilience to the effects of climate change; and
- does not sever ecological corridors created by these assets.

Trees, woodland and hedgerows form part of the District's green infrastructure, and in particular, are important for health and well-being, biodiversity, and increasing resilience to the effects of climate change. Ancient woods are irreplaceable wildlife habitats with complex ecological conditions that have developed over centuries. They contain a wide range of wildlife including rare species, however, because the resource is limited and highly fragmented, ancient woodland and their associated wildlife are particularly vulnerable and must be protected from damaging effects of adjacent and nearby land uses that could threaten the integrity of the habitat and survival of its special characteristics.

The District Plan recognises this contribution and will support the protection of trees, woodland and hedgerows, as well as encouraging new planting. Development will be required to incorporate trees, woodland and hedgerows into the design and landscaping scheme.

All hedgerows on farmland and open land are protected and consent is required from the District Council to remove them. The Hedgerow Regulations 1997 also define 'important' hedgerows as being of particular archaeological, historical, wildlife or landscape value.

DP38: Biodiversity

Biodiversity will be protected and enhanced by ensuring development:

- Contributes and takes opportunities to improve, enhance, manage and restore biodiversity and green infrastructure, so that there is a net gain in biodiversity, including through creating new designated sites and locally relevant habitats, and incorporating biodiversity features within developments; and
- Protects existing biodiversity, so that there is no net loss of biodiversity. Appropriate measures should be taken to avoid and reduce disturbance to sensitive habitats and species. Unavoidable damage to biodiversity must be offset through ecological enhancements and mitigation measures (or compensation measures in exceptional circumstances); and

- Minimises habitat and species fragmentation and maximises opportunities to enhance and restore ecological corridors to connect natural habitats and increase coherence and resilience; and

- Promotes the restoration, management and expansion of priority habitats in the District; and

- Avoids damage to, protects and enhances the special characteristics of internationally designated Special Protection Areas, Special Areas of Conservation; nationally designated Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty; and locally designated Sites of Nature Conservation Importance, Local Nature Reserves and Ancient Woodland or to other areas identified as being of nature conservation or geological interest, including wildlife corridors, aged or veteran trees, Biodiversity Opportunity Areas, and Nature Improvement Areas. Designated sites will be given protection and appropriate weight according to their importance and the contribution they make to wider ecological networks.

Policy DP38 'Biodiversity' reflects the requirements of the National Planning Policy Framework (section 11) where it relates to biodiversity and the natural environment. It takes into account the duty on the District Council to have regard to the purpose of conserving biodiversity.

Development proposals should be informed by local ecological and geological evidence and national guidance. Local ecological evidence should include protected and notable species as well as considering the potential effects of the development on the habitats and species on the Natural Environment and Rural Communities Act 2006 section 41 list.

DP17: Ashdown Forest Special Protection Area (SPA) and Special Area of Conservation (SAC)
In order to prevent adverse effects on the Ashdown Forest SPA and SAC, new development likely to have a significant effect, either alone or in combination with other development, will be required to demonstrate that adequate measures are put in place to avoid or mitigate any potential adverse effects. Within a 400 metres buffer zone around Ashdown Forest, mitigation measures are unlikely to be capable of protecting the integrity of the SPA and, therefore, residential development will not be permitted.

Within a 7km zone of influence around the Ashdown Forest SPA, residential development leading to a net increase in dwellings will be required to contribute to mitigation through:

- 1) The provision of Suitable Alternative Natural Greenspace (SANG) to the minimum level of 8Ha per 1,000 net increase in population; or a financial contribution to SANGs elsewhere; or the provision of bespoke mitigation; and
- 2) A financial contribution to the Ashdown Forest Strategic Access Management and Monitoring (SAMM) Strategy.

Large schemes proposed adjacent or close to the boundary of the 7km zone of influence may require mitigation for the SPA. Such proposals for development will be dealt with on a case-by-case basis.

Where bespoke mitigation is provided, these measures will need to be in place before occupation of development and must be managed and maintained in perpetuity. The effectiveness of such mitigation will need to be demonstrated prior to approval of the development. Bespoke mitigation will need to be discussed and agreed by the District Council as the competent authority following advice from Natural England.

2.3 Biodiversity Action Plans & UK Post-2010 Biodiversity Framework

The UK Post-2010 Biodiversity Framework (JNCC & DEFRA, 2010) supersedes the UK Biodiversity Action Plan 1992-2012 (UKBAP), setting out goals relating to nature conservation at a UK scale, for example the reduction and reversal in the decline of threatened species and improving the status of biodiversity. The specific habitats and species contained within the UKBAP continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework, and are required to be a material consideration in the planning process under the 2019 NPPF.

3.0 METHODOLOGY

3.1 Desk Study

3.1.1 Data Request

A data request was submitted to the Sussex Biodiversity Records Centre (SxBRC) in order to ascertain any records held of nature conservation designations and protected species within 2 km of the boundary of the site.

The data search covered:

- Statutory designated sites
- Non-statutory designations such as SINC
- Records of protected and notable species.

3.1.2 Waterbodies

Any ponds located within 500 m of the proposed development were searched for using Ordnance Survey maps and available aerial images.

3.2 Field Survey

3.2.1 Habitats

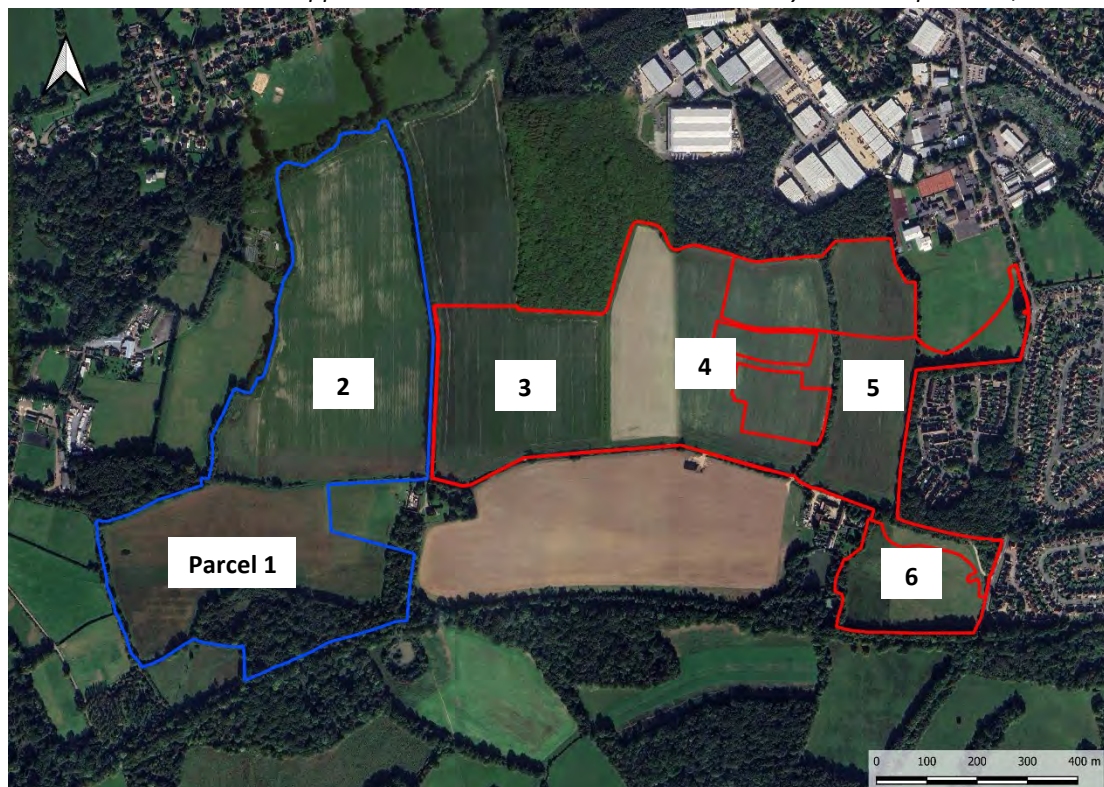
The initial Preliminary Ecological Appraisal (PEA) was undertaken by the Ecology Partnership in 2016 with updated assessments in 2018 and 2021. The initial field survey which forms the basis of the findings of this report was carried out by Lyndsey Barratt BSc (Hons) PG Cert ACIEEM and Lewis Lakudzala BSc (Hons), MRes ACIEEM on the 4th April 2024. Weather conditions were 12 °c with 70% cloud cover. The most recent field survey was undertaken by Lewis Lakudzala BSc (Hons) MRes ACIEEM and Abby Woolston BSc (Hons) MRes on the 25th November 2025. Weather conditions were 7 °c with 90% cloud cover.

Habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Biodiversity Metric 4.0 calculation. Where appropriate primary habitat codes were used although for some habitat types, the use of secondary habitat codes was necessary as well.

For clarity, the site has been divided into sections. The survey findings in this report correspond to the sections shown on the plan below.

Figure 2. Plan displaying the numbered field parcels on the site.

N.B. The reserved matters application associated with this document only relates to parcels 3, 4 and 5.



3.2.3 Bats

3.2.3.1 Trees

A non-exhaustive Ground Level Tree Assessment (GLTA) of any notable trees on site was undertaken by Lyndsey Barratt BSc (Hons) PGCert ACIEEM (Class 1 Bat License holder 2018-38386-CLS-CLS) and Lewis Lakudzala BSc (Hons), MRes ACIEEM (at the time accredited agent under Class 1 License of L. Barratt) on the 4th April 2024. The most recent GLTA was carried out on all trees proposed for removal and was carried out by Lewis Lakudzala (Level 2 Class License Number 2025-85515-CL18-BAT).

Following edition 4 of the BCT guidelines (Collins (d) 2023), features of trees were assessed for their suitability to support roosting bats using a high-powered torch and binoculars, with the results of these observations combined with the data collated during the desk study to classify each tree as either negligible, FAR (Further assessment required), PRF-Is (Potential roost features - individual) or PRF-M's (Potential roost features – maternity) (**Table 1**).

Table 1. Guidelines for assessing the potential suitability of sites for bats (Trees) (adapted from Collins, 2023).

Suitability	Description
	Roosting Features
Negligible	Tree does not support any suitable features that could be potentially utilized by roosting bats.
FAR	Further Assessment Required (FAR) to establish if any PRFs are present in the tree.
PRF - I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF - M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

3.2.3.1 Night-time Bat Walkover

Based on the suitability of the habitat for foraging and commuting bats, Night-time Bat Walkovers (NBW) were carried out in order to measure bat activity and species diversity on site. The surveys followed the methodology of the 'Night-Time Bat Walkover Survey' outlined within best practice guidelines (BCT, 2023). The survey began at sunset at a location adjacent to potential roosts and flight lines. Surveyors remained in the same location for a period of 30-60 minutes and began the walked transect only once bat activity was observed within this period. The survey route (**Figure 3**) was then walked continuously for two hours whilst recording a time-stamped narrative of bat observations including:

- Species
- Number of bats
- Flight direction
- Flight height
- Behaviour

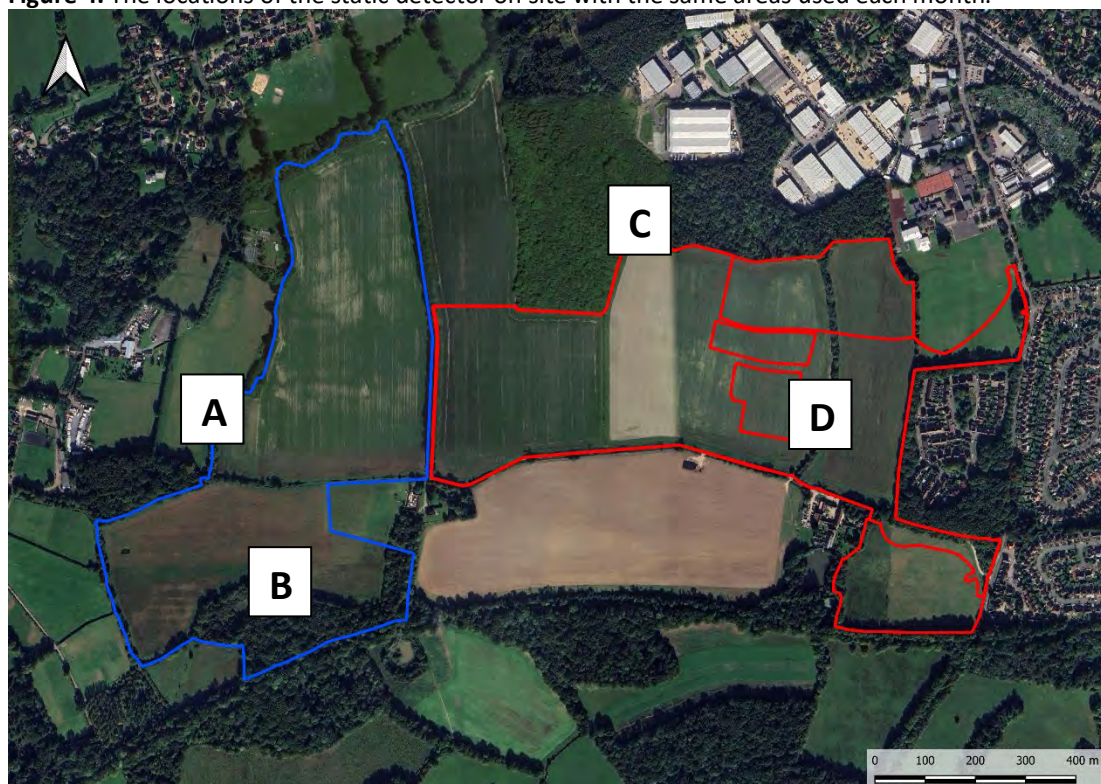
Due to the size of the site, the two NBW routes were required to cover the entire area and sample all habitats present. Echolocation calls were recorded using Elekon Batlogger M full spectrum detectors and subsequent analysis with Wildlife Acoustics Kaleidoscope was conducted to identify species where identification was not possible during the field survey. The surveys were carried out by Tim Harris.

Figure 3. The routes taken during the night-time walk over of the site.



3.2.3.2 Static Detectors

The 'stratified' method of sampling locations was utilised where the location was identified by dividing the site into sub-areas and those of particular interest are surveyed more intensively. The detectors were deployed at a minimum of 1.5m away from flat surfaces and/or vegetation with care given to the direction of the microphone. A minimum of five nights of data per month (April – September) was collected, as specified in best practice guidelines (BCT, 2023). The samples were separated by at least three weeks. Similar locations were used for each survey (**Figure 4**).

Figure 4. The locations of the static detector on site with the same areas used each month.

3.2.3.3 Bat Data Analysis

Echolocation recordings captured during the phase II surveys were processed and analysed using Wildlife Acoustics Kaleidoscope Version 5.6.8. The AutoID function was used in conjunction with reference collection 'Bats of Europe 5.4.0 - United Kingdom' at classifier threshold of 0 Balanced (Neutral). AutoID results were manually reviewed and corrected where necessary in order to identify species present on site. All recordings were reviewed with the exceptions of *Pipistrellus* spp., noise files and non-identifiable (NoID) recordings in which auditing effort was reduced due to high quantities of data. The results were then multiplied proportionately to be applicable to the entire data set. An auditing effort of 10% for *Pipistrellus* spp., noise files and NoID recordings was utilized (**Table 2**).

Table 2. The auditing effort for the static monitoring surveys undertaken April - September 2025.

Bat Species	Percentage of Recordings Analysed
Common Pipistrelles	10%
Soprano Pipistrelles	10%
Non-Identifiable (NoID) Recordings	10%
Noise Files	10%
All Other Bat Species	100%

3.2.4 Reptile Surveys

Survey methods followed Gent and Gibson (1998) for herpetofauna studies. A total of 265 artificial refugia comprising 0.5 m x 0.5 m bitumen roofing felt squares were laid down in suitable locations in April 2024. This number of refuges was chosen to evenly cover suitable habitat on site and provide a high confidence in likely absence, or for reptile presence an accurate picture of population distribution and abundance.

Refugia were placed in areas of suitable reptile habitat, including sunny open rough grassland (away from dense shade), adjacent to scrub, ruderal and/or shorter rough grassland, and on south-facing slopes.

Survey checks of the artificial refugia began on 25th April and ended on 14th August 2024. All artificial refugia were examined on each survey visit, and all surveying was undertaken in suitable weather conditions.

3.2.5 Great Crested Newt Surveys

Due to the presence of Great Crested Newts (*Triturus cristatus*) which was established in 2016, Ponds previously identified to support GCN were subject to updated surveys. Surveys were undertaken in accordance with best practice guidelines.

3.2.5.1 Environmental DNA Analysis

A total of 22 waterbodies were identified within 500m of the site, all of which were recommended to be subject to an eDNA test (Ecology Partnership, 2023). As such, a site visit was undertaken to conduct an eDNA test on the ponds listed above on the 31st May and 12th June 2024 by Ecosupport Ltd. 5 ponds were accessible and therefore subject to an eDNA assessment. During the eDNA test, 20 evenly spaced sample sites were identified around the ponds perimeters and one ladle of pond water was collected from each of the pre-identified sites. The samples were then mixed along with preservative following guidance from SureScreen Scientifics and sent for eDNA analysis.

3.2.5.2 Presence / absence surveys

The presence / likely absence surveys were undertaken in March – May 2024 (with at least two surveys carried out within the mid April – mid May period as per best practice guidance (English Nature, 2001). The surveys were carried out by Lyndsey Barratt (GCN Class licence number 2022-10446-CL08-GCN) using a mix of the methods as described below.

Bottle trapping

Traps were constructed of 2L clear plastic bottle and canes following the methodology outlined within the Herpetofauna Workers Manual (Gent & Gibson, 2003). The traps were set at 2 m intervals along the margins of the ponds. They were set at approximately sunset (or just after) and checked the following morning ensuring they were *in situ* for no longer than the recommendations outlined within the GCN Mitigation Guidelines (English Nature, 2001) (i.e. no longer than 12 hours March – April, 10- hours in May and 8 hours in June).

Torchlight surveys

This involves making a single circuit around the perimeter of the waterbody after dark with a 1, 000, 000 candle power Clulite torch. This is shone into the marginal waters around the waterbody's edges to count any newts observed. To ensure effectiveness of this technique all torch surveys were conducted in steady conditions (i.e. no wind and or rain which may roughen water surface, lessening visibility).

Egg searching

This method involves searching both live and dead submerged vegetation for GCN eggs where newts lay eggs on folded leaves. The presence of eggs can be a useful tool for confirming GCN presence although it does not provide any information in aiding population size estimation.

Netting

A long-handed dip-net was used to gently push through the boundaries and vegetation within the pond to capture any GCN that may be present, with at least 15 minutes of netting per 50m of shoreline, as per the recommendations outlined within the GCN mitigation Guidelines (English Nature, 2001).

3.2.6 Dormouse Nest Tube Survey

Dormouse surveys were initially carried out in 2016 and 2019 by The Ecology Partnership, with updated surveys in 2024 by Ecosupport. The surveys followed standard guidance as set out by NE and detailed in the Dormouse Conservation Handbook (Bright *et al.*, 2006).

The *Dormouse Conservation Handbook* uses an “index of probability” to assess the likelihood of a survey detecting Dormice. This assigns a score for each month which nest tubes are on a site (see **Table 3**) and recommends that a total of 20 points is necessary. The surveys were set up in May and carried out between June and November 2024 to ensure that all key parts of the season were covered and sufficient survey effort was achieved. Following the final survey, a score of 20 was achieved. Each survey was carried out in suitable, dry weather conditions and completed on the same day to ensure no animals found were double counted.

Table 3. Index of probability of finding Dormice present in nest tubes in any one month. From the Dormouse conservation handbook (Bright *et al* 2006).

Month	Points	Month	Points
April	1	August	5
May	4	September	7
June	2	October	2
July	2	November	2

Table 4. Index of probability.

Month	Probability
April	1
May	4
June	2
July	2
August	5
September	7
October	2
November	2

3.2.7 Notable and Birds of Conservation Concern (BoCC)

The survey methodology was broadly based upon the British Trust of Ornithology (BTO) Breeding Bird Survey (BBS) and Common Bird Census methods, including the BTO Standard Recording Codes (BTO, 2004). A total of 4 surveys were undertaken between April-June 2024 during favourable weather conditions (with little or no rain, little to no wind and good visibility). The survey visits were carried out at dawn, taking approximately 90 minutes each. The surveys followed a pre-defined linear transect route similar as per the walked bat transects (**Figure 3**) and comprised 9 No. 10-minute observational points from where the surveyor could observe bird activity and listen for birdcalls to establish territories and presence of breeding/nesting birds. Behaviour such as singing male birds, young, nests, feeding behaviour, territorial disputes and defensive behaviour around possible active nests were noted. Observations were marked on a site plan

3.3 Assessment Methodology

3.3.1 Introduction

The methodology for the assessment of the likely ecological effects of the proposed development is based on IEEM's *Guidelines for Ecological Assessment in the UK* (CIEEM 2018). Although this assessment does not constitute a formal Ecological/ Environmental Impact Assessment, the IEEM guidelines provide a useful framework for assessing ecological impacts at any level.

