



Ecological Impact Assessment (EcIA)

Land Near the Junction of Lynwick Street and Guildford Road

The Ecology Partnership, Thorncroft Manor, Thorncroft Drive, Leatherhead, Surrey KT22 8JB

T +44 (0) 1372 364133 **E** info@ecologypartnership.com **W** ecologypartnership.com

Contents

1.0 INTRODUCTION.....	3
2.0 METHODOLOGY.....	7
3.0 BASELINE ECOLOGICAL CONDITIONS	14
4.0 DESCRIPTION OF THE PROPOSED DEVELOPMENT	27
5.0 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES	28
6.0 CUMULATIVE EFFECTS.....	34
7.0 COMPENSATION.....	35
8.0 ENHANCEMENT	36
9.0 MONITORING.....	36
10.0 SUMMARY	36
11.0 REFERENCES.....	40

LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on a site at a later date.

The views and opinions contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to or during works.

1.0 Introduction

Purpose of the Report

1.1 This Ecological Impact Assessment (EIA) evaluates the effects of the development of land at Rudgwick, Horsham. The results of The Ecology Partnership's surveys and desk study of the site and surrounding land are presented. These findings are assessed against the proposals for residential development on the site in order to:

- Evaluates the baseline interest;
- Identifies and ranks significant impacts;
- Sets out mitigation and compensation measures and the means to secure these;
- Assesses the significance of residual impacts;
- Identifies enhancement measures; and
- Sets out requirements for post-construction monitoring.

Site Context and Description of the Project

1.2 Current proposals for the site are to build a new residential development with associated access and landscaping which includes the creation of SuDS.

1.3 The site is to the south-west of Rudgwick and to the north-west of Horsham (TQ07973305). The site covers approximately *c.* 4.41ha and consists of two cow-grazed grasslands with scrub, broadleaved treelines, and hedgerows with trees along the field boundaries. The immediate surroundings comprised of arable fields, broadleaved woodland, and low-density residential housing.

1.4 The aerial photograph (Figure 1) shows the site and its immediate surroundings. The red line depicts the approximate site boundary and survey area.



Figure 1: Approximate location of the red line boundary

Legislation

1.5 The following legislation has been considered in determining the scope of this EcIA.

- The Bern Convention (1979);
- Convention on Biological Diversity (1992)
- The Habitats Directive (1992);
- The Birds Directive (1979);
- Wildlife and Countryside Act (1981 as amended);
- The Natural Environment and Rural Communities (NERC) Act (2006);
- Conservation of Habitats and Species Regulations 2017 (as amended);
- The Protection of Badgers Act 1992;
- The Hedgerow Regulations 1997;
- The Environment Act 2021.

National and Local Planning Policy

1.6 National policy guidance is provided by National Planning Policy Framework (NPPF 2024), which sets out the Government's planning policies for England and how they should be applied. Section 15 of the document is entitled 'Conserving and Enhancing the Natural Environment'.

1.7 The site falls under the planning control of Horsham District Council and the adopted plan (2015). These policies include the following which are considered relevant to ecology, biodiversity and nature conservation:

- *Policy 25: The Natural Environment and Landscape Character*
- *Policy 28: Countryside Protection*
- *Policy 31: Green Infrastructure and Biodiversity*

Wildlife and Countryside Act 1981 (as amended)

1.8 The PEA identified the potential presence within the project's red line of several species or species groups listed on Schedule 5 of the Act, for which the provisions of Section 9 apply, necessitating surveys and assessments to determine presence/absence, location of activity and in some cases estimates of abundance, from which mitigation measures could, if necessary, be devised to comply with the Act.

Natural Environment and Rural Communities Act 2006

1.9 Section 41 (Biodiversity lists and action (England) of the Act requires the Secretary of State to "publish a list of living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity (in England)" and to "take such step as... reasonably practical to further the conservation... or promote the taking by others of such steps" for these (Section 41 List) species and habitats.

1.10 The PEA identified the presence of the Section 41 a hedgerow with trees as well as the potential presence of a number of Section 41 species, including bats, dormice, and breeding birds. Surveys and/or assessments for the species provided information to inform mitigation where appropriate and proportionate, that could be requested by the local planning authority in relation to Section 41, in addition to meeting legislative requirements.

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

1.11 The Conservation of Habitats and Species Amendment protects biodiversity through the conservation of natural habitats and species of wild fauna and flora. It outlines the rules for the protection, management and exploitation of such habitats and species.

1.12 European Protected Species (EPS) are protected under this legislation including all UK bat species and dormice. If the development is likely to cause an offence against an EPS which significantly impacts their favourable conservation status; an EPS mitigation licence would be required to permit certain activities that would otherwise be illegal.

1.13 Special Protection Areas (SPAs) are selected to protect one or more rare, threatened or vulnerable bird species listed within this legislation. Special Area of Conservation (SAC) are designated for protecting one or more special habitats and/ or species. Special Protection Areas (SPAs) are selected to protect one or more rare, threatened or vulnerable bird species listed within this legislation. Ramsar sites are wetlands of international importance designated under the Ramsar Convention.

1.14 Development proposals which are likely to have a significant (adverse) effect on the National Site Network in the UK (including Special Areas of Conservation (SAC), Special Protection Areas (SPA), and Ramsar sites) are required to undertake an Appropriate Assessment.