3.3.2 Valuation

Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/or social significance.

3.4 Limitations

Although the survey was conducted outside the optimum time for the identification of botanical interest, it was considered that the majority of species and habitats present could be suitably identified; this was therefore not considered to represent a significant limitation to the overall assessment. The previous reports by The Ecology Partnership (2018 & 2021)

were also used to inform the species and habitats present on site.

This survey does not constitute a full site assessment for invasive species, such as Japanese Knotweed (*Fallopia japonica*).

4.0 ECOLOGICAL BASELINE

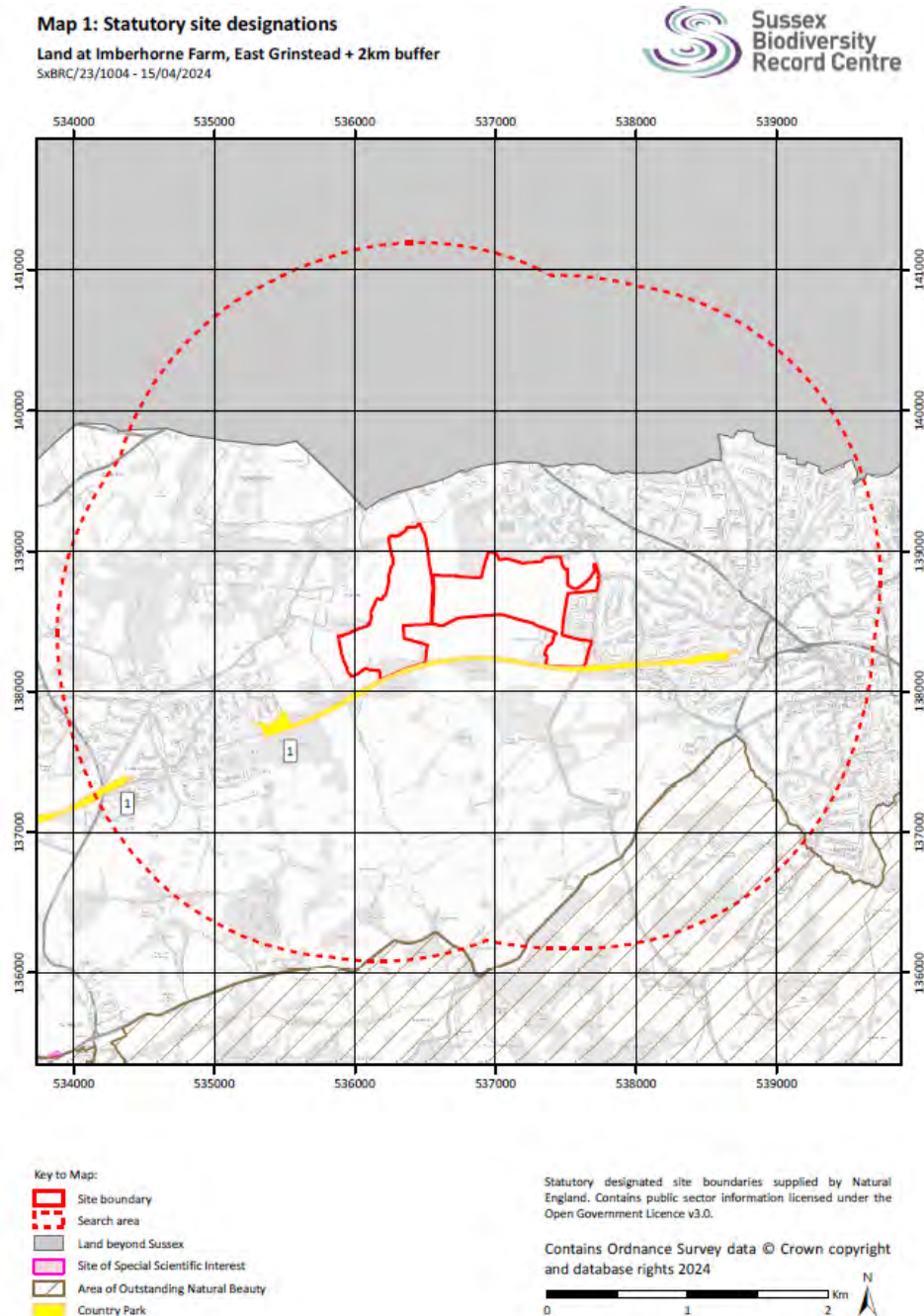
4.1 Designated Sites

4.1.1 Statutory

The SXBRC data request has identified the following statutory designated sites located within 2km of the site (shown in **Figure 5**):

- High Weald, AONB (1.4 km distance SE of the site)
- Worth Way (spans the southern boundary of the site)

Figure 5. Map provided by SXBRC which indicates the proximity of the site to the nearby statutory designations



4.1.2 Non-Statutory

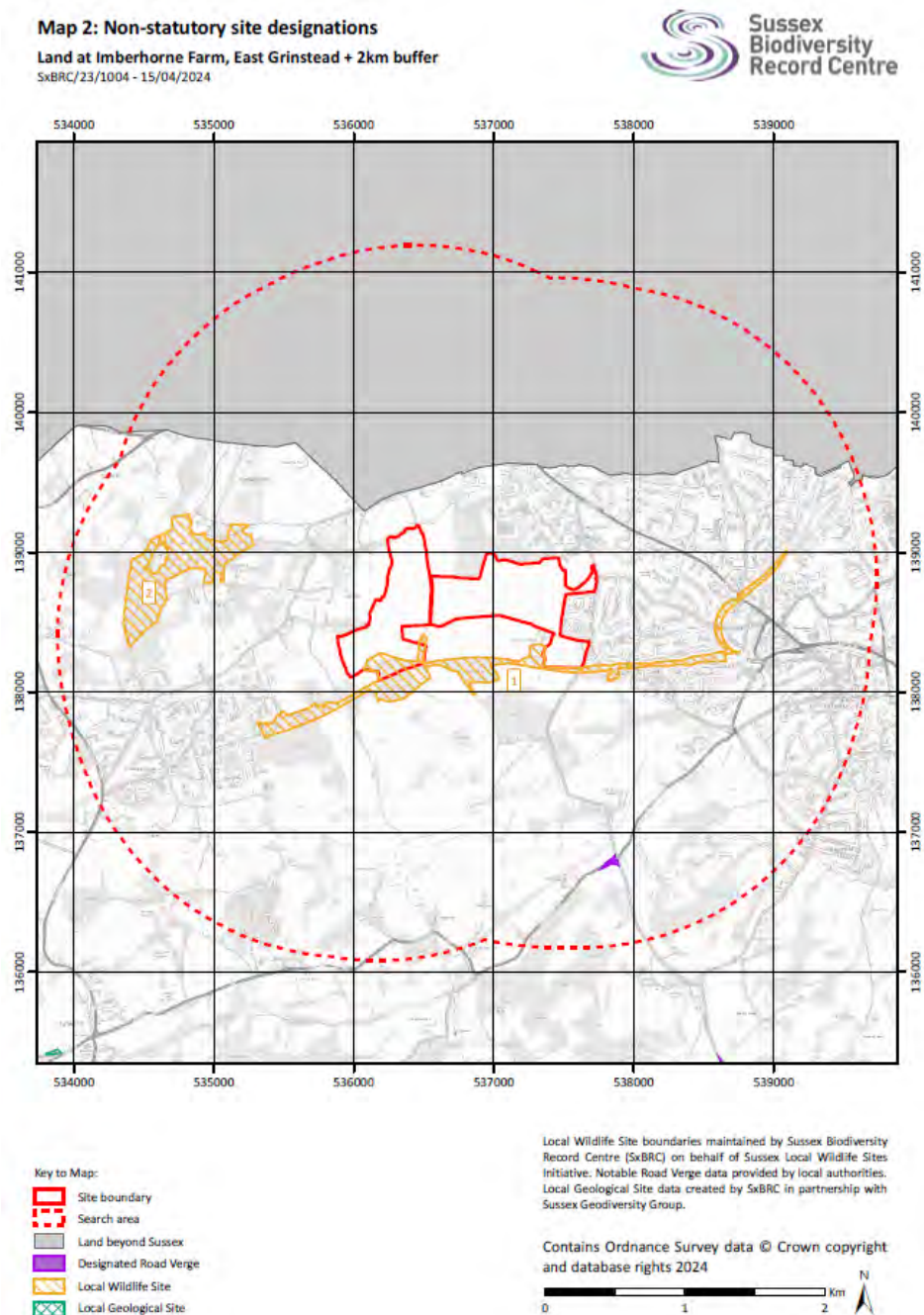
The SXBRC data request has identified the following statutory designated sites located within 2km of the site (shown in **Figure 6**):

- M17 – Worth Way, LWS (situated along the southern boundary of the site)
- M37 – Lobbs Wood & Furnace Pond, LWS (1.5 km to the west of the site)

Two designated road verges not within 2km of the site include:

- Saint Hill Road (2.4 km SE of the site)
- Turners Hill Road (2.8 km W of the site)

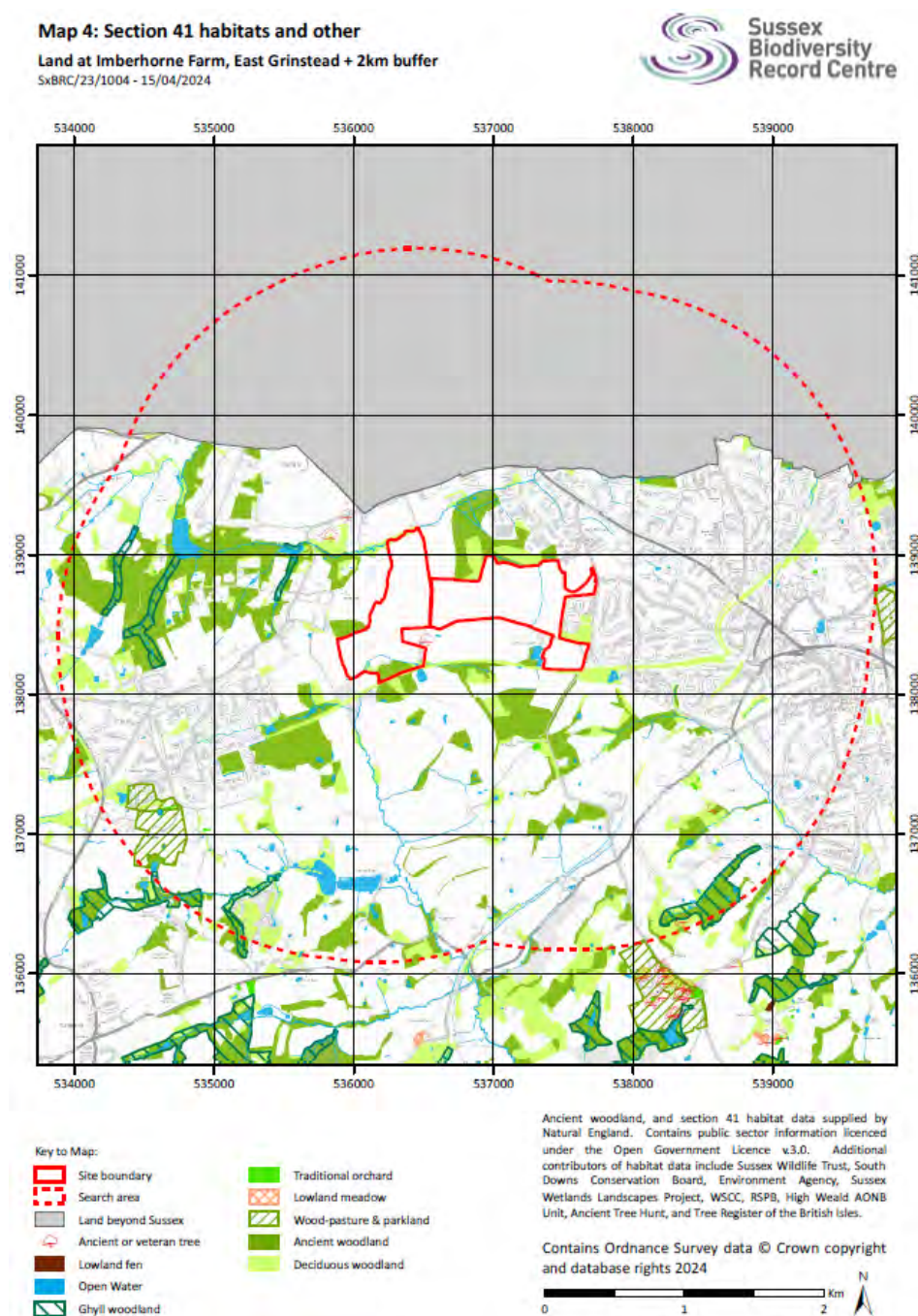
Figure 6. Map provided by SXBRC which indicates the proximity of the site to the nearby statutory designations.



4.1.3 Priority Habitats

The SXBRC data request has identified priority habitats near the site. Ancient and deciduous woodland are present north and south of the site and there are patches of ancient and deciduous woodland west of and east of the site respectively. Open water is also present south, north, northwest and southwest of the site. Ancient trees are situated at the southern west corner of and north-west of the site, in addition to south-east of the site, however at a greater distance. Ghyll woodland has also been noted west of the site. A small patch of wood pasture and parkland is present south-west of the site near the edge of the 2km buffer.

Figure 7. Map provided by SXBRC, which indicates the proximity of the site to priority habitats



4.2 Vegetation Survey Results

The vegetation within the site has been described below using the UK Habs Habitat Definitions Version 2.0 (UKHab Ltd., 2023). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. The habitat types on site comprise:

- Temporary Grass and Clover Leys (c1c) with bare ground (510), recent management (517)
- Modified Grassland (g4) with bare ground (510)
- Modified Grassland (g4) with rushes dominant (15), seasonally wet (502)
- Lowland Mixed Deciduous Woodland with ancient woodland site (28), ponds (priority habitat) (40), coppice (210)
- Woodland (w) with plantation (29)
- Ecologically Valuable Line of trees (34) (w1f) with scattered scrub (10) and ditch (50)
- Species-rich Native Hedgerow (Priority Habitat) (h2a5)
- Hawthorn Hedgerow (h2a6) with active management (516)
- Bramble Scrub (h3d) with ditch (50)
- Blackthorn Scrub (h3a)
- Other Standing Water (r1g) with pond (non-priority) (41)
- Stream (r2b)
- Pond (r)

4.2.1 Temporary Grass and Clover Leys (c1c) with bare ground (510), recent management (517)

The site supports 5 large arable parcels previously utilised for agricultural-use (**Figure 8 & Figure 9**), Due to the cease of crop production the fields support a sown grassland mix with the western parcels supporting remnant Wheat with establishing grass species. The leys were evenly distributed with areas of bare ground present due to heavy machinery (**Figure 9**). Species recorded include Perennial Ryegrass (*Lolium perenne*) and White Clover (*Trifolium repens*).

Figure 8. View of the eastern agricultural parcel with temporary grass/clover leys (taken November 2025).



Figure 9. View of a western agricultural parcel with temporary grass/clover leys (taken November 2025).



4.2.2 Modified Grassland (g4) with bare ground (510)

The boundaries of the arable parcels supported strips of modified grassland with more established forb species and diversity (**Figure 10**). Species recorded include: Ribwort Plantain (*Plantago lanceolata*), Creeping Buttercup (*Ranunculus repens*), Yarrow (*Achillea millefolium*), Dandelion (*Taraxacum* sp.), Cleavers (*Galium aparine*), Nettle (*Urtica dioica*), Thistle (*Cirsium* sp.), Hogweed (*Heracleum sphondylium*), Bramble (*Rubus fruticosus*), Tufted Vetch (*Vicia cracca*), Agrimony (*Agrimonia eupatoria*) and Ragwort (*Senecio Jacobaea*).

Figure 10. View of the modified grassland strip on the edge of the west parcel (taken November 2025).



The margins of the arable fields located in the centre and southwest corner of the site supported similar species composition, however Red fescue (*Festuca rubra*), Perennial Rye-Grass, Yorkshire Fog (*Holcus lanatus*), Broad-Leaved Dock (*Rumex obtusifolius*), Lesser Stitchwort (*Stellaria graminea*), Cow's Parsley (*Anthriscus sylvestris*), Birds-foot-trefoil (*Lotus corniculatus*), Soft Rush (*Juncus effusus*), Curled Dock (*Rumex crispus*), Water Mint (*Mentha Aquatica*), Silverweed (*Potentilla Anserina*), Southern Woodrush (*Luzula forsteri*), Yellow Vetch (*Vicia Lutea*), Meadow Foxtail (*Alopecurus pratensis*) and Early Purple Orchid (*Orchis mascula*) were also recorded previously (The Ecology Partnership, 2021), although these were not observed during the more recent assessments (2024 and 2025, Ecosupport).

An area of grazed semi-improved grassland was located in the southeast corner of the site (**Figure 11**). Species recorded included: Yorkshire Fog, Dandelion, Birds-foot-trefoil, Red Clover (*Trifolium Pratense*), Perennial Rye-Grass, Red Fescue, Tufted Vetch, Common Nettle, Spear Thistle (*Cirsium vulgare*), Herb Robert (*Geranium Robertianum*) and Dovesfoot Cranesbill (*Geranium Molle*).

Figure 11. View of the modified grassland parcel on the southeast of the site (taken November 2025).



4.2.3 Modified Grassland (g4) with rushes dominant (15), seasonally wet (502)

This habitat was present within the parcels on the northwest, southwest and southeast of the site (**Figure 12**) (See **Appendix I - UK Habs Map** for locations) and were dominated by Soft Rush (*Juncus effusus*), Southern Woodrush (*Luzula forsteri*) and Perennial Rye Grass.

Figure 12. View of the rush pasture within the southwest parcel of the site (taken April 2024).



4.2.4 Lowland Mixed Deciduous Woodland (w1f) with ancient woodland site (28), ponds (priority habitat) (40), coppice (210)

A parcel of ancient woodland was located on the southwest of the site, along the southern boundary (**Figure 13**). Mature hazel coppice was present in addition to several ponds interspersed throughout the woodland (**Figure 14**). The woodland is designated as part of the Local Wildlife Site, Worth Way. Tree species recorded included Silver Birch (*Betula pendula*), Oak (*Quercus* sp.), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*), and Hazel (*Corylus avellana*) with understorey vegetation characteristic of ancient woodland recorded including: Wild Garlic (*Allium ursinum*), Bluebells (*Hyacinthoides non-scripta*) and Lesser Celandine (*Ficaria verna*).

Figure 13. View within the woodland on the southwest of the site (taken April 2024).



Figure 14. View of one of the ponds within the woodland on site (taken November 2025).



4.2.5 Woodland (w) with plantation (29)

A small parcel of plantation woodland was present on the southeast of site (**Figure 15**). Species recorded included Wild Cherry (*Prunus avium*) only.

Figure 15. View of the cherry plantation woodland on site (taken April 2024).



4.2.6 Ecologically Valuable Line of trees (34) (w1f) with scattered scrub (10) and ditch (50)

Five lines of trees were present on the site located between the various arable parcels (**Figure 16**).

Figure 16. Plan indicating the tree lines around the site.



The first tree line (T1) was recorded along the lower portion of the western boundary of the site adjacent to the stream and a ditch (**Figure 17**). Species recorded include Oak, Willow (*Salix* sp.), Alder (*Alnus glutinosa*), Sycamore (*Acer pseudoplatanus*), Field Maple (*Acer campestre*), Blackthorn, Ash (*Fraxinus excelsior*), Hawthorn, Holly and Oak.

Figure 17. View of the treeline T1 on site (taken April 2024).



A native tree line (T2) was recorded along the upper portion of the western boundary of the site adjacent to the stream and a ditch (**Figure 18**). Species recorded included Willow, Alder, Field Maple, Blackthorn, Ash, Hawthorn, Holly and Oak.

Figure 18. View of the treeline T2 on site (taken November 2025).



Between the west and central parcel, a tree line bordered the stream on the west of the site with a well-developed scrub understory (T3) (**Figure 19**). The canopy species comprised of Sycamore Oak and Ash, pockets of Alder were also situated adjacent to the stream to the north. The shrub layer comprised of Hazel, Holly, Blackthorn, Dog Rose (*Rosa canina*), Bramble, Elder (*Sambucus nigra*), Hawthorn, Cherry, Sweet Chestnut (*Castanea sativa*) and Birch.

Figure 19. View of the treeline T3 on site (taken April 2024).



A tree line associated with a stream was present on the east of the site with a well-developed scrub understorey (T4) was identified running north to south between the eastern and centre arable fields, with a stream running adjacent (**Figure 20**). The dominant species consisted of: *Salix sp.*, Alder, Hawthorn, Cherry (*Prunus sp.*), Silver Birch, Bramble, Pendulous Sedge (*Carex pendula*), Cleavers, Common Dog Violet (*Viola riviniana*), Common Nettle, Cow Parsley, Blackthorn (*Prunus spinosa*), Field Maple, Primrose (*Primula vulgaris*), Holly, Beech (*Fagus sylvatica*), Rosebay Willowherb (*Chamerion angustifolium*), English Oak, Spear Thistle, Herb Robert, Broad-Leaved Dock, Soft Rush And Dandelion.

Figure 20. View of the treeline T4 on site (taken November 2025).



A native tree line was present on the east of the site (T5), along to the residential estate adjacent to the site on the east (**Figure 21**). Species recorded include Ash, Sycamore, Field Maple, Blackthorn, Holly and Oak.

Figure 21. View of the treeline T5 on site (taken April 2024).



The final tree line (T6) was located on the east of the site, between parcels 5 & 6 (**Figure 22**). This tree line supported predominantly Oak with Silver Birch (*Betula pendula*) and Horse Chestnut (*Aesculus hippocastanum*) also recorded.

4.2.7 Species-rich Native Hedgerow (h2a5)

A species-rich mature hedgerows was present along the southern boundary of the site which was associated with a ditch (**Figure 23**). The hedgerow supported Hawthorn, Hazel, Dogwood (*Cornus sanguinea*), Bramble, Ivy (*Hedera helix*) and *Salix* sp. also recorded.

Figure 22. View of the hedgerow along the southern boundary (taken April 2024).



4.2.8 Hawthorn Hedgerow (h2a6) with active management (516)

A Hawthorn hedgerow ran north-south between the two central parcels on site (**Figure 24**). The hedge was regularly managed and supported only the single species.

Figure 23. View of the Hawthorn hedgerow on site (taken November 2025).



4.2.9 Bramble Scrub (h3d) with ditch (50)

In addition to the scrub understorey present along the tree lines (see **section 4.2.6**), several patches of Bramble scrub were present around the site. Bramble scrub was present along the southern boundary (**Figure 25**) of the site associated with a drainage ditch. A sparse area of scrub was also present on the northeast of the site, to the south of Imberhorne School.

Figure 24. Bramble scrub present along the southern boundary of the site (taken November, 2025).



4.2.10 Blackthorn Scrub (h3a)

An area of dense Blackthorn scrub was present within the woodland on the southwest of the site.

4.2.11 Other Standing Water (r1g) with pond (non-priority) (41)

A pond was located within the southwest parcel of the site (**Figure 26**). The pond was small and oval in shape, with significant vegetation growth on the surface.

Figure 25. The pond within the southwest parcel on the site (taken November 2025).



4.2.12 Stream (r2b)

A stream was recorded predominantly around the boundary of the site with some sections of the watercourse dividing the parcels on site (**Figure 27**). Notably, the stream ran adjacent to the tree line on the east of the site (T4) between steep, vegetated banks comprising of bramble scrub, Ivy, Pendulous Sedge (*Carex pendula*), Common Nettle, Cleaver and Ground-Ivy (*Glechoma hederacea*).

In addition, the stream was present along the north of the woodland (**Fig 21**). The stream supported a slow flow with limited vegetation on the banks.

Figure 26. The section of the stream on the east of the site adjacent to treeline T4 (taken November 2025).



Figure 27. The section of the stream along the north of the woodland on site (taken April 2024).



4.3 Bat Survey Results

4.3.1 Pre-existing Data

Table 5. List of bat records within 2 km of the site provided by SXBRC.

Taxon Name	Species Name	Number of records	Details
Chiroptera	Bat	11	2 bats found dead. Droppings found at an unspecified roost. Some seen feeding. One requiring woodworm treatment.
<i>Eptesicus serotinus</i>	Serotine	4	Droppings found at a maternity roost situated at the top of the gable end wall on Lingfield road. Some seen foraging. On Imberhorne Lane, this foraging was done south of the building and along the access road over pine trees.
<i>Myotis</i>	Myotis	6	Majority detected via an aural bat detector. Lots of feeding activity.
<i>Myotis nattereri</i>	Natterer's Bat	2	One bat found dead, and another had a broken forearm, subjecting it to euthanasia.
<i>Nyctalus noctula</i>	Noctule Bat	4	Majority detected via an aural bat detector. Recorded in flight and foraging.
<i>Nyctalus/Eptesicus</i> agg.	Noctule/Serotine Bat	6	Majority detected by a heterodyne detector.
<i>Pipistrellus</i>	Pipistrelle Bat	16	Five dead bats found, including one juvenile. Droppings found at some unspecified roosts. One bat found under tiles, and one found flying in a shop.
<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle	1	Female is overwintering at Sussex Bat Hospital following a cat attack.
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	86	8 juvenile bats and 1 infant. Droppings found at unspecified roosts. Three died due to cat attacks. Many seen foraging and commuting. On Copthorne road, bats were foraging and flying along the eastern site and southeast to northwest respectively.

<i>Pipistrellus pygmaeus</i>	Soprano Bats	29	One juvenile present and two babies. One had to be euthanised following a cat attack. Two are set to become education bats. Many recorded feeding and commuting.
<i>Plecotus</i>	Long-eared Bat	12	Droppings present at unspecified roosts. Some feeding and flying noted.
<i>Plecotus auritus</i>	Brown Long-eared Bat	16	Five juveniles found. One dead due to cats. Droppings found at unspecified roosts. Many found thin but were later released.

4.3.2 Previous Survey Work

The survey work carried out by The Ecology Partnership (2016) identified Common Pipistrelles (*Pipistrellus pipistrellus*) as the most dominant species during the activity surveys and static monitoring. Other species included Serotine (*Eptesicus serotinus*), Noctule (*Nyctalus noctula*), *Myotis* spp., Brown Long-eared Bats (*Plecotus auritus*) and Soprano Pipistrelles (*Pipistrellus pygmaeus*), with a low number of Leislers (*Nyctalus leisleri*) and Nathusius Pipistrelle (*Pipistrellus nathusii*). The species on-site were comprised largely common and widespread species.

Updated surveys conducted in 2018 provided similar results, with Common Pipistrelles abundant with occasional Soprano Pipistrelles, and infrequent Noctule and *Myotis* spp. and very low numbers of Brown Long-eared Bats and Serotines.

4.3.3 Ground Level Tree Assessments (GLTA) (trees) (2023)

At this stage the full extent of tree removal proposed on site is not known, however it is understood that some trees require removal in order to facilitate the development. A full, Ground Level Tree Assessment (GLTA) was not undertaken at the time of the walkover in 2023, however all trees to be impacted by proposals will be subject to a GLTA.

During the updated walkover assessment, an oak tree situated within tree line T1 (see **Figure 16** for location) was recorded to support three holes caused by limb tear-outs. The first hole was located on the northwest elevation of the tree (**Figure 29**) with the remaining two located on the southwest. Due to the location of the PRFs on thinner branches of the tree, it is considered likely they would only be able to support individual roosting bats. In addition, there was a small amount of peeling bark on the eastern elevation of the tree. As such, the tree is considered to be **PRF – I** for roosting bats.

Figure 28. Identified PRF on the northwest of the tree (taken April 2024).



4.3.4 Ground Level Tree Assessments (GLTA) (trees) (2025)

All trees proposed for removal were subject to a full, exhaustive ground level tree assessment (GLTA) to determine suitability for roosting bats.

A total of 9 trees were identified to support potential for roosting bats. The trees were located within two tree lines, one adjacent to the proposed access road and the other further to the north (see **Figure 30**). Species included 7x Oak (*Quercus robur*) and 2x Horse Chestnut (*Aesculus hippocastanum*). Of the 9 trees identified to support bat roost potential, 6 oak trees were assessed as PRF-M (suitable for maternity roosts and/or multiple bats), while the remaining Oaks (1) and Horse Chestnut Trees (2) were PRF-I (suitable for individual bats) in accordance with the BCT Best Practice Guidelines (Collins, 2023).

The details of the GLTA's can be found below in **Table 6**.

Figure 29. The locations of the trees on the east of the site which were identified to support potential for roosting bats.



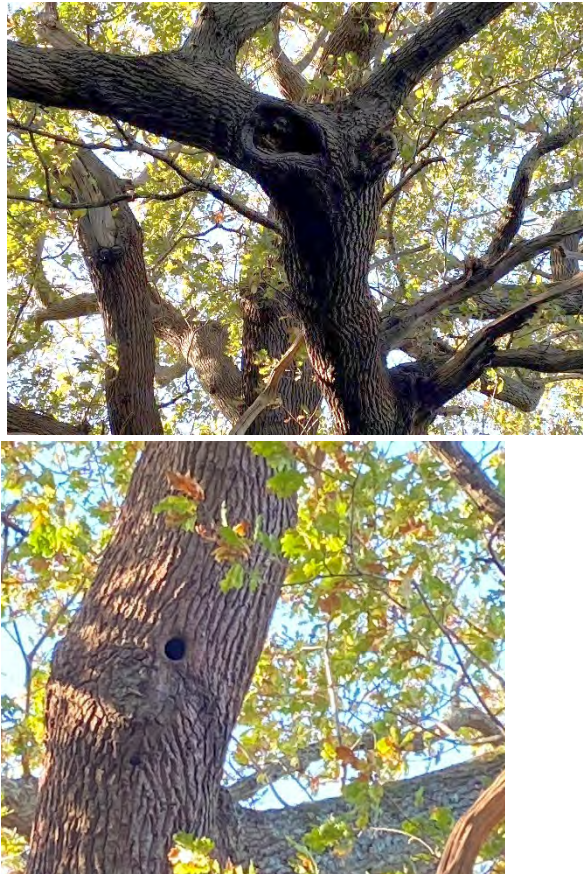
Table 6. Results of the GLTAs carried out on the trees proposed for removal.

Tree Code	Species	Description / Potential Roosting Features (PRFs)	Potential for Roosting Bats	Photo(s)
T2-B2	Horse Chestnut	Semi-mature tree with a number of small knot holes on the trunk in addition to dense ivy coverage	PRF-I	
T9-B2	Oak	Large mature Oak with two dead limbs and a knot hole on the main trunk	PRF-M	

T11-B2	Horse Chestnut	Semi-mature tree with a woodpecker on the southern face 2.5m from the ground	PRF-M	
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T18-B2	Oak	Mature tree with a transverse snap recorded on limb in addition to a knot hole, woodpecker hole and 2 dead branches	PRF-M	
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T20-B2	Horse Chestnut	Mature tree with a single knot hole recorded on the northern face. Knot hole was approximately 5 inches deep	PRF-I	
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T25-A3	Oak	Veteran Oak tree located adjacent to the proposed access. PRFs include peeling bark, tear out (2), woodpecker hole, knot hole (4), with several dead limbs	PRF-M	
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T39-A2	Oak	Large mature oak with squirrel hole identified at the top of the main trunk	PRF-M	

T43-A2	Oak	Mature oak with a split at the top of the limb. Due to positioning PRF would be exposed to rainfall	PRF-I	
T50-B2	Oak	Mature oak with large vertical split in main trunk and deadwood limbs present	PRF-M	

T114-A2	Oak	Large mature Oak with a hazard beam on a limb to the south in addition to tranverse snaps (2) and a vertical wound on the main trunk	<i>PRF-M</i>	
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4.3.5 Nighttime Bat Walkovers (2024)

Tables 5 & 6 below indicate the dates and other relevant information recorded during the transect surveys with the results presented below in **Figure 31**.

Table 7. Relevant information recorded during the transect surveys on the western transect route. Wind speed is approximated in the Beaufort Scale. CW = Clockwise and CCW = Counter Clockwise (refer to Figure 3 for route).

West Transect Route

Date	Temp (°C)	Cloud Cover (%)	Precipitation	Wind (Beaufort scale)	Start Time	Finish Time
7 th May 2024	15-12	40	Dry	2 NNE	20:32	23:02
7 th June 2024	16-12.5	10	Dry	1-2 SW	21:11	23:41
26 th July 2024	22-18.5	0	Dry	0	21:19	23:49
24 th September 2024	17-14	100	Dry	2 W	18:53	21:23

Table 8. Relevant information recorded during the transect surveys on the Eastern transect route.

East Transect Route

Date	Temp (°C)	Cloud Cover (%)	Precipitation	Wind (Beaufort scale)	Start Time	Finish Time
24 th April 2024	10-5.5	10	Dry	1 NW	20:12	22:42
20 th May 2024	17-13.5	60	Dry	2 NE	20:50	23:10
19 th June 2024	17-12.5	5	Dry	3 E	21:19	23:49
28 th September 2024	12-9	10	Dry	1 W	18:44	21:14

Figure 30. The number and species composition of bat recordings noted during the walked transects (n = 4) on the west of the site conducted in 2024 (May – September 2025).

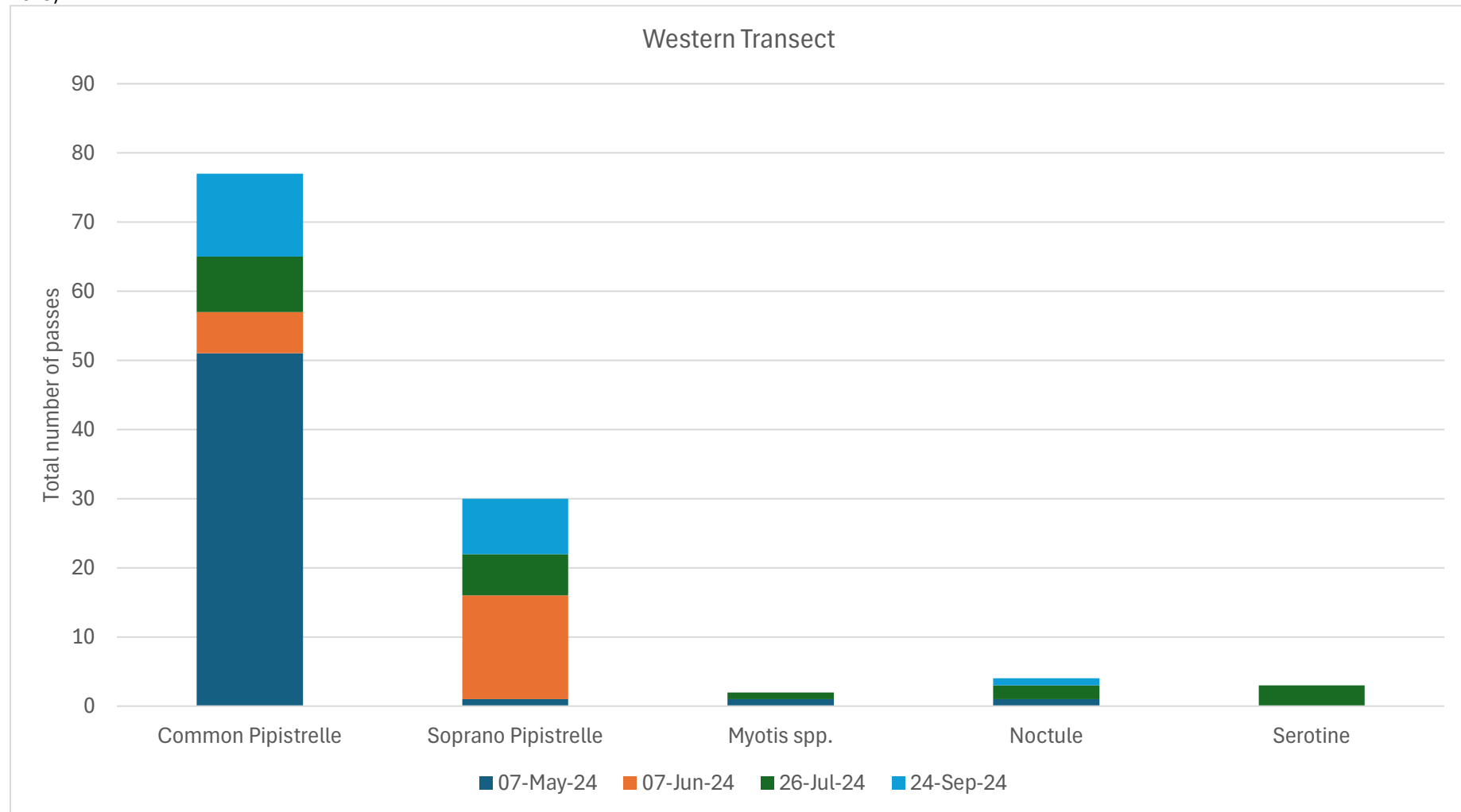
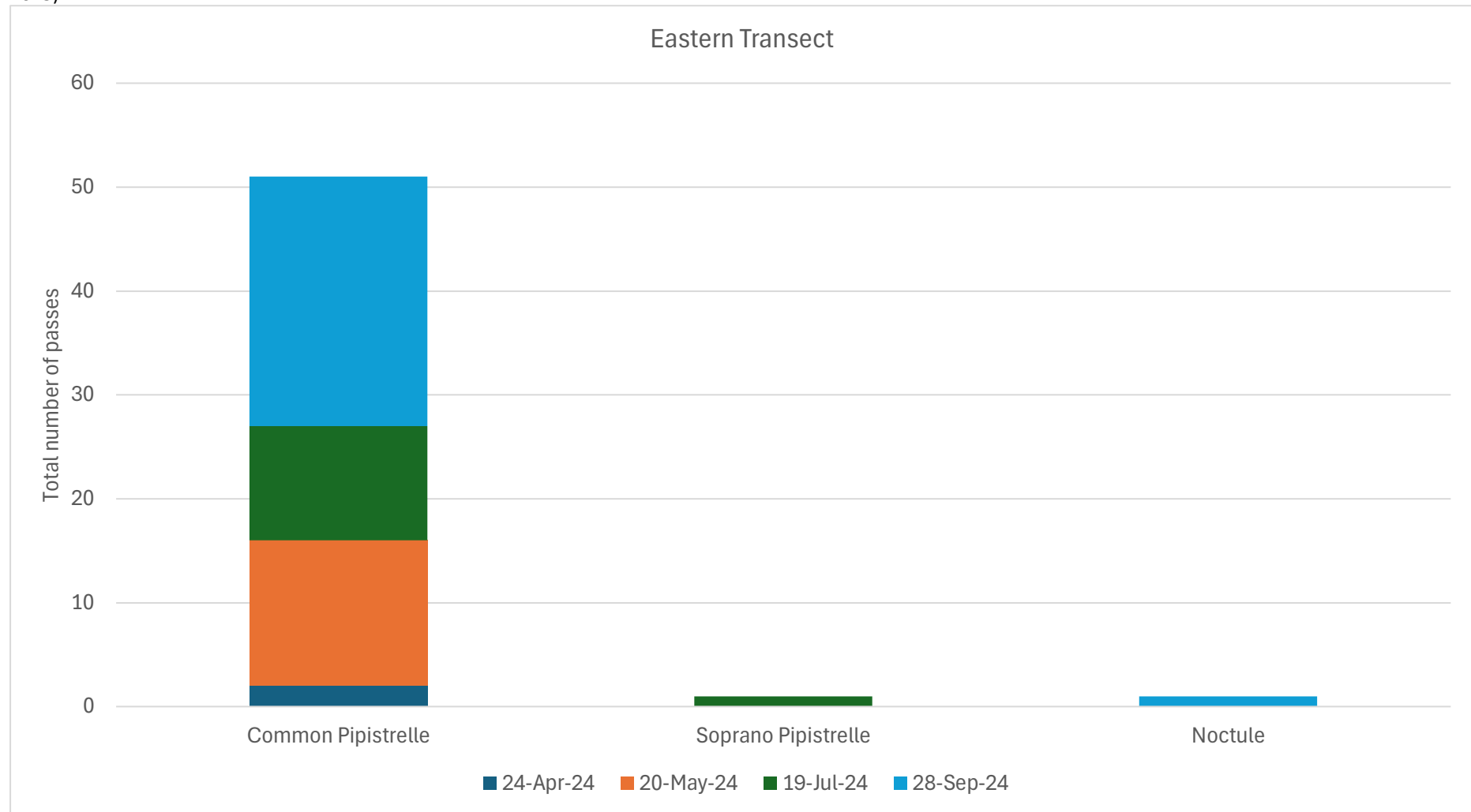


Figure 31. The number and species composition of bat recordings noted during the walked transects (n = 4) on the east of the site conducted in 2024 (April – September 2025).



4.3.6 Static Monitoring

The results of the static detector monitoring carried out between April – September 2024 are provided in **Table 9** below.

Table 9. Results from Wildlife Acoustics Minibat static deployment from April – September (see **Figure 4** for locations).

Location	Date	Species	Total passes	Average passes per night	Average passes per hour
A1	11th - 15th April 5 Nights 10.25 hrs p/n	C.pip	375.00	75	7.32
		S.pip	232.00	46.4	4.53
		Noctule	6.00	1.2	0.12
A2	11th - 15th April 5 Nights 10.25 hrs p/n	C.pip	59.00	11.8	1.15
		S.pip	31.00	6.2	0.60
		<i>Myotis spp.</i>	33.00	6.6	0.64
A3	11th - 15th April 5 Nights 10.25 hrs p/n	C.pip	220.00	44	4.29
		S.pip	35.00	7	0.68
		Noctule	3.00	0.6	0.06
		<i>Plecotus spp.</i>	16.00	3.2	0.31
		<i>Myotis spp.</i>	15.00	3	0.29
A4	11th - 15th April 5 Nights 10.25 hrs p/n	C.pip	1960.00	392	38.24
		S.pip	88.00	17.6	1.72
		Noctule	1.00	0.2	0.02
		<i>Plecotus spp.</i>	6.00	1.2	0.12
		Serotine	74.00	14.8	1.44
		N.pip	1.00	0.2	0.02
B1	27th - 31st May 5 Nights 7.75 hrs p/n	C.pip	4826.00	965.20	124.54
		S.pip	2551.00	510.20	65.83
		<i>Plecotus spp.</i>	30.00	6	0.77
		<i>Myotis spp.</i>	6.00	1.2	0.15
		N.pip	5.00	1	0.13
B2	27th - 31st May 5 Nights 7.75 hrs p/n	C.pip	4475.00	895	115.48
		S.pip	1552.00	310.4	40.05
		Noctule	3.00	0.6	0.08
		<i>Plecotus spp.</i>	6.00	1.2	0.15
		<i>Myotis spp.</i>	369.00	73.8	9.52
		Serotine	15.00	3	0.39
B3	26th - 30th May 5 Nights 8 hrs p/n	C.pip	1043.00	208.6	26.08
		S.pip	15.00	3	0.38
		Noctule	1.00	0.2	0.03
		Leisler's	1.00	0.2	0.03

B4	26th - 30th May 5 Nights 8 hrs p/n	C.pip	1731.00	346.2	43.28
		S.pip	90.00	18	2.25
		Noctule	6.00	1.2	0.15
		<i>Plecotus spp.</i>	10.00	2	0.25
		<i>Myotis spp.</i>	11.00	2.2	0.28
		Serotine	1.00	0.2	0.03
		Leisler's	1.00	0.2	0.03

C	<i>June statics failed</i>
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D1	26th - 30th July 5 Nights 10.25 hrs p/n	C.pip	1109	221.8	21.64
		S.pip	220	44	4.29
		N.Pip	11	2.2	0.21
		Noctule	35	7	0.68
		Leisler's	4	0.8	0.08
		Serotine	41	8.2	0.80
		<i>Plecotus spp.</i>	27	5.4	0.53
		<i>Myotis spp.</i>	10	2	0.20
D2	26th - 30th July 5 Nights 10.25 hrs p/n	C.pip	1132	226.4	22.09
		S.pip	81	16.2	1.58
		Noctule	57	11.4	1.11
		Leisler's	94	18.8	1.83
		Serotine	33	6.6	0.64
		<i>Plecotus spp.</i>	11	2.2	0.21
		<i>Myotis spp.</i>	22	4.4	0.43
		Barbastelle	1	0.2	0.02
D3	26th - 30th July 5 Nights 10.25 hrs p/n	C.pip	494	98.8	9.64
		S.pip	184	36.8	3.59
		Noctule	34	6.8	0.66
		Leisler's	14	2.8	0.27
		Serotine	12	2.4	0.23
		<i>Plecotus spp.</i>	1	0.2	0.02
		<i>Myotis spp.</i>	15	3	0.29
D4	26th - 30th July 5 Nights 10.25 hrs p/n	C.pip	2579	515.8	50.32
		S.pip	175	35	3.41
		Noctule	5	1	0.10
		Leisler's	22	4.4	0.43
		Serotine	122	24.4	2.38
		<i>Plecotus spp.</i>	48	9.6	0.94
		<i>Myotis spp.</i>	38	7.6	0.74
		Barbastelle	6	1.2	0.12

E1	22nd - 25th August 4 Nights 10.00 hrs p/n	C.pip	434	108.5	10.85
		S.pip	60	15	1.50
		<i>Myotis</i> spp.	25	6.25	0.63
E2	22nd - 25th August 4 Nights 10.00 hrs p/n	C.pip	73	18.25	1.83
		S.pip	33	8.25	0.83
E3	22nd - 25th August 4 Nights 10.00 hrs p/n	C.pip	288	72	7.20
		S.pip	46	11.5	1.15
		<i>Plecotus</i> spp.	6	1.5	0.15
		<i>Myotis</i> spp.	38	9.5	0.95
E4	22nd - 25th August 4 Nights 10.00 hrs p/n	C.pip	346	86.5	8.65
		S.pip	151	37.75	3.78
		<i>Plecotus</i> spp.	1	0.25	0.03
		<i>Myotis</i> spp.	9	2.25	0.23

F1	19th - 23rd September 5 Nights 11.75 hrs p/n	C.pip	2421.00	484.2	41.21
		S.pip	758.00	151.6	12.90
		Noctule	12.00	2.4	0.20
		<i>Plecotus</i> spp.	18.00	3.6	0.31
		<i>Myotis</i> spp.	27.00	5.4	0.46
		Serotine	3.00	0.6	0.05
		N.pip	6.00	1.2	0.10
F2	19th - 23rd September 5 Nights 11.75 hrs p/n	C.pip	1931.00	386.2	32.87
		S.pip	353.00	70.6	6.01
		Noctule	12.00	2.4	0.20
		<i>Plecotus</i> spp.	50.00	10	0.85
		<i>Myotis</i> spp.	43.00	8.6	0.73
		N.pip	4.00	0.8	0.07
F3	19th - 23rd September 5 Nights 11.75 hrs p/n	C.pip	3229.00	645.8	54.96
		S.pip	986.00	197.2	16.78
		Noctule	30.00	6	0.51
		<i>Plecotus</i> spp.	9.00	1.8	0.15
		<i>Myotis</i> spp.	408.00	81.6	6.94
		Leisler's	2.00	0.4	0.03
F4	19th - 23rd September 5 Nights 11.75 hrs p/n	C.pip	684.00	136.8	11.64
		S.pip	27.00	5.4	0.46
		<i>Plecotus</i> spp.	1.00	0.2	0.02
		<i>Myotis</i> spp.	10.00	2	0.17

4.3.6.1 *Myotis* spp. assemblages on site

Static monitoring recorded *Myotis* spp. across most locations, with peak levels in May (B2 = count 369) and September (F3 = 408). Lower but persistent levels of *Myotis* activity were also recorded at several other locations throughout the survey period. Overall, *Myotis* activity on site was generally low to moderate outside of the key peaks at B2 and F3, with relatively small numbers of passes compared with *Pipistrellus* spp. and no indication of consistently high activity on site.

Echolocation call characteristics of *Myotis* species recorded during static monitoring were analysed to determine species assemblages of bats present on site. Call characteristics considered included start frequency, end frequency, inter-pulse-interval and call duration (Russ, 2021). Social calls were also analysed where possible.

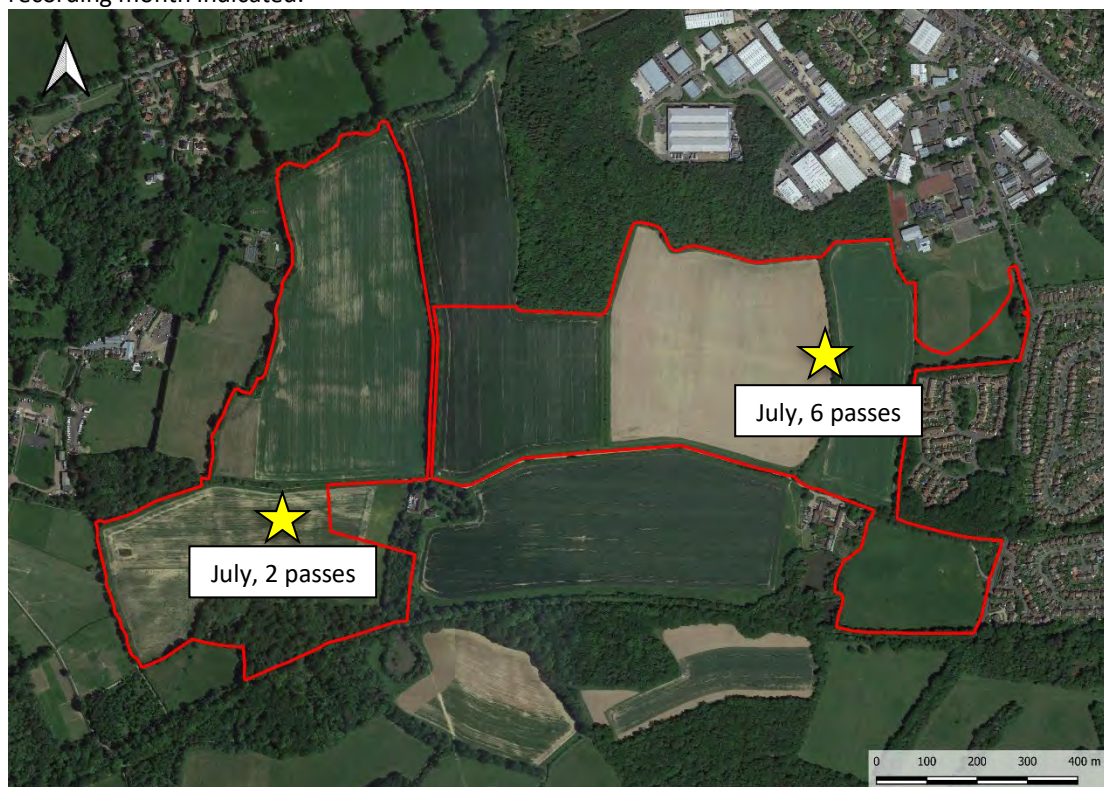
Following the analysis, and taking into account the nearby bat records, it is considered likely that the following *Myotis* species were present on site (ordered from most to least likely):

- Daubenton's Bat (*Myotis daubentonii*)
- Natterer's Bat (*Myotis nattereri*)
- Brandt's Bat (*Myotis brandtii*)
- Whiskered Bat (*Myotis mystacinus*)

4.3.6.2 Annex II species on site

Barbastelle activity was recorded only during the July static monitoring period and was confined to two logger locations. A single Barbastelle pass was logged at detector D2, equating to an average of 0.2 passes per night and 0.02 passes per hour over five nights. Slightly higher activity was recorded at D4, where six passes were registered, corresponding to 1.2 passes per night and 0.12 passes per hour. Overall, Barbastelle activity on site was very low and spatially restricted, indicating that the species is likely using the wider landscape opportunistically rather than relying on the site as a key commuting route or core foraging area. In addition, it should also be considered that Barbastelle bats were not recorded on site during the previous surveys in 2016 & 2018 (The Ecology Partnership) .

Figure 32. Locations Barbastelle Bats were recorded during 2024 static deployment (yellow stars) with recording month indicated.



4.3.7 Evaluation

During the activity surveys and static detector deployments, Common Pipistrelle (*Pipistrellus pipistrellus*), with Soprano Pipistrelle (*Pipistrellus pygmaeus*) also regularly recorded (which is to be expected based on a typical species composition sampled across an active season). Overall activity levels varied across different areas of the site, with repeated passes recorded along the western and northern boundary tree lines, particularly in the more sheltered north-western and south-western corners of the site. Activity along the eastern side was similar, but more focused around the line of trees and the boundary to the ancient woodland on the north. Species composition comprised primarily *Pipistrellus* spp. with the occasional *Plecotus* spp, *Myotis* spp, Noctule (*Nyctalus noctula*), Leisler's (*Nyctalus leisleri*), Nathusius' Pipistrelle (*Pipistrellus nathusii*) and Serotine (*Eptesicus serotinus*) also recorded (with these species considered common and rarer in England (Wray *et al* 2010). Barbastelles (*Barbastella barbastellus*) (considered one of the rarest species) were recorded during one month, with a maximum number of 6 passes detected in July.

The Bat Mitigation Guidelines (Collins, 2023) provides a standard method for assessing importance of bat assemblage. This approach has been developed to reflect geographic variations in species distributions. To determine the maximum possible score any site could achieve, a score is assigned to each species that could be present where:

- widespread in (almost) all geographies [score 1]
- widespread in many geographies, but not as abundant in all [score 2]
- rarer or restricted distribution [score 3]
- rarest Annex II species and very rare [score 4]

Once the score for each category has been calculated and summed to determine the maximum theoretical score, the threshold score needed for any assemblage to meet each geographic level of importance, can be calculated:

- Assemblage score meets or exceeds 45% of the maximum score: County importance
- Assemblage score meets or exceeds 55% of the maximum score: Regional importance
- Assemblage score meets or exceeds 70% of the maximum score: National importance

The threshold for any site in the Southern England achieving a score of –

- 20 would be classed as of at least ‘County’ importance,
- 25 would be classed as of ‘Regional’ importance,
- 32 classed as of ‘National’ importance.

Using this system, the site scores **26 points** for commuting and foraging bats (see **Table 10**) and is correspondingly considered to be of at least ‘**Regional**’ importance.

Table 10. Valuation of habitat for (a) commuting and (b) foraging bats after Wray et al. (2010). The points scored by the site are indicated in bold / italic type.

Rarity Category	Species	Score
Widespread	Common Pipistrelle	1
	Soprano Pipistrelle	1
	Brown Long-eared	1
Widespread in many geographies but not as abundant in all	Whiskered	2
	Brandts	2
	Daubentons	2
	Natterers	2
	Noctule	2
Rarer or restricted in distribution	Alcathoe	3
	Serotine	3
	Leisler’s	3
	Nathusius Pipistrelle	3
Rarest Annex II Species and very rare	Greater Horseshoe	4
	Lesser Horseshoe	4
	Bechstein	4
	Barbastelle	4
	Grey Long-eared	4
	Maximum Score (out of 45)	26

[REDACTED]

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4.5 Reptiles

4.5.1 Pre-existing Information

There were 32 Slow-worm (*Anguis fragilis*) records, 31 Grass Snake (*Natrix helvetica*) records, 21 Common Lizard (*Zootoca vivipara*) records and 1 Adder (*Vipera berus*) record identified by SXBRC within the 2km search radius.

4.5.2 Previous Survey Work (2016 & 2019)

Reptile surveys of the suitable habitats on-site were undertaken by The Ecology Partnership in September 2016. Populations of Common Lizards (*Zootoca vivipara*) and Slow Worm (*Anguis fragilis*) were identified on-site during these surveys.

Updated reptile surveys were conducted in 2019 between April and May 2019. Grass Snakes (*Natrix natrix*), Slow Worms And Common Lizards were identified on-site. The reptiles were recorded predominantly along the boundary to the west of the Imberhorne School and in the southeast parcel. No reptiles were located along the margins of the arable fields.

4.5.3 Updated Reptile Surveys (2024)

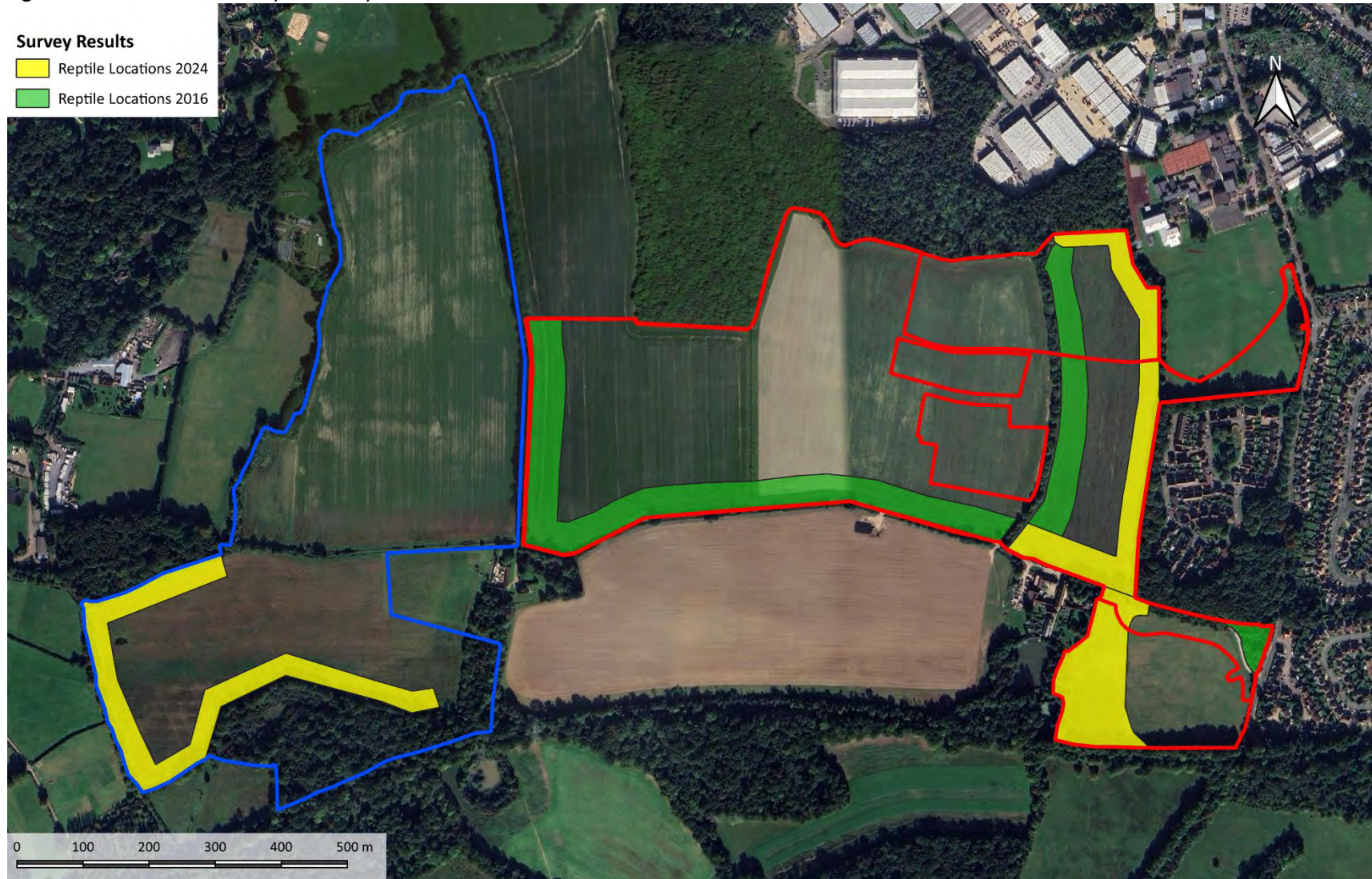
Following identification of suitable reptile habitat on site, presence / likely absence surveys were undertaken by Ecosupport Ltd in accordance with best practice guidance (Froglife, 1999). 265 Refugia were spread across the site and allowed two weeks to bed in. The refugia was then checked seven times during suitable weather conditions by experienced reptile workers.

The results of the reptile surveys carried out on site are displayed below in **Figure 37** and **Table 11**.

Table 11. The results of the reptile surveys undertaken in 2024 (Ecosupport).

Date	Weather Conditions (Temp, Wind, Cloud & Precipitation)	Common Lizard	Grass Snake	Slow Worm				Reptile Recorded / Location
				AM	AF	SA	J	
25/04/24	10C-13C, dry, sunny intervals, some mats warm	0	0	0	0	0	0	-
08/05/24	14C-18.5C, dry, full sun, most mats warm	1	0	0	0	0	0	Field 5
07/06/24	10C-17C, dry, 10-80% sun, mats cool or warm	2	2	0	0	0	0	Field 1 – GS Field 5 - CL
17/07/24	19C-21C, dry, 40-60% sun, mats cool or warm	1	1	1	0	0	0	Field 1 – GS Field 5 – AM Field 6 - CL
13/08/24	24C-21C, dry, 50% sun, mats warm or very warm.	1	0	0	0	0	0	Field 5 – CL
23/08/24	19°C-22C, dry after rain, 90% cloud, mats cool or warm	0	0	1	0	0	0	Field 6 – AM
04/09/2025	18-21C, dry, 50% cloud, mats cool or warm	1	0	0	0	1	0	Field 1 – CL Field 5 - SA

Figure 36. The results of the reptile surveys undertaken on site between 2016 & 2024.



4.5.4 On Site Suitability

Where the site has been left unmanaged for some time, the sward and structure has developed as such that a tussocky structure has developed around the boundaries of the arable parcels. The modified grassland in the southwest and southeast of the site also support the tussocky structure required by reptiles. It should be considered that due to previous use of the site for agricultural purposes, the majority of the site lacks suitable habitat for reptiles with suitable areas restricted to boundary vegetation of linear features across the site. Taking this, and the survey work into account, the site is considered to **Confirmed presence** of Reptiles on site.

4.5.5 Evaluation

Slow Worm (*Anguis fragilis*), Common Lizard (*Zootoca vivipara*), and Grass Snake (*Natrix Helvetica*) were recorded during the reptile surveys, with all individuals recorded under artificial refugia. The peak count comprised 2 Slow Worms (one adult male and one sub-adult) and two Common Lizards, recorded across multiple visits. No juvenile Slow Worms were recorded. Common Lizards were recorded on five of the seven survey visits, within Fields 1, 5, and 6. Grass Snakes were recorded on two occasions Field 1 only. Slow Worms were recorded on three survey visits, with single individuals on each occasion, including adult males and one sub-adult within Fields 5 and 6. It is considered likely that the populations are likely small and restricted to discrete habitat patches at certain areas of the site.

Froglife (1999) provides a means of evaluating reptile populations based on survey results using a density of 10 refuges per hectare. “low”, “good” or “exceptional” populations are based on numbers of adult reptiles recorded by one surveyor in one visit. Using this method, it is concluded that a **Low** population of Slow Worm, **Low** population of Viviparous Lizard and **Low** population of grass snakes are present on this site.

Table 12. Reptile population assessment Froglife (1999) - number of adult reptiles recorded by a surveyor in a single visit.

Species	Low Population (score 1)	Good Population (score 2)	Exceptional Population (score 3)
Grass snake	<5	5-10	>10
Adder	<5	5-10	>10
Slow worm	<5	5-20	>20
Viviparous lizard	<5	5-20	>20

Given that the density of refugia used during this survey exceeded the recommended guidelines of 5-10/ha, the observations are considered to provide an accurate representation of use of the habitats within the site boundary by reptiles, and a strong confidence in the overall population assessment.

4.6 Great Crested Newts

4.6.1 Pre-existing Information

SXBRC returned 29 records of GCN presence from within the 2km search radius.

4.6.2 Water Bodies Within 500 m

There were several ponds identified within 500m of the site (**Figure 38**), with the majority located within the woodland to the south of the site. A number of ponds were located within private property therefore not accessible during the most recent survey visits.

Figure 37. Plan displaying the location of the ponds within 500m of the site.



4.6.3 Previous Survey Work (2016 & 2018)

During the surveys undertaken in 2016 (The Ecology Partnership) the ditch within the site boundary was not found to contain GCN. However, the site lies adjacent to seven ponds that supported GCN (**Figure 39**), at least three of which are confirmed breeding populations owing to the identification of GCN eggs. When considered individually, ponds P9, P11 and P11a contained 'small' GCN populations. GCN eggs were also identified on vegetation within pond P11. While no eggs were identified in pond P9 and P11a, which was likely due to the lack of emergent vegetation which made egg searching difficult. Egg-laying may have taken place on areas not accessible to survey such as leaf litter.

The 2018 surveys indicated wider use of the local water bodies than indicated by the surveys undertaken in 2016. Ponds P12, P12a and P13 were only accessible to survey using eDNA, as such the population size for these ponds is unknown. Similarly, eggs were identified in pond P8 but no individuals were identified using the pond survey, so while a population of GCN is considered likely to use the pond, the size is unknown. However, pond P13 is considered a breeding pond as eggs were identified.

Figure 38. Results of the GCN surveys in 2018 (The Ecology Partnership, 2018)

4.6.4 Environmental DNA Survey (eDNA) (2024)

Of the waterbodies identified within 500m of the site, several were found to be either inaccessible or refused access. Waterbodies P1, D01, D02, 10L, 10B were subject to an eDNA survey. The results are displayed below in **Table 13**.

It should be noted that the pond system within the woodland has changed over time, resulting in the formation of additional subsidiary ponds that were not present in previous years (for example Pond 10L has developed as a subsidiary of Pond 10).

Table 13. eDNA results of the ponds identified within 500m of the site.

Pond / Ditch Number	eDNA Result
P1	Positive
10B	Negative
10L	Positive
D01	Negative
D02	Negative

4.6.5 Presence / Likely Absence Surveys (2024)

Presence / likely absence surveys were undertaken in March – May 2025 (with at least two surveys carried out within the mid April – mid May period as per best practice guidance (English Nature, 2001)). The results of the surveys are detailed below in **Table 14**.

Table 14. Great Crested Newt Survey Results (Ecosupport, 2024).

Date	Pond Name	Survey Methods	Start Time	End Time	Weather Conditions (Temp, Wind, Cloud &, Precipitation)	Water Turbidity (1 - Clear, 5 - No Visibility)	Vegetation Cover (%)	GCN			Smooth			Palmate		
								Male	Female	Unknown	Male	Female	Unknown	Male	Female	Unknown
29/04/2024	P1	Torching, egg search	20:19	06:34	Temp: 10-13, Wind: 1-3, Cloud Cover: 50%, Precipitation: 0	Mostly dry	90%	-	-	-	-	-	-	-	-	-
13/05/2024	P10	Bottle trapping, egg search torching	20:39	06:08	Temp: 10-14, Wind: 0-1, Cloud Cover: 60%, Precipitation: 0	4	30%	1	-	1	1	1	-	1	-	-
14/05/2024	P20	Bottle trapping, egg search torching	20:41	06:10	Temp: 11-13, Wind: 0-3, Cloud Cover: 65%, Precipitation: drizzle	4	70%	-	-	-	-	1	-	-	1	-
21/05/2024	P21	Bottle trapping, egg search torching	20:51	06:05	Temp: 12-15, Wind: 1-2, Cloud Cover: 55%, Precipitation: 0	4	80%	-	-	-	-	-	-	1	-	-

4.6.6 District Level Licensing (DLL)

At this stage the site has enrolled onto the Naturespace District Level Licensing (DLL) scheme under Licensing Certificate NSP1054MSDC (issued 11 September 2025) for planning application DM/23/2699 (associated with outline permission).

As stated within the NatureSpace GCN DLL Certification:

“This proposed development has been evaluated in relation to the terms and conditions of the District Licence and to the NatureSpace great crested newt strategy and no further compensation actions are required by the developer.

Once the planning authority has granted the developer an authorisation to cover works under their District Licence for great crested newts, licensable works may proceed at the site. The authorisation is a written letter, signed by the planning authority’s signatory, and it forms a separate document to the planning permission Decision Notice.”

For the full certification see **Appendix III**.

4.6.7 Evaluation

The site comprises of predominantly arable land with boundary grassland in addition to a woodland parcel on the southwest. The grassland and woodland do provide the suitable structure and heterogeneity required by terrestrial GCN. In addition, there are several waterbodies within 500m of the site, some of which have been confirmed to support GCN (The Ecology Partnership, 2018).

The surveys conducted in 2024 indicated that there was a **‘low’** population of GCN present within Pond 10 (Froglife 2001), with the pond being a likely non-breeding pond for low numbers of GCN (maximum count of 2 GCN). Incidentally, low numbers of common newt species were also identified during the 2025 surveys conducted.

Due to the presence of GCN within a number of ponds nearby to the site, and the close proximity of the ponds to one another, it is considered likely that GCN will be utilising several of the ponds nearby to the site.

4.7 Hazel Dormouse

4.7.1 Pre-existing Information

There were 3 records of Hazel Dormice (*Muscardinus avellanarius*) identified by SXBRC that were within the 2km radius.

4.7.2 Previous Survey Work (2016, 2018 & 2019)

During the Dormouse surveys were undertaken in 2016 (The Ecology Partnership), no dormice or evidence of their presence, such as nests or hazelnut shells eaten by Dormice were identified. During updated were conducted between October 2018 to October 2019. No evidence of dormice was identified during the survey period.

4.7.3 Dormouse Nest Tube Surveys (2024)

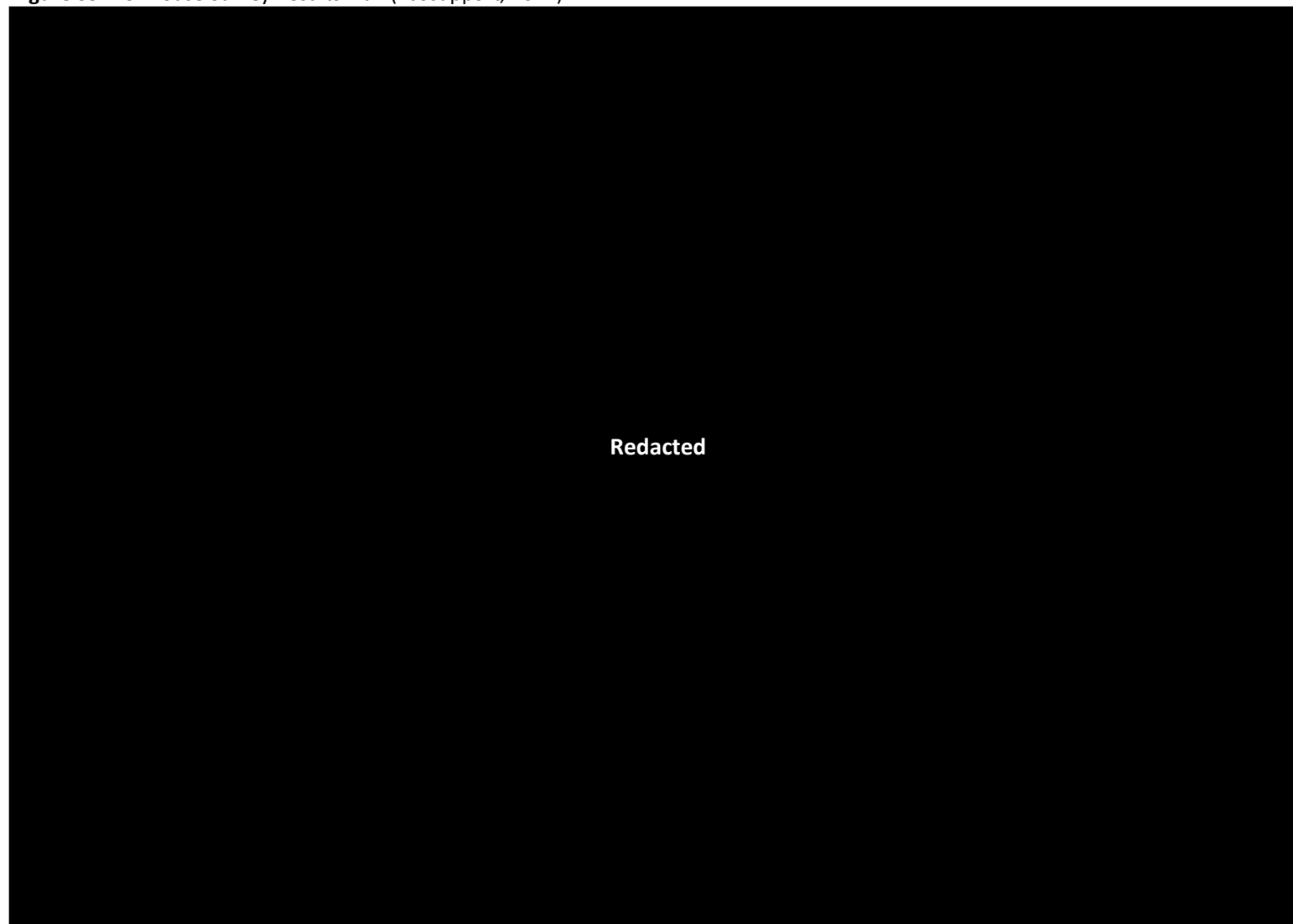
Table 15 displays the survey results including weather conditions at the start of each survey.

All surveys were undertaken in suitable conditions and the correct survey effort was achieved. During each visit, all nest tubes were examined for Dormouse presence, as well as any other indication of use as described below. As presence was established in August, surveys were not continued from this point.

Table 15. Summary of the Dormouse survey results (Ecosupport, 2024).

Date	Weather Conditions (Temp, Wind, Cloud & Precipitation)	Evidence of Dormice	Location
07/06/24	10°C-17°C, dry, 10-80% sun, mats cool or warm	No evidence seen	-
17/07/24	19°C-21°C, dry, 40-60% sun, mats cool or warm	No evidence seen	-
13/08/24	24°C-21°C, dry, 50% sun, mats warm or very warm.	One Dormouse nest found	Tube 33 in Field 3
14/08/24	19°C-22°C, dry after rain, 90% cloud, mats cool or warm	No evidence seen	-

Figure 39. Dormouse Survey Results Plan (Ecosupport, 2024).



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4.7.3 Evaluation

As one Dormouse nest was recorded within the western tree line of field 3, presence is highly likely to have been established within all areas of suitable habitat on site as well as within all connecting suitable habitat in the local area. Although no confirmed evidence of Dormice utilising the site for breeding purposes was recorded, it is considered likely there is a breeding population on-site due to the presence of nests.

Using the valuation criteria outlined within CIEEMs *Guidelines of Ecological Impact Assessment in the United Kingdom* (2018) the site can be considered to be of **County Value** for Dormice, although there is a significant amount of alternative suitable habitat within the immediate local area, including ancient woodland immediately to the north of the site.

4.8 Notable and Birds of Conservation Concern (BoCC)

4.8.1 Pre-existing Information

SXBRC have returned records for different NERC S41 listed species and Birds of Conservation Concern (BoCC) bird species. Due to the number of records, they will not all be reproduced here. However, some species include: Red Kites (*Milvus milvus*), Mute Swans (*Cygnus olor*), Swifts (*Apus apus*), Lapwings (*Vanellus vanellus*), Herring Gulls (*Larus argentatus*), Common Tern (*Sterna hirundo*), Woodcock (*Scolopax rusticola*), Kingfisher (*Alcedo atthis*), Skylark (*Alauda arvensis*), Yellowhammers (*Emberiza citrinella*), House Sparrow (*Passer domesticus*), Starlings (*Sturnus vulgaris*), Song Thrush (*Turdus philomelos*), and Barn Owl (*Tyto alba*).

4.8.2 Previous Survey Work

During the Breeding Bird Surveys (BBS) conducted in February, March and May 2017 (The Ecology Partnership) species identified on site include Yellowhammer (*Emberiza citrinella*) and Skylark (*Alauda arvensis*). Other species include Redwing (*Turdus iliacus*) and Fieldfare (*Turdus pilaris*) in addition to House Sparrow (*Passer domesticus*) and Song Thrush (*Turdus philomelos*).

4.8.3 Breeding Bird Surveys (Ecosupport, 2024)

A total of 49 bird species were recorded during the breeding bird surveys within or immediately beyond the site boundaries.

Of the species observed, 23 appear on the Birds of Conservation Concern (BoCC) as declining (red or amber lists) (Eaton *et al.*, 2015) and / or are listed as Species of Principle Importance (SoPI) under the NERC Act (2006).

The notable species recorded on site are detailed in **Table 16**.

Table 16. Protected bird species, BoCC Red and Amber listed species and Species of Principle Importance recorded on site.

Species	Legal/Conservation Status	Number of Pairs, nest locations, Males holding territory on site	Field(s) recorded
Mallard (<i>Anas platyrhynchos</i>)	BoCC Amber	Present in breeding season	
Stock Dove (<i>Columba oenas</i>)	BoCC Amber	Suspected breeding	1, 2, 3
Woodpigeon (<i>Columba palumbus</i>)	BoCC Amber	Probable breeding	all
Cuckoo (<i>Cuculus canorus</i>)	BoCC Red, S41	Present in breeding season but probably on passage	
Tawny Owl (<i>Strix aluco</i>)	BoCC Amber	Suspected breeding	2
Kestrel (<i>Falco tinnunculus</i>)	BoCC Amber	Present in breeding season	1, 3
Rook (<i>Corvus frugilegus</i>)	BoCC Amber	Present in breeding season, suspected nearby	
Marsh Tit (<i>Poecile palustris</i>)	BoCC Red, S41	Suspected breeding	1, 2, 3
Skylark (<i>Alauda arvensis</i>)	BoCC Red, S41	Suspected breeding	1, 2, 3, 4
Sedge Warbler (<i>Acrocephalus schoenobaenus</i>)	BoCC Amber	Present in breeding season but probably on passage	
Whitethroat (<i>Curruca communis</i>)	BoCC Amber	Suspected breeding	3, 4, 5, 6
Wren (<i>Troglodytes troglodytes</i>)	BoCC Amber	Suspected breeding	all
Starling (<i>Sturnus vulgaris</i>)	BoCC Red, S41	Successful breeding offsite but nearby	foraging in 6
Song Thrush (<i>Turdus philomelos</i>)	BoCC Amber, S41	Suspected breeding	all
House Sparrow (<i>Passer domesticus</i>)	BoCC Red, S41	Suspected breeding	3, 5, 6
Dunnock (<i>Prunella modularis</i>)	BoCC Amber, S41	Suspected breeding	2, 3, 5
Grey Wagtail (<i>Motacilla cinerea</i>)	BoCC Amber	Present in breeding season	5
Meadow Pipit (<i>Anthus pratensis</i>)	BoCC Amber	Present only early in breeding season; probable passage or wintering bird	
Greenfinch (<i>Chloris chloris</i>)	BoCC Red, S41	Present early in breeding season only	5
Linnet (<i>Linaria cannabina</i>)	BoCC Red, S41	Present early in breeding season only	1
Yellowhammer (<i>Emberiza citrinella</i>)	BoCC Red, S41	Suspected breeding	2, 3, 4

A total of 8 Red-listed and 13 Amber-listed Birds of Conservation Concern were recorded as using the site as a resource, or likely using the site. Of these, at least 10 species were found to be nesting/breeding or likely to be nesting/breeding within or in close proximity to the site. Red and Amber-listed species recorded on site with their SOS status description and approximate numerical range in Sussex (Sussex Ornithology Society, 2020) is as shown in **Table 17.**

Table 17. Red and Amber-listed species recorded on site with their SOS status description and approximate numerical range in Sussex

Species	SOS Status Description	Approximate Numerical Range (Breeding Pairs)
Mallard	Common	10,001-50,000
Stock Dove	Common	1001-5000
Woodpigeon	Abundant	500,001+
Cuckoo	Fairly Common	101-1000
Tawny Owl	Fairly Common	101-1000
Kestrel	Fairly Common	101-1000
Rook	Very Common	5001-30,000
Marsh Tit	Scarce	1-100
Skylark	Very Common	5001-30,000
Sedge Warbler	Common	1001-5000
Whitethroat	Very Common	5001-30,000
Wren	Abundant	30,000+
Starling	Common (but declining)	1001-5000
Song Thrush	Very Common	5001-30,000
House Sparrow	Very Common	5001-30,000
Duncock	Very Common	5001-30,000
Grey Wagtail	Scarce	1-100
Meadow Pipit	Very Common	5001-30,000
Greenfinch	Very Common	5001-30,000
Linnet	Common	1001-5000
Yellowhammer	Common	1001-5000

The status of most Red-listed and Amber-listed species known to be actually nesting/breeding, attempting to nest on site or indeed suspected as likely nesting are still regarded as either 'Abundant', 'Very Common', 'Common' or 'Fairly Common' within the County of Sussex. Marsh Tit (*Poecile palustris*) and Grey Wagtail (*Motacilla cinerea*) are regarded as 'scarce', although these species were only suspected to be breeding on site. In addition, the optimal habitat for these species will be retained under current proposals.

This status classification is based on the species having an average number of breeding pairs of 30,000+ for Abundant, 5001-30,000 for Very Common, 1001-5000 for Common, and 101 – 1000 for Fairly Common species annually within the County. Given the relatively small, single figure numbers of breeding or suspected breeding pairs within the site, it is not considered that the displacement of these numbers of 'Abundant, Very Common, Common or Fairly Common' Red and Amber listed bird species would be significantly detrimental to the overall County populations. On a more local level there will be a minor reduction in nesting and foraging resources within the site however, due to the considered low number of BoCC Red & Amber listed nesting pairs/territories present on site and the categorisation of the species using the site as a nesting and foraging resource during the nesting season, the site is considered to be of Low ecological value to breeding and nesting birds and it is not considered that the loss of bird populations and the communities present would be significantly detrimental on a County level.

A number of the Red & Amber listed species recorded on site are likely to be adaptive to the proposed housing scheme and associated landscaping and open space creation, these include Wrens. These species will adapt fairly readily to semi urban landscapes. With appropriate retention of habitats, linear features and the inclusion of suitable nesting features it would be considered reasonable that the housing proposal can provide suitable environments for these species to re-establish territories in the future.

4.9 Riparian Mammals

4.9.1 Pre-existing Information

There were no records of Otters (*Lutra lutra*) or Water voles (*Arvicola arvensis*) returned by SxBRC.

4.9.2 Site Assessment

The ditches present on site do not offer the vegetation structure needed by Water Voles with largely unvegetated banks and very low levels of water. Therefore, the site itself is considered to be of negligible potential for Water Voles.

4.10 Hedgehogs

4.10.1 Pre-existing Information

There were 37 records for West European Hedgehogs (*Erinaceus europaeus*) within 2km of the site identified by SxBRC.

4.10.2 Site Assessment

Suitable habitat for Hedgehogs is present on site in the form of grassland, hedgerows and mature tree lines. Therefore, the site itself is considered to support *suitable habitat for foraging and commuting hedgehogs*.

5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION

5.1 Introduction

The CIEEM guidelines (CIEEM 2018) require that the potential impacts of the proposals should be considered in absence of mitigation. In order for a significant adverse effect to occur, the feature being affected must be at least of local value. However, in some cases, features of less than local value may be protected by legislation and/or policy and these are also considered within the assessment. Although significant effects may be identified at this stage of the assessment, it is often possible to provide appropriate mitigation.

5.2 Site Preparation and Construction

5.2.1 Impacts to Habitats

It is assumed the proposals will predominantly involve the loss of the areas of cropland, grassland and scrub, which are considered to be of value at the **site-local** level of significance. The development works would also take place adjacent to the retained woodland to the north and south in addition to linear features of local value and therefore construction works could result in both direct (noise, dust, water pollution) and indirect (roost zone compaction) impacts. The loss or damage to these habitats and potential indirect effects would have a **moderate adverse impact** to habitats of **local-regional** value (due to the presence of ancient woodland on the northern).

5.2.2 Impacts to Wildlife

5.2.2.1 Bats

The site has been identified as being of regional importance for both foraging and commuting bats. The works will result in a loss of foraging resources (grassland, trees, scrub) and any disruption to commuting routes (from external lighting or loss of linear features) would likely have a **moderate adverse impact** at the **regional** level of significance.



Open excavations at night pose a threat to commuting and foraging nocturnal wildlife (i.e.  Hedgehogs can become trapped). There is a **potential negative impact** at **local** level.

5.2.2.3 Reptiles

Low populations of Slow Worms, Common Lizards and Grass Snakes were recorded around the boundaries of the site and will be directly impacted upon by the proposed development. Without mitigation procedures put in place, this would result in the direct harm of individuals and a reduction in the local population. This would therefore be contrary to the provisions of the Wildlife & Countryside Act (1981) and would create a significant adverse impact to local reptile populations. This will have a **moderate adverse impact** at the **Local** level of significance.

5.2.2.4 Great Crested Newts

A low population of GCN were recorded within pond 10, which was located in the woodland within Gullage Wood, on the south of the site during the 2024 surveys. A maximum count of 1 adult GCN in addition to eggs were recorded during the surveys in 2024.

In addition, positive eDNA results were recorded in ponds P1 and 10L in 2024. Despite this, the ponds are located adjacent to the SANG, where no residential development will take place, and the site has been accepted onto Naturespace's District Level Licensing scheme. The proposals will result in the loss of habitats which could be considered to offer suitability for GCN in the form of longer grassland and field margins. Therefore, in the absence of mitigation, the works have potential to cause disturbance, harm and even death of individual GCN. This will have an **adverse impact** at the **Local** level of significance.

5.2.2.5 Dormice

The presence of Dormice was established on-site within the hedgerow bordering the western boundary of field 3. Although this hedgerow is to be retained, some areas of suitable habitat will require removal in order to facilitate the development (hedgerows / scrub). Without mitigation procedures in place, this would result in the direct harm of individuals and a reduction in the local population. This would therefore be contrary to the provisions of the Conservation of Species and Habitats Regulations (2019). This will have a **moderate adverse impact** at the **County** level of significance.

5.2.2.6 Birds

Whilst the tree lines and hedgerows situated around the site boundaries will largely be retained, areas of Bramble scrub and some trees on site will require removal. This has the potential to directly impact nests and/or create disturbance if undertaken during bird nesting season. Therefore, it is considered the development will result in a **minor adverse impact** at the **Local** level of significance.

Removal of small sections of hedgerow and trees removal are required to facilitate site access. Given the area to be lost in comparison to the total area, it is not considered this will have a significant negative impact and is unlikely to impact the sites potential to support nesting birds, particularly as the woodland on the south is to be retained.

Noise generated during on site activities has the potential to impact upon the nesting birds on site. This would have a **likely negative impact** at a local level.

5.3 Site Operation

5.3.1 Impacts to Wildlife

The development will result in an increase in lighting within the general area from streetlights and external lights on the new houses. This can affect the behaviour, particularly foraging, of nocturnal wildlife. Therefore, an **adverse impact is likely** on [REDACTED] Bats and Barn Owls at the **regional** level (due to the presence of Barbastelles).

5.3.2 Impacts on Designated Sites

5.3.2.1 Increased Recreational Disturbance

The site is situated 1.4km from High Weald Area of Natural Beauty (AONB) and Worth Way Country Park runs adjacent to the site along the south. It is Natural England's advice that all net increases in residential development within the 5.6km 'Zone of Influence' are likely to have a significant effect on the SPA either alone or in-combination with other development. As such the increase in visitor numbers would have an **adverse impact** to features of **International Significance**.

5.3.2.2 Impacts to Local Wildlife Sites

The site is located adjacent to Worth Way LWS and 1.5km from Lobbs Wood & Furnace LWS. Due to the close proximity of the development to these Local Wildlife Sites an **adverse impact is likely** to features of **county significance** as a result of the development in the form of air, dust and aquatic pollution during the construction phase and post-development.

Finally, the proposed development may result in an increase in visitor numbers to the LWS', due to the public rights of way on the south of the site (proposed SANG), which would have an **adverse impact** to features of **County Significance**.

6.0 RECOMMENDATIONS

6.1 Introduction

The below sections outline a number of recommendations for further survey work required to fully assess the potential ecological impacts of the development and ensure and proposed mitigation and compensation appropriate and proportionate. In addition to this, measures are outlined to protect the existing features of value and provide enhancements post development.

6.2 Bats

6.2.1 Updated Ground Level Tree Assessments (GLTA)

For any trees to be removed under the current proposals an updated ground level roost assessment should be undertaken immediately prior to removal. This should be done over winter when the trees are not in leaf (and the PRFs are more visible). If any trees that require removal have been identified as supporting PRFs, further survey work will be required to ascertain if they support any bat roosts. The details of the potential further survey work can be found below in section **6.2.1.1**.

6.2.2 Further Surveys

6.2.2.1 Initial Potential Roost Feature (PRF) Inspection Surveys

For all trees assessed as PRF-M (potential for maternity roosts and/or multiple bats) (see **Figure 30**), a total of three PRF inspection surveys will be required between May – September (with at least two between May – August), with these visits spaced at least 3 weeks apart (BCT, 2023).

6.2.2.2 Precautionary Working Method Statement (PWMS)

For trees assessed as PRF-I (suitable for individual bats only) (**Figure 30**), the *Roost Resource Approach* will be followed in which no further surveys are required, and a precautionary working method statement will be adhered to (BCT, 2023). The following Precautionary Working Method Statement (PWMS) will be adopted to during works to the tree.

- Any PRFs will be inspected using an endoscope under the supervision of a suitably qualified ecologist immediately prior to tree felling/works. This includes any Ivy being carefully pulled back and checked for bats.
- These works will be conducted between March and October (dependent on suitable weather conditions).
- If all features have been fully inspected and no evidence of bats is identified, the tree must be immediately felled.
- If any features cannot be fully inspected, the tree must be soft-felled.
- If evidence of bats is identified or if any PRF-Ms are found, further survey work will be required. In particular, if bats are found to be present, roost characterisation surveys

will be carried out to inform a European Protected Species Licence and a full mitigation strategy will be required.

6.2.3 Sensitive Lighting

The following lighting strategy should be adopted on site.

A document (*Guidance Note 08/23 Bats and Artificial Lighting at night*) has been produced via a collaboration between the Institute of Lighting Professionals (ILP) and the Bat Conservation Trust (BCT), which outlines the latest recommendations to minimise the impacts of increased artificial lighting on bats. The key recommendations within this document have been outlined below and will be implemented provided there are no conflicts with any legal limits of illumination (in which case a suitable compromise should be reached).

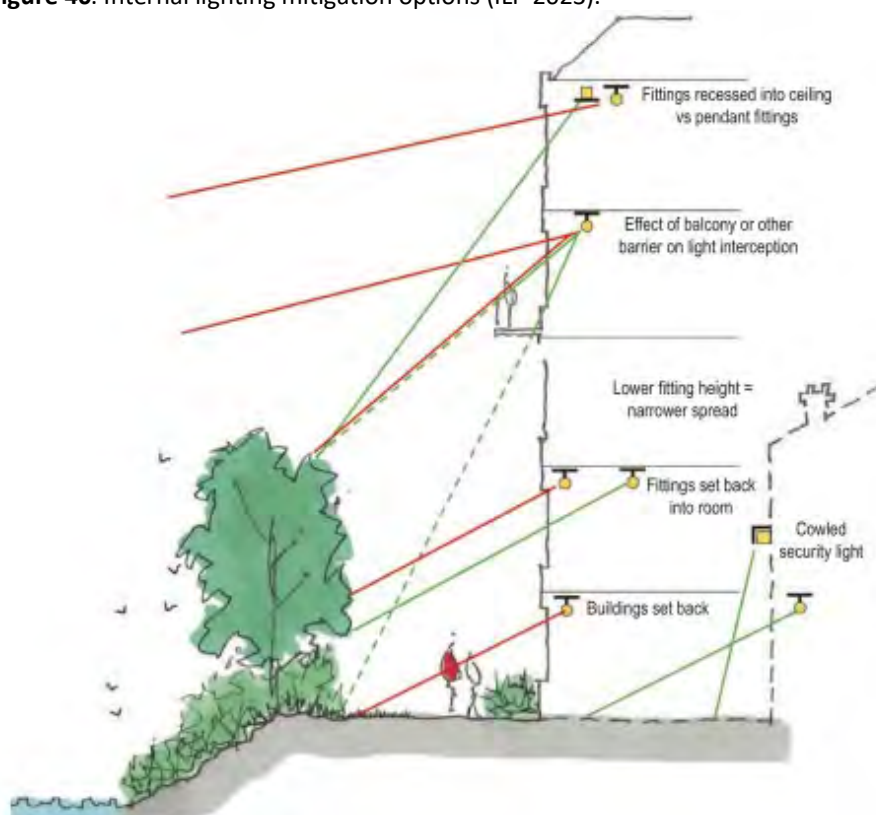
‘Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on Key Habitats and features:

- *All luminaires will lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used*
- *LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability*
- *A warm white light source (2700Kelvin or lower) will be adopted to reduce blue light component*
- *Light sources will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012)*
- *Internal luminaires can be recessed (as opposed to using a pendant fitting – See **Figure 41**) where installed in proximity to windows to reduce glare and light spill*
- *Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges (see Case Study 1)*
- *Column heights will be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards*
- *Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01*
- *Luminaires will always be mounted horizontally, with no light output above 90° and/or no upward tilt*
- *Where appropriate, external security lighting will be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate*
- *Use of a Central Management System (CMS) with additional web-enabled devices to light on demand Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS*
- *The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare,*

poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues. See Case Study 6

Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely'

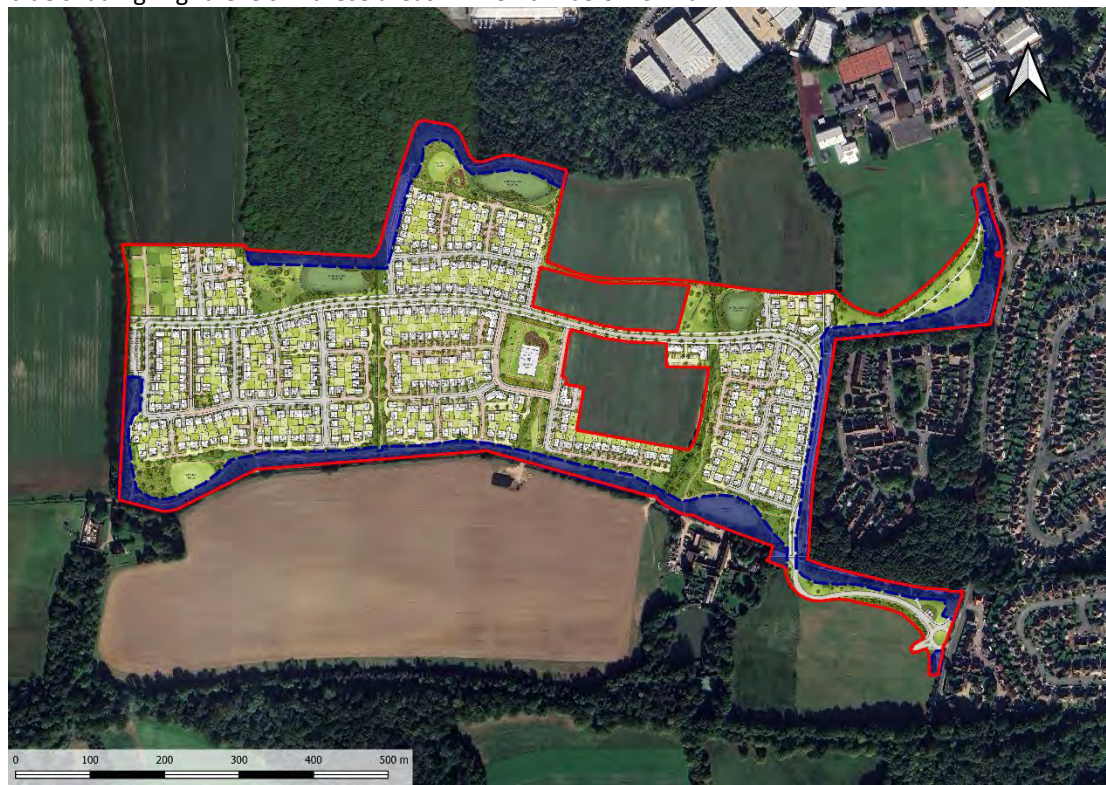
Figure 40. Internal lighting mitigation options (ILP 2023).



6.2.4 Dark Corridors

As light the sensitive Barbastelle Bat (*Barbastella barbastellus*), was recorded on site during static monitoring (albeit low numbers), dark corridors will be implemented into the scheme to preserve suitable commuting routes for this species. Within these areas light levels will be maintained at levels below 0.4 lux. The dark corridors will be situated along the retained boundary trees around the residential section of the development, and within the SANG on the west of the site.

Figure 41. The location of the dark corridors to be implemented into the development, indicated by blue shading. Light levels in these areas will remain below 0.4 lux.



[REDACTED]

[REDACTED]

[REDACTED] Any open pipework should be checked and then capped nightly.

[REDACTED]

[REDACTED]

[REDACTED]

Redacted

Reptile Mitigation Strategy

6.4.1 Introduction

Due to the legal protection relating to reptiles, it is necessary to implement mitigation to ensure these animals are not harmed as a result of the impending construction works and to ensure that there is no net reduction in the conservation status of reptiles in the local area. Therefore, this mitigation strategy has been produced in accordance with best practice guidelines relating to reptiles and development, published by Gent & Gibson (1998) and the HGBI (1998).

The desirable approach is to avoid development within the areas used by reptiles. If this is not possible, reptiles should be moved to areas within the site that are to be retained, enhanced and managed to provide suitable habitat (relocation). The steps in the mitigation strategy for reptiles are as follows:

- Step 1:** Identification of suitable release area. If a separate site is to be used, it may be necessary to undertake a reptile survey of any potential receptor site to establish the status of existing reptile populations on the site;
- Step 2:** Production and agreement of mitigation strategy;
- Step 3:** Habitat creation, enhancement and/or management of receptor site area (if required);
- Step 4:** Set up of development site with appropriate numbers of artificial refugia and reptile exclusion fencing;

- Step 5:** Capture of reptiles on site and translocation/relocation. This stage must take place between March and September, in order to include the optimal period for reptile capture;
- Step 6:** Destructive search of suitable natural reptile refuges;
- Step 7:** Production of completion report;
- Step 8:** Monitoring success of mitigation.

6.4.2 Receptor Area

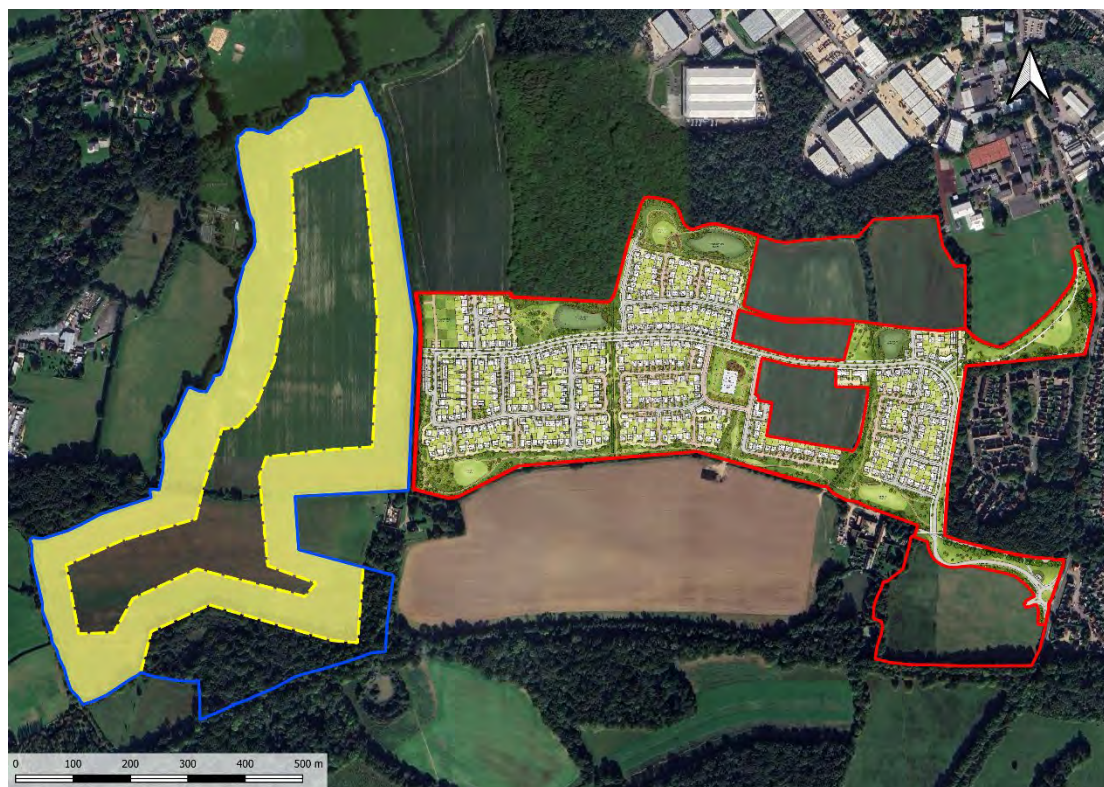
6.4.2.1 Location and description

Reptiles captured within the residential area will be translocated to any areas within the SANG (**Figure 44**), where no development will take place. The habitats in this area support the structure and heterogeneity required by reptile species (Edgar et al, 2010). Prior to the translocation this area should be surveyed by a suitably qualified ecologist to ensure that the habitats on site are suitable for reptiles. Once a receptor site has been chosen, the grassland present within this area will be left to grow and not cut by the landowner prior to the reptile translocation taking place to allow further development of tussocks within this area.

6.4.2.1 Enhancement

The receptor area will be managed to benefit reptiles. This will be achieved by cutting the grass one - two times per year and at different times to encourage diversity of plant species present. This cut will be done at a height no lower than 30cm using a hand-held strimmer's to ensure that reptiles are not harmed during the management works.

Figure 43. Indicative location of the proposed receptor site (yellow) within the SANG on the west of the site.



6.4.3 Capture

6.4.3.1 Method

The methodology used for the capture of reptiles will be the same as that used during the survey. Artificial refugia, made from materials such as roofing felt or corrugated metal, allow reptiles to be detected and captured relatively easily. HGBI guidelines (1998) state artificial refugia should be distributed across the site at a minimum density of 50/ha. However, a considerably higher density of refugia will be used in order to maximise the catching potential. These will be distributed across the site. During suitable weather conditions captured reptiles will then be placed within the protected receptor area and transported within a bucket with a perforated lid.

6.4.3.2 Timing

The optimum period for capture of reptiles is April to June and September, however it is possible to capture reptiles outside of this period providing weather conditions are suitable. By ensuring that all reptiles are translocated by the end of September, it will allow sufficient time for reptiles to find suitable hibernation sites within the receptor site.

6.4.3.3 Capture Effort

The survey indicates that there are '**Low**' populations of Slow Worms, Common Lizards and Grass Snakes present on site. The HGBI (1998) and Natural England (2011) guidelines recommend a minimum of 60 capture effort days are to be expended (**Table 18**) however given the limited areas that reptiles were recorded and low counts, 30 days trapping would be considered to be a more proportionate capture effort. Reptile mats will be deployed at an increased density of >100 / ha to increase capture rate and help reduce the number of capture days required. The capture effort will be reviewed on an *ad hoc* basis during the translocation (i.e. when 5 consecutive visits have been carried out in ideal weather conditions¹ where no reptiles are captured (or seen), it is considered that the relocation can come to an end).

Table 18. The minimum capture effort for common reptile species based on HGBI (1998). The figures relevant to this scheme are emboldened and italicised.

Species	Population Size (adult density)	Refugia Density / ha	Minimum No of Trapping Days in Good Weather
Slow Worm	<i>High (> 100 / ha)</i>	<i>100</i>	<i>All suitable days between March and September (min 90 suitable days)</i>
	<i>Medium (> 50 / ha)</i>	<i>100</i>	<i>All suitable days between March and September (min. 70 suitable days)</i>

¹ Suitable weather conditions are generally considered to be between 10 and 18°C with intermittent sunshine and little or no wind and rain (see Froglife 1999).

	Low (< 50 / ha)	50	60 Suitable days (30 days considered proportionate due to limited population size)
Common Lizard	High (> 80 / ha)	100	All suitable days between March and September (min 90 suitable days)
	Medium (> 40 / ha)	100	All suitable days between March and September (min. 70 suitable days)
	Low (< 20 / ha)	50	60 Suitable days (30 days considered proportionate due to limited population size)
Grass Snake	High >4	100	All suitable days between March and September (min 90 suitable days)
	Medium 2-4	100	All suitable days between March and September (min. 70 suitable days)
	Low <2	50	60 Suitable days (30 days considered proportionate due to limited population size)

6.4.3.4 Destructive Search

Following the conclusion of the relocation, a destructive search of the site is required. This would entail the sensitive stripping of vegetation on site using a toothed bucket where habitat is suitable for reptiles and can be focused on areas where reptile numbers were highest.

6.4.3.5 Protection of Receptor

The proposed receptor area must be located within an area that is safeguarded from future development. If applicable a small area of post and rail fencing will be installed, to ensure the protection of the reptile receptor area.

6.4.3.6 Post-completion Monitoring

Given the population size of Slow Worms present and the residential nature of the site, it is not considered necessary to conduct any monitoring post completion.

6.5 GCN

6.5.1 District Level Licensing (DLL)

The site has enrolled onto the Naturespace District Level Licensing (DLL) scheme under Licensing Certificate NSP1054MSDC (issued 11 September 2025) for planning application DM/23/2699 (associated with outline permission).

As stated within the NatureSpace GCN DLL Certification:

“This proposed development has been evaluated in relation to the terms and conditions of the District Licence and to the NatureSpace great crested newt strategy and no further compensation actions are required by the developer.

Once the planning authority has granted the developer an authorisation to cover works under their District Licence for great crested newts, licensable works may proceed at the site. The authorisation is a written letter, signed by the planning authority’s signatory, and it forms a separate document to the planning permission Decision Notice.”

For the full certification see **Appendix III**.

Mitigation and compensation measures will be fully outlined in the DLL methodology. However, the following precautionary approach will be applied to all groundworks impacting suitable habitat for GCN.

6.5.2 Toolbox Talk

Before any works commence an ecologist must brief all site operatives. This briefing must include details of the legal protection of GCN, all precautionary steps that must be taken during the proposed works, an annotated key detailing the appearance, characteristics and optimal habitat of GCN as well as what actions need to be taken if a GCN is found on site.

6.5.3 Sensitive Habitat Removal

Any scrub, trees or shrub requiring removal will be reduced in height gradually (50cm and then 10cm) under the direct supervision of an ecologist which will encourage any sheltering amphibians to move out of the area prior to removal of the scrub. An ecologist will undertake a fingertip search of the remaining scrub stalks / vegetation bases prior to clearance to ground level. Where amphibians or reptiles are found, they will be moved to the adjacent woodland strip under cover.

6.5.4 Avoidance of Disturbance, Killing and Injuring

To avoid any potential impacts to newts the following methods will be employed;

- Timing – works will be carried out to avoid the hibernation period typically when night temperatures began to drop to a freezing point between mid – late October – late February / early March.
- Semi-permanent HDPE exclusion fencing will be erected around the perimeter of the site supplemented by Temporary Amphibian Fence (TAF) drift fence and pitfall trapping (**Figure 45**). This will ensure no newts / reptiles are harmed or killed during the compensation.

- Destructive search – Will be conducted under the supervision of an SQE of any piles of waste vegetation / brash piles after an appropriate capture and exclusion programme has been implemented.

6.5.5 Site Drainage

To avoid potential conflicts between the installation of drains around the site and amphibians potentially becoming trapped in them, every drain will have a 45-degree angled curb 1 m either side of it. This will prevent any amphibians who hit the flat surface of the curbs and following it falling into the drains as they will have a means of getting over these linear features. As an additional form of mitigation against trapped amphibians, each drain will also be fitted with an escape ladder. The mesh ladders available from the British Herpetological Society (BES) should be used as they have proved successful in trials (**Figure 45**) (McInroy & Rose, 2015).

Figure 44. Image of mesh amphibian escape ladders that will be placed in every open drain on site.



6.6 Dormice

6.6.1 European Protected Species Licence

The proposed plans will require removal of sections of woodland / hedgerow and Bramble scrub on-site. Although only a single Dormouse nest was recorded within a hedgerow, the hedgerow is connected with suitable habitats within the wider site, therefore these habitats are also likely to support Dormice. Dormice should therefore be assumed to be present within all areas of the site. A European Protected Species Licence (EPSL) will be required for any works impacting the woodland / hedgerows / mature trees and bramble scrub and such works must be carried out under the EPSL.

N.B. The areas in which the Dormouse nests was recorded will be retained entirely, however the hedgerow may be thinned to facilitate the development.

6.6.2 Vegetation Clearance

It is expected that a total 0.164ha of suitable Dormouse habitat in the form of hedgerows will be cleared under a single stage / two stage methodology (see **Figure 46** for location of sensitive vegetation removal). Any Dormice discovered during the works will be either be left undisturbed in place (if deemed safe by the ecologist) or will be relocated to a similar location to where they were found in retained habitat (e.g. if the animal is found within leaf litter, then the animal will be placed in leaf litter). 9 No. Dormouse nest boxes will be placed into the woodland and treelines along the southern and northern boundaries as close to the works as possible to act as receptors in the unlikely event of any Dormice being found.

Figure 45. Proposed areas of suitable habitat to be cleared on site (red = bramble scrub, orange = mature trees / treeline) with arrows indicating direction of two stage clearance.



6.6.2.1 Clearance Methodology

The following methodologies outline a two stage option for the clearance work to be carried out once a NE EPSL has been granted.

Two stage methodology

Clearance of the vegetation within the site will be carried out sympathetically and under the supervision of a Licenced Ecologist (LE) who will search for nests by hand and capture Dormice (if necessary) before and during clearance works. If any active animals are discovered during the works then these animals will be captured and placed, with their original nest where present, within previously erected nest boxes (outlined above). If any hibernation nests/potential hibernation nests are identified during the first stage of the clearance over winter, these will be left undisturbed, with vegetation retained in a buffer around the nest, due to the vulnerable nature of hibernating or torpid Dormice. All arisings / cuttings will also be removed from site each day following a hand search by the licenced ecologist to prevent re-occupation.

- The licenced ecologist will deliver a toolbox talk to the vegetation clearance contractors, detailing the sensitive measures required. The ecologist will then supervise all vegetation clearance. No clearance will be undertaken without the supervision of the ecologist.
- To avoid any impacts to Dormice the removal of all vegetation will adopt a two staged approach with the upper sections removed over winter (when Dormice may be hibernating in the lower parts) and the trunk and roots removed during spring.

Winter clearance

This should remove sufficient vegetation to persuade Dormice emerging from hibernation in April or May to move to more appropriate habitat nearby. Once emergence is complete, by the end of May, full clearance of the area can continue. Winter clearance should thus be planned as a two- stage process.

Trees and shrubs within the area in question should be cut down between November and March inclusive, to avoid both the bird nesting season and the majority of the period when Dormice might be found in nests above ground. Clearance should be done by hand and in a sensitive manner, to minimise the likelihood of disturbing or killing hibernating Dormice. Similarly, the process of removing the cut material should, as far as possible, be designed to protect Dormice hibernating on the ground. This can involve such techniques as:

- Sacrificing a single 'haul- route', which has first been cleared by hand if necessary;
- Using a long-reach mechanical grab and/or limiting the number of 'drag-lines' along which stems are removed; and/or
- Directional felling to minimise the ground impact.

In addition to the above, all vegetation being removed, and the ground beneath, will first be hand searched as far as possible to identify the presence of any hibernation nests. Similarly, any proposed drag/haul routes will first be searched by hand before such usage commences. If any hibernation nests are identified, these will be retained and protected and, if present within a haul/drag routes these will be re-routed to avoid the retained nest.

Spring clearance

Once the above works have been completed, the roots will be removed using hand tools where possible or with a digger using a toothed bucket under the supervision of the licenced ecologist from mid-April onwards (provided the temperatures have been warm enough for Dormice to emerge from hibernation at the discretion of the ecologist).

6.6.3 Minimising Disturbance

Prior to construction works commencing the retained woodland / tree lines / scrub will be protected from damage during the works. They will be fenced using Heras fencing or similar to prevent access by machinery. Where large mature trees are present, they will be protected using standard arboricultural tree protection measures which include protection of the canopy and prevention of root compaction. Access will not be permitted behind this fencing by construction personnel. This will protect Dormouse habitat from direct damage/disturbance and dust. Signage will also be added (on top of the usual warnings for tree protective fencing) stating things such as:

Protected Dormouse Habitat

It is an Offence to Damage / Disturb this Habitat

This will also provide protection for wildlife species, including [REDACTED] that may be using the margins of the site as well as bats, invertebrates, reptiles and other mammals. No vehicles will enter the protective ring fencing and no materials will be stored within their circumference. All protective fencing must be in place prior to any construction machinery arriving on site, before any works on site get underway, and will remain in place until all work is completed. This will minimise the level of disturbance within the boundary habitat / buffer areas during the works and ensure the habitats and any wildlife species that may be using them are protected.

6.6.4 Habitat Compensation / Connectivity

Although the vegetation clearance will not result in any habitat fragmentation, To compensate for the loss of suitable dormouse habitat as part of the proposed development replacement hedgerow habitat must be created. As outlined for breeding birds and within this document, these hedgerows should include at least 50% thorny species including Hawthorn, Blackthorn and Holly, to prevent increased predation by cats. This should also be included within the buffer planting around the woodland parcel. They should also incorporate species which benefit Dormice by comprising of a variety of flowering and fruiting species to provide an

optimum food resource as well as shelter and nesting opportunities. Specific details will be set out in the method statement which will support the dormouse EPS mitigation license.

The clearance of the vegetation won't result in any fragmentation of habitat, with connectivity maintained around the boundaries of the site.

6.6.5 Mitigating Operational Impacts

6.6.5.1 Lighting

A sensitive lighting scheme for the site will be implemented as described in **Section 6.2.3** which includes specific recommendations for lighting types to mitigate against the impact of artificial lighting on nocturnal species. Where there is any light spill into the newly created and retained boundary habitats, this is also kept to a minimum level of no higher than 0.5 Lux. By extension, this strategy also ensures the boundary vegetation areas being used by Dormice (and the new planting) will also avoid any additional light spill.

6.6.5.2 Cat Predation

To minimise the risks of cat predation once the houses have been completed and the new occupants moved in, thorny species (such as *Crataegus monogyna*) will be planted up within the retained hedgerows and mixed scrub on site and along the boundaries of the treelines at a minimum density of 1 per linear metre. As these species mature, they will provide a natural deterrent to cats moving into wooded areas on site.

6.6.5.3 Dormouse Boxes

As iterated in the above sections, prior to the commencement of vegetation removal, at least 9 No Dormouse boxes will be installed by a suitably qualified ecologist in suitable habitat to be retained to enhance the site for Dormice. The boxes will be checked at years 1 – 10 post clearance works by a licenced ecologist and the data submitted to the National Dormouse Monitoring Programme (NDMP).

6.6.6 Newly Planted Areas

Scrub / tree planting will be carried out within the application site prior to the commencement of works that will compensate for the loss of vegetation suitable for Dormice. These areas will require appropriate management, detailed and secured by the eventual EPS licence, to ensure they remain suitable for use by Dormice.

6.6.7 Responsibility

The plants will be managed for a minimum period of 12 months by the developer post completion of development, covering the first part of the establishment period. Protection, maintenance and monitoring of the newly planted areas will be safeguarded within the granted EPSL work schedule. Ownership / management responsibilities for the POS will then be transferred to a management company which is as yet unappointed.

6.7 Breeding and Nesting Birds

In order to avoid disturbance of nesting birds or damage to their nests, all demolition and habitat removal works will be undertaken outside of the bird nesting season (typically March – August dependent on weather). If this is not possible, sections to be cleared should be thoroughly checked by a suitably qualified ecologist immediately prior to clearance. If any active nests are found they should be left undisturbed with a suitable buffer of vegetation (5m) until the nestlings have fledged.

6.8 Nitrogen Mitigation in Solent

The site is likely to result in an increase in nitrogen run-off to the Solent through added waste to the wastewater treatment works due to the addition of new dwellings. Natural England has laid out guidance for calculating and mitigating any increased nitrogen from new development (Natural England 2022). A nitrogen budget calculation will need to be completed to measure the amount of increased nitrogen from the development and mitigation will be required to offset this.

6.9 Biodiversity Net Gain (BNG)

A full BNG & HMMP report will be produced to accompany this document.

6.10 Enhancements

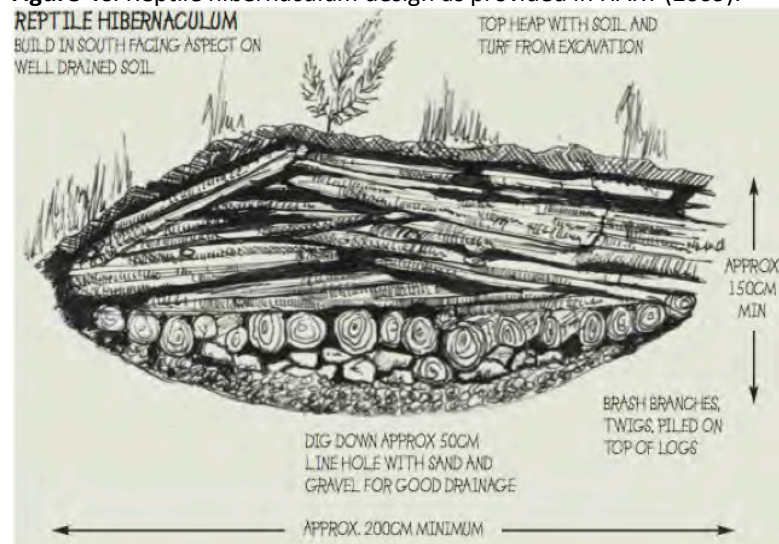
The proposed enhancements will be incorporated into the residential portion of the development. Enhancements for the SANG on the western part of the site will be detailed in a separate document.

6.10.1 Reptiles

6.10.1.1 Reptile Hibernacula

To act as a biodiversity enhancement for reptiles, the site will include 2 hibernacula to provide any reptiles that recolonise these areas suitable locations to bask and hibernate within. The hibernacula will be created following the specification outlined within Reptile Habitat Management: Guidelines for Landowners (HART, 2009) (**Figure 47**).

Figure 46. Reptile hibernaculum design as provided in HART (2009).



6.10.1.2 Log Piles

In addition, it is recommended that 2 log piles will be constructed, on the north and south site boundaries, to provide sheltering and hibernating opportunities for a range of wildlife such as reptiles and small mammals, as well as attracting invertebrates as a foraging resource.

6.10.2 Bats

6.10.2.1 External Bat Boxes

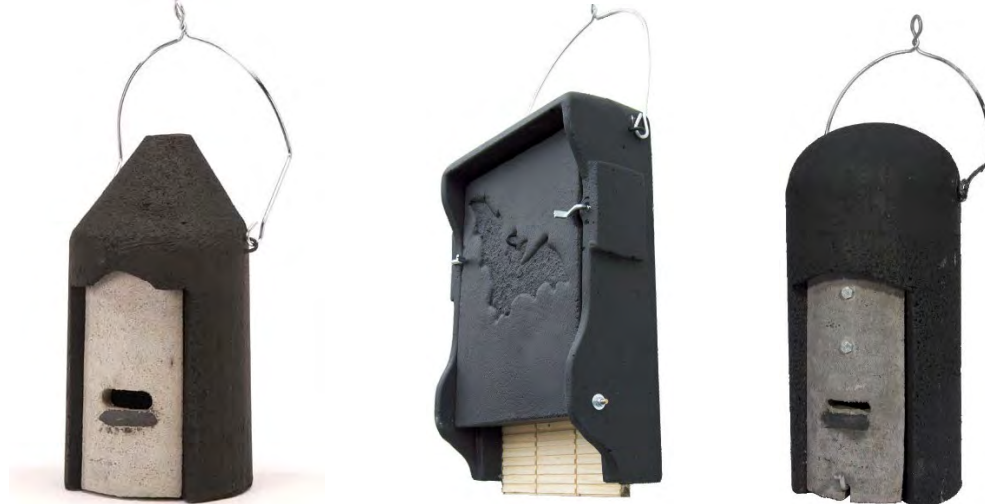
A total of 15 bat boxes will be erected on suitable, retained mature trees around the site boundary comprising a mix of:

- Schwegler 2F bat boxes – The front panel has a second inner wooden panel fitted to it to create a cavity wall. This provides ideal quarters for bats that inhabit crevices.

- Schwegler 1FF bat boxes – These are spacious enough for bats to use as a roost or nursery width making it ideal for bat species which inhabit crevices such as Pipistrelle Bats but also larger bats such as Noctule (*Nyctalus noctula*).
- Schwegler 1FD bat box – The domed roof results in an increased interior height whilst the two grooved internal wooden front panels provide a crevice. Both the cooler woodcrete surface and the warmer wooden panel means bats have a choice of different temperatures in different parts of the box.

Bat boxes to be sited on trees will be done so using the galvanised steel hanger and aluminium nail provided. They should be positioned at a height of between 3-6m from ground level. Bat boxes should ideally be sited in open sunny positions. The arrangement of the bat boxes has them facing different directions to provide a variety of micro-habitats. To increase the chances of bats roosting in the new features, the bat boxes will be placed adjacent to vegetation features as bats will be more likely to discover the artificial roosts if it is placed close to an existing flightpath.

Figure 47. Schwegler 2f (left), 1ff (middle) and 1fd (right) (NHBS, 2021).



6.10.2.1 Bat Bricks

To provide a net positive benefit for bats within the proposed development, half of the newly built dwellings will have Ibstock bat bricks (**Figure 49**) integrated within the external brick work. These features are entirely self-contained and available in a variety of different colours to match different construction materials. They should ideally be placed on an elevation which will benefit from some degree of sunlight exposure and be located away from windows.

Figure 48. Ibstock bat brick 'B' which will be integrated into the gable walls of half of all new dwellings on site.



6.10.3 Birds

Both the Green Infrastructure and the residential gardens will continue to provide foraging and nesting resources for birds. Additional habitats including the attenuation basins, hedgerow creation, tree planting and shrub planting, will increase both food and nesting resource available on site for birds. Any impact upon birds resulting from the proposed development is therefore likely to be minor positive in the medium to long-term.

6.10.3.1 Bird Bricks

To act as biodiversity enhancement, half of the newly built dwellings will incorporate one Swift brick. The Ibstock 'Eco Home for Swifts' bricks will be installed (**Figure 50**) as they are a discreet and attractive box ideal for new dwellings. The boxes should be installed under the eaves or in high walls in shaded areas out of direct sunlight and away from windows. The installation of such boxes has also been shown to be beneficial for House Sparrows (*Passer domesticus*) which are a nationally declining species.

Figure 49. Ibstock eco home for swifts that will be incorporated into the newly built dwellings.



6.10.3.2 Bird Boxes

As well as providing integrated bird bricks, the erection of boxes in trees will provide further enhancements. Using nest boxes of varying designs would maximise the species complement attracted to the site, and where possible these could be tailored to provide opportunities for red listed/BAP species known from the local area. Schwegler 1B (6), 2H (3) and 2M (3) bird boxes will be used (12 in total) will be erected on suitable mature trees around the site's boundaries. The 1B is the most popular box for garden birds and appeals to a wide range of species. The 2H is attractive to Robins, Pied Wagtails, Spotted Flycatcher, Wrens and Black Redstarts whilst the 2M is an example of a general-purpose design (***NB if there are issues obtaining these boxes, alternatives can be used if first agreed with the ecologist***).

Figure 50. Bird boxes to be installed (NHBS 2025).



6.10.4 Hedgehogs

6.10.4.1 Hedgehog Highways

To ensure permeability for small mammals across the site, gaps will be present within the gravel boards / bases of each fence line which adjoins other gardens or greenspaces. The gaps should be at least 15 cm high by 15 cm wide.

Small signage could be installed at these points to ensure they remain open upon completion of the development. The People's Trust for Endangered Species provide such signage, the purchase of which also supports conservation efforts (**Figure 52**).

Figure 51. Hedgehog Highway Sign (left). Eco Hedgehog Hole Fence Plate (right).



6.10.4.2 Hedgehog Homes

The green areas along the north and south will incorporate a total of 2 Hedgehog homes each (4 total) (**Figure 53**) (such as the Igloo Hedgehog home or Hogitat Hedgehog house). These will enhance sheltering opportunities for local hedgehogs and provide the rapidly declining species with a place to shelter / hibernate.

Figure 52. Example of the Igloo Hedgehog Home.



6.10.5 Invertebrates

6.10.5.1 Bee Bricks

To increase opportunities for invertebrates within the site, bee bricks will be included within 50% of the new units on the site (**Figure 54**). The brick can be used in place of a standard brick and provides cavities for solitary bee species such as Red Mason bees (*Osmia bicornis*) or Leafcutter bees (*Megachile* sp.), both non-aggressive native species. The bricks should be placed in a sunny location at a minimum height of 1m. It is highly recommended the brick is placed in a location where landscaping will include nearby pollinator-friendly plants.

Figure 53. Bee bricks to be installed on site (NHBS 2025).



6.10.6 Tree / Shrub Planting

As a general enhancement, any new landscape planting will aim for a minimum 70:30 ratio in favour of native species over non-natives and ornamentals (in line with the CIEEM guidance outlined within Smith & Day (2012). Species that can be considered within any planting include Rowan (*Sorbus aucuparia*), Alder (*Alnus glutinosa*), Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*), Silver Birch (*Betula pendula*), Small-leaved Lime (*Tillia cordata*) and Willow (*Salix* spp.). Non-natives and ornamentals should only be given a bias in formal locations where aesthetics is a priority.

Planting a mixture of flowering plants, trees (including fruit trees) and shrubs encourages a diversity of insects to sustain bats. It is beneficial that the flowers vary in colour (although pale flowers are more easily seen in poor light and so attract insects at dusk), fragrance, shape, amount of nectar and time of flowering. (It is important to provide native flowering plants, shrubs and trees throughout spring, summer and autumn). Flowers with 'landing platforms' for insects increase opportunities for insects and in turn foraging bats and these will be included within marginal habitats where appropriate.

7.0 CONCLUSION

An Ecological Impact Assessment was undertaken of the site known as 'Imberhorne Farm' in East Grinstead, in relation to the proposed development comprising the construction of 550 residential housing units with associated infrastructure and mixed-use elements, including a new school development and care village. The development will be considered in conjunction with the SANGS proposals to the east.

The site supports bat assemblages of foraging and commuting bats of regional importance alongside confirmed low populations of Slow Worm (*Anguis fragilis*), Common Lizard (*Zootoca vivipara*) and Grass Snake (*Natrix helvetica*). Low population were also recorded of Great Crested Newt (GCN) in ponds within 500m from the site. [REDACTED]

[REDACTED] in addition to a single Hazel Dormouse (*Muscardinus avellanarius*) nest.

European protected species licenses will be required for any works that impact Dormice habitat and the site has been enrolled onto the District Level Licensing (DLL) scheme for GCN (see **Appendix III**). The site layout has been designed so that dark corridors will be implemented to preserve foraging and community habitat for bats and a translocation has been proposed for reptiles. A BNG assessment has been carried out for the site in which full results are detailed in the BNG Report.

8.0 REFERENCES

ARG (2010) Amphibian & Reptile Groups of the UK, ARG Advice Note 5, Great Crested Newt Habitat Suitability Index, May 2010

Bat Conservation Trust (BCT) and Institute of Lighting Professionals (ILP) (2023) *Bats and Artificial Lighting at night*.

Bright, P, Morris, P and Mitchell-Jones, T., (2006) The Dormouse conservation handbook, 2nd edition, English Nature.

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK & Ireland

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th Edition.

Department for Environment, Food & Rural Affairs (2023). *The Statutory Biodiversity Metric*. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

Department for Environment, Food & Rural Affairs (2023). *The Statutory Biodiversity Metric. User Guide* Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

Cook, K., 2006. The Natural Environment and Rural Communities Act 2006. Environmental Law Review, 8(4), pp.292-298.

Department for Levelling Up, Housing and Communities (2023) 'National Planning Policy Framework' (NPPF)

Edgar, P., Foster, J., & Baker, J., (2010) Reptile Management Handbook, Amphibian and Reptile Conservation (ARC)

HGBI (Herpetofauna Groups of Britain & Ireland), (1998). *Evaluating local mitigation/translocation programmes: maintaining best practice and lawful standards. HGBI advisory notes for Amphibian and Reptile Groups (ARGs)*. HGBI c/o Froglife, Halesworth, Suffolk.

HMSO (2017) *The Conservation of Habitats and Species Regulations*. Statutory Instrument 2010 No. 490. HMSO, London.

HMSO (2000). *The Countryside and Rights of Way Act 2000*. HMSO, London.

HMSO (1981). *The Wildlife & Countryside Act 1981*. HMSO, London.

ILP / BCT (2023) Guidance Note 08/2: Bats and Artificial Lighting at Night.

JNCC (2010) Handbook for Phase 1 Habitat Survey

Mid Sussex District Council (2018) 'Mid Sussex District Plan 2014-2031' Available online at:
<https://www.midsussex.gov.uk/media/3406/mid-sussex-district-plan.pdf>

Natural England & Forestry Commission England (2014) Standing Advice for Ancient Woodland and Veteran Trees.



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.

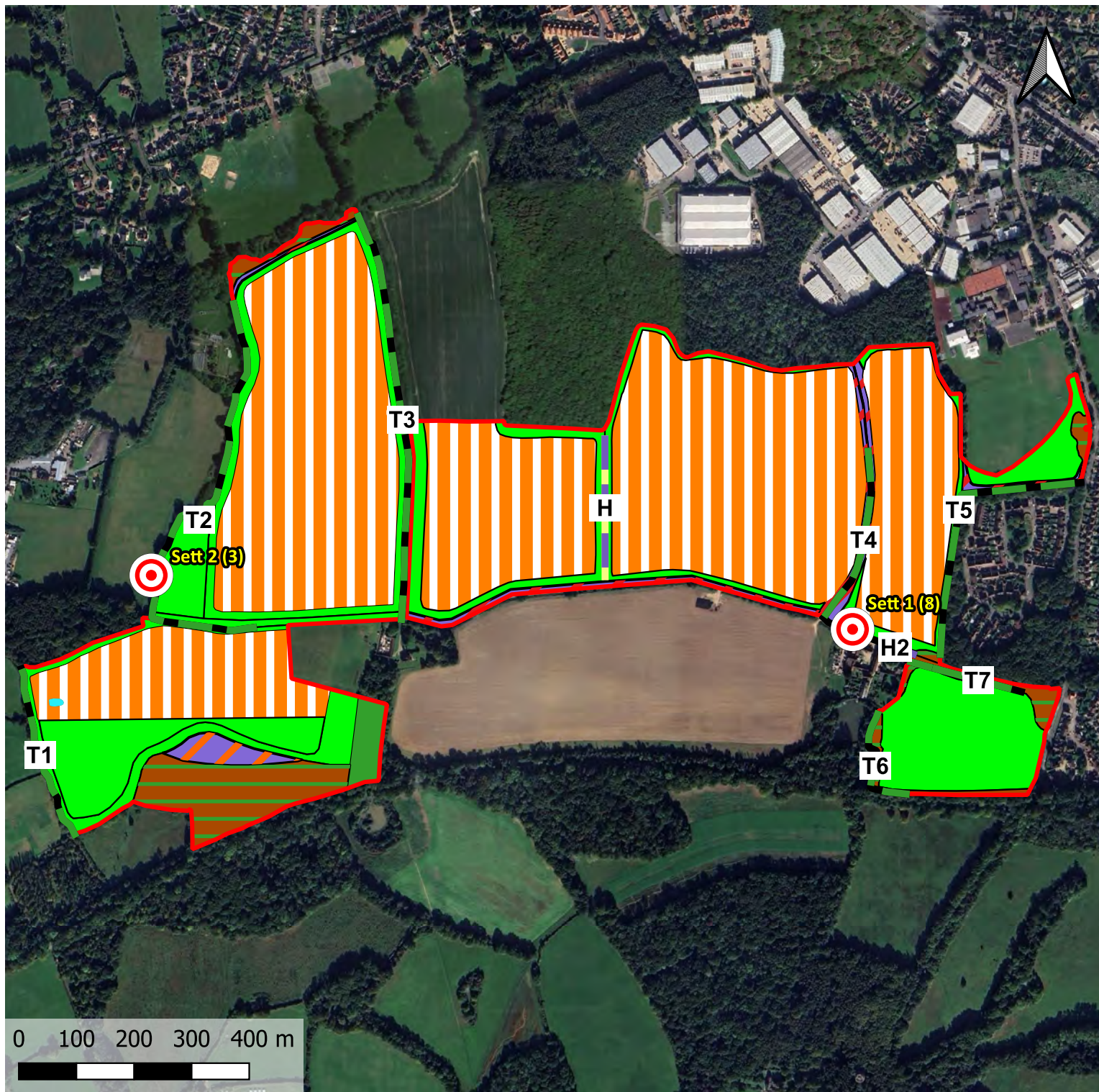
The Ecology Partnership (2018). *Imberhorne Farm, West Sussex. Updated Preliminary Ecological Appraisal.*

The Ecology Partnership (2021). *Imberhorne Farm, West Sussex. Further Updated Preliminary Ecological Appraisal.*

UKHab Ltd. (2023). UK Habitat Classification – Habitat Definitions Version 2.01 (July 2023).

Wray, S., Wells, D., Long, E. & Mitchell-Jones, T. (2010). Valuing Bats in Ecological Impact Assessment. *In Practice*. **70**. 23-25.

APPENDIX I - UKHABS MAP



Legend

-  Site Boundary
-  Badger sett locations (TN)
-  Hedgerow (h2)
-  Hedgerow (priority habitat) (h2a)
-  Line of trees (w1g6)
-  Modified grassland (g4)
-  Lowland mixed deciduous woodland (w1f)
-  Dense scrub (h3)
-  Blackthorn scrub (h3a)
-  Temporary grass and clover leys (c1b)
-  Artificial unvegetated unsealed surface (u1c)
-  Pond (r)



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Map	UKHabs Baseline Map
Site	Imberhorne Farm, East Grinstead
Client	Vistry
Date	16/12/2025

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APPENDIX II - EDNA SURVEY RESULTS

GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus* , inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN1755	Inberhorne Farm, Pond 10B	TQ36273821	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Daisy Chambers

Approved by: Christopher Troth



GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus* , inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN 1763	Imberhorne Farm - Pond 10L	TQ 36313 38179	Pass	Pass	Positive	1/12

Matters affecting result: none

Reported by: Lauryn Jewkes

Approved by: Chelsea Warner



GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
1767	Imberhorne Farm - D01	TQ 37351 38749	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Lauryn Jewkes

Approved by: Chelsea Warner

GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus* , inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN 1764	Imberhorne Farm - Ditch 2	TQ 36340 39129	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Lauryn Jewkes

Approved by: Chelsea Warner



GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus* , inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
1762	Imberhorne Farm - Pond 1	TQ 35942 38336	Pass	Pass	Positive	1/12

Matters affecting result: none

Reported by: Lauryn Jewkes

Approved by: Chelsea Warner



APPENDIX III - DISTRICT LEVEL LICENSING CERTIFICATION



NatureSpace Great Crested Newt District Licensing Scheme

Certificate

**A CERTIFICATE DOES NOT PERMIT LICENSABLE WORKS TO COMMENCE. A FORMAL AUTHORISATION FROM MID
SUSSEX DISTRICT COUNCIL TO WORK UNDER THEIR DISTRICT LICENCE MUST BE OBTAINED PRIOR TO
COMMENCEMENT.**

Date of certificate issue: **11th September 2025**

Development title: **Land at Imberhorne Farm**

Developer name: **Mr Damon Turner (Welbeck Strategic Land II LLP)**

Development location (8 figure grid reference): **TQ 3656 3868**

Development address: **Land at Imberhorne Farm, East Grinstead, West Sussex, RH19 1TX**

Planning application reference: **DM/23/2699**

Development plan reference: **"Land at Imberhorne Farm: Impact plan for great crested newt District
Licensing (Version 1)", dated 10th April 2024**

This certificate confirms that the above development (as proposed in the assessed development proposals on plan "Land at Imberhorne Farm: Impact plan for great crested newt District Licensing (Version 1)", dated 10th April 2024) has been evaluated by NatureSpace Partnership and (if/when planning approval has been granted) can be covered under the District Licence (WML-OR136, or a 'Further Licence').

This proposed development has been evaluated in relation to the terms and conditions of the District Licence and to the NatureSpace great crested newt strategy and no further compensation actions are required by the developer.

Once the planning authority has granted the developer an authorisation to cover works under their District Licence for great crested newts, licensable works may proceed at the site. The authorisation is a written letter, signed by the planning authority's signatory, and it forms a separate document to the planning permission Decision Notice.

Under the requirements of the District Licence, the planning permission must include the following planning conditions and informatives:

Planning No development hereby permitted shall take place except in accordance with the terms and conditions of the Council's Organisational Licence (WML-OR136, or a 'Further Licence') and with the proposals detailed on plan "Land at Imberhorne Farm: Impact plan for great crested newt District Licensing (Version 1)", dated 10th April 2024.

Reason: In order to ensure that adverse impacts on great crested newts are adequately mitigated and to ensure that site works are delivered in full compliance with the organisational licence (WML-OR136, or a 'Further Licence'), section 15 of the National Planning Policy Framework, Circular 06/2005 and the Natural Environment and Rural Communities Act 2006.

Planning condition: No development hereby permitted shall take place except in accordance with Part 1 of the Great Crested Newt Mitigation Principles, as set out in the District Licence (WML-OR136, or a 'Further Licence'), and in addition in compliance with the following

- Works which will affect likely newt hibernacula may only be undertaken during the active period for amphibians.
- Capture methods must be used at suitable habitat features prior to the commencement of the development (i.e. hand/destructive/night searches), which may include the use of temporary amphibian fencing, to prevent newts moving onto a development site from adjacent suitable habitat, installed for the period of the development (and removed upon completion of the development).
- Amphibian fencing and pitfall trapping must be undertaken at suitable habitats and features, prior to commencement of the development.

Reason: In order to ensure that adverse impacts on great crested newts are adequately mitigated and to ensure that site works are delivered in full compliance with the Organisational Licence (WML-OR136, or a 'Further Licence'), section 15 of the National Planning Policy Framework, Circular 06/2005 and the Natural Environment and Rural Communities Act 2006.

Informative: It is recommended that the NatureSpace Best Practice Principles are taken into account and implemented where possible and appropriate.

Informative: It is essential to note that any works or activities whatsoever undertaken on site (including ground investigations, site preparatory works or ground clearance) prior to receipt of the written authorisation from the planning authority which permits the development to proceed under the District Licence (WML-OR136, or a 'Further Licence') are not licensed under the great crested newt District Licence. Any such works or activities have no legal protection under the great crested newt District Licence and if offences against great crested newt are thereby committed then criminal investigation and prosecution by the police may follow.

Informative: It is essential to note that any ground investigations, site preparatory works and ground / vegetation clearance works / activities (where not constituting development under the Town and Country Planning Act 1990) in a red zone site authorised under the District Licence but which fail to respect controls equivalent to those detailed in the planning condition above which refers to the NatureSpace great crested newt mitigation principles would give rise to separate criminal liability under the District Licence, requiring authorised developers to comply with the District Licence and (in certain cases) with the GCN Mitigation Principles (for which Natural England is the enforcing authority); and may also give rise to criminal liability under the Wildlife & Countryside Act 1981 (as amended) and/or the Conservation of Habitats and Species Regulations 2017 (as amended) (for which the Police would be the enforcing authority).

The licence requires authorisations to specify which activities and operations are permitted from the list in Annex B of WML-OR136.

In this case, the **licensed activities and operations will be as follows: A5, A6, A7, A8, A11**

The following Protocol conditions will apply: P1, P2, P3, P4, P5, P6, P8, P11, P12

Please see Annex 1 for full details of these activities and operations.



Once authorised, developers working under the District Licence also should note:

- 'Authorised developers' authorise (in writing) additional persons (e.g., employees, contractors) to act as 'Accredited Agents' under the District Licence;
- Authorised developers must ensure that all persons using the licence (including any Accredited Agents) must possess appropriate knowledge, training and experience to undertake licensed activities in accordance with the District Licence and accepted best practice;
- Developers must maintain a record of activities carried out under the District Licence and a list of any persons you authorise to act as 'Accredited Agents' - and provide a record of these activities and persons to Mid Sussex District Council or NatureSpace Partnership in a timely manner;
- It is a condition of any authorisation under the District Licence that reasonable requests for permission to access the site will be granted to employees and representatives of the Planning Authority and or Natural England for monitoring purposes;
- It is recommended that the attached Best Practice Principles are followed for all works on site.

Licensable acts which will be made lawful when an authorisation for the proposed development is issued under the District Licence:

Capture; Possess; Transport; Disturb; Killing & injuring; Damage & destroy resting places.



NATURESPACE PARTNERSHIP

SIGNED (on behalf of **Nature Space Partnership**)

by

PROJECT OFFICER

SENIOR OFFICER

Important:

This certificate is not an authorisation to work under a District Licence. Authorisations are issued separately by the Licensee (Mid Sussex District Council), in writing once the development has been granted a valid planning permission.

District Licence expiry date note:

The District Licence (WML-OR136) is held by the Planning Authority, which is able to issue authorisations to developers with planning approval. All references to WML-OR136 within this document refer to the latest version of the licence as issued by Natural England. At the time of writing, this is referenced WML-OR136 (Version 1) issued on 22nd October 2023. The current District Licence is set to expire on 21st October 2028, at which point it will be renewed. The current 5-year limit on licence duration means that authorising documents will need to be amended as and when the licence is reissued by Natural England. The licence conditions expressly provide for 'Further Licences', and NatureSpace will manage the updating of this certificate and any authorisation documents at the appropriate time.



Planning Appeals:

In the event that the proposed development is refused, and a subsequent appeal made to the Planning Inspectorate, the District Licence documents will need to be reconfirmed by NatureSpace and then submitted to PINs as part of the appeal documentation. The applicant should contact NatureSpace in the event of an appeal to expedite this. Failure to do so could mean that the development would not be able to receive authorisation under the District Licence if approved at appeal.

Enquiries:

For any enquiries relating to this report please contact NatureSpace Partnership:

Email: info@naturespaceuk.com

Tel: 01865 688307

Website: <https://naturespaceuk.com/>

For any enquiries relating to District Licensing, please contact either NatureSpace Partnership, your planning authority or Natural England - gcndll@naturalengland.org.uk

Annex 1. Activities, Operations and Protocols under a District Licence

The District Licence contains a 'Protocol for activities and operations affecting great crested newts within the licensed area' (see Annex B of the licence) – which contains a list of activities, operations, and licensable acts. The full list in the District Licence does not apply in every authorisation under the District Licence. This report details the activities, methods and acts which would be permitted for the proposed development, based on the impacts as assessed.

Permitted activities and operations under the District Licence (subject to receiving planning approval and written authorisation from the planning authority):

- A5 Capture, exclusion, and relocation of great crested newts from terrestrial habitat (by hand, hand searches of suitable features and/or destructive searches, night/torch searching, exclusion fencing (including upright and one-way temporary amphibian fencing),). NB: This includes fence installation and removal.
- A6 Relocating great crested newts at imminent risk of harm on Development Land (by hand, hand searches and/or destructive searches)
- A7 Site clearance - including removal of vegetation, hard- standing, buildings and landscaping
- A8 Removal of rubble and log piles and other potential hibernacula
- A11 Construction activities



Protocols

Annex B of the District Licence is a 'Protocol for activities and operations affecting great crested newts within the licensed area' and includes a number of additional 'Protocol conditions'. The full list does not apply in every authorisation under the District Licence. This report details the 'Protocol conditions' which would apply to this site, based on the impacts as assessed.

Protocol conditions (which would apply upon authorisation):

- P1 Before any works commence on a site in the Red Zone all those persons involved with the licensable works are to be briefed by someone suitably experienced by way of a 'tool box talk' on:
 - a. how to identify great crested newts
 - b. what to do should great crested newts be found, including good working practices and
 - c. what is and is not permitted under the licence.
- P2 Certain activities permitted by this licence require ecological expertise. Activities subject to this condition can only be carried out by an ecologist with an appropriate Great Crested Newt Survey Licence or under the direct supervision of such a person.
- P3 Where licence or protocol conditions refer to publications, licence users are expected to refer to the most up to date iteration available. Natural England can direct users to the relevant iterations.
- P4 The biosecurity guidelines in Amphibian Disease Precautions: A guide for UK fieldworkers, Advice Note 4 (available from www.arguk.org) must be observed by all licence users.
- P5 Great crested newts must not be relocated outside the Licensed Area, over a distance greater than 1 kilometre or beyond a significant physical barrier to dispersal without the permission of Natural England.
- P6 Any animal listed in Schedule 9 Part 1 (but not Part 1A or 1B) of the 1981 Act which is a species which is not ordinarily resident in England in a wild state, that is caught in a trap set under this licence must not be released or allowed to escape back into the wild; it must be humanely despatched, unless a specific licence to release that species has been obtained, or alternative advice has been provided by Natural England.
- P8 Persons capturing newts under this licence are expected to follow the advice on welfare considerations for capture programmes in the 'Great Crested Newt Mitigation Guidelines' available from Natural England.



- P11 Great crested newts are not to be translocated to Compensation Land or other locations within the Licensed Area unless the terrestrial and/or aquatic habitats are suitable for great crested newts. The suitability of the site is to be confirmed by a suitably qualified person (e.g., an ecologist with a great crested newt survey licence).
- P12 Any licensable activities in the red zone must be carried out in accordance with the approved Great Crested Newt Mitigation Principles.

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