The Environment Act 2021

1.15 The Environment Bill received Royal Assent on 9th November 2021 and is now enacted as the Environment Act 2021. Part 6 (Nature and Biodiversity) and Schedule 14 of the Environment Act 2021 insert a new section 90A and Schedule 7A into the Town and Country Planning Act 1990 (TCPA), which contain the provisions requiring mandatory biodiversity net gain for development granted planning permission pursuant to the TCPA. These provisions require developments to provide a biodiversity value post-development that exceeds the predevelopment biodiversity value of the onsite habitats by at least 10%. This was adopted in February 2024 although there are a number of exemptions which may mean that biodiversity net gain is not required. These are listed under government and are as follows:

- Development below a de minimis threshold;
- Householder applications;
- Small scale self-build and custom housebuilding;
- HS2; and
- Biodiversity net gain sites.

2.0 Methodology

Scope of the Assessment

2.1 The zone of influence of the development is defined as:

- The project red line, for effects on designations, habitats and species;
- Adjacent habitat, considered by species, for mobile species with territories or foraging ranges that may overlap the site;
- Designated sites which can be impacted through development activities; and
- Undesignated priority (Section 41) habitats that may be sensitive receptors to increased recreational pressure or other impacts such as surface water pollution.

2.2 The types of features considered in the assessment of effects, to meet legislative and policy requirements, are:

- Designated sites (European, national and local);
- Protected species;
- Habitats and species of principal importance (Section 41 list);
- Hedgerows and woodland, where not of principal importance;
- Invasive species (Schedule 9 of Wildlife and Countryside Act); and
- Habitats, where not of principal importance, that may function as wildlife corridors or stepping stones.

Desktop Study

2.3 A desktop study was completed using an internet-based mapping service (www.magic.gov.uk) for statutory designated sites and an internet-based aerial mapping service (maps.google.co.uk) to understand the habitats present in and around the survey area as well as habitat linkages and features within the wider landscape. Records for the

site and local area (up to 2km) were purchased from Sussex Biodiversity Records Centre (SxBRC), in July 2024, for a 2km radius around the site

Field Surveys

Phase 1 Survey / UKHAB and Preliminary Ecological Appraisal (PEA)

2.4 The original Preliminary Ecological Appraisal (PEA) was carried out by The Ecology Partnership on 20th May 2019, with an update PEA assessed on 2nd June 2021. A recent update PEA and habitat condition assessment to support this planning application was undertaken on 14th May 2024. The surveyors identified the habitats present, following the UKHab classification system. The site was surveyed on foot and the existing habitats and land uses were recorded on an appropriately scaled map. The potential for the site to support protected species was also assessed (CIEEM 2017).

Protected Species Surveys

2.5 The desktop study and habitat survey identified that the habitats which had the potential to support bats, dormice, and breeding birds. Further surveys were recommended and a summary of the survey work completed is outlined in Table 1 below. Detailed survey methodologies are provided in the appended reports.

Table 1: Species surveys undertaken in 2019, 2021 and 2024

Faunal Group	Survey Methodology	Date of Surveys	Guidance
Bats – foraging and commuting	<p>During the PEA surveys, the sites potential to be used by foraging and/or commuting bats was assessed. The site was considered to be of moderate habitat suitability and therefore further surveys were conducted to understand how bats were using the site. These were only conducted in 2021 and 2024.</p> <p>Dusk activity transect surveys commenced at sunset until 2 hours after sunset, during which time, bats were identified and recorded. These surveyors were undertaken during suitable weather conditions, when conditions were relatively dry and mild with little/no wind.</p>	<p>Site assessed for bat potential on the 20th May 2019, 2nd June 2021, and 14th May 2024.</p> <p>Dusk activity transect surveys conducted: 14th June, 20th July, & 2nd September 2021, 21st May, 24th July, and 24th September 2024.</p>	<p>Bat Surveys – Good Practice Guidelines 3rd / 4th edition (Collins 2016 / 2023).</p>

Faunal Group	Survey Methodology	Date of Surveys	Guidance
Bats – Remote Recording Surveys	<p>Likely flight paths were identified across the site, along which locations to place the static detectors were selected. These were then deployed and left on site for five consecutive nights and collected in for analysis</p>	<p>In 2021, three Anabat static detectors were deployed on site for five consecutive nights between the 15th – 19th June 2021, 21st – 25th July 2021, and 2nd – 6th May 2021</p> <p>In 2024, one Song Meter and two Anabat static detectors were deployed between the 26th – 30th June 2024, 25th – 29th July 2024, 22nd – 26th August 2024, and 26th – 30th September.</p>	Bat Surveys – Good Practice Guidelines 3 rd / 4 th edition (Collins 2016 / 2023).
Bats – roosting potential trees	<p>As part of the PEA surveys, any trees likely to be removed by the scheme and supporting particular features likely to be of value to bats, such as splits, cracks, rot holes, coverings of ivy, peeling bark, or similar were recorded.</p> <p>The potential for the trees to support roosting bats has been assessed in accordance with the criteria set out in the Bat Conservation Trust guidelines.</p>	<p>Site assessed on the 20th May 2019, 2nd June 2021, and 14th May 2024.</p>	Bat Surveys – Good Practice Guidelines 3 rd / 4 th edition (Collins 2016 / 2023).
GCNs	<p>OS maps revealed two ponds and five drains within 250m of the red line boundary. The site is bound by roads, residential housing, and grazed fields which separate the site from suitable GCN habitats in the wider landscape. Therefore, the site was not considered suitable for GCN, and no further surveys were required.</p>	<p>Site assessed on the 20th May 2019, 2nd June 2021, and 14th May 2024.</p>	Oldham <i>et al.</i> 2000
Reptiles	<p>As part of the PEA, the site was assessed for its suitability to support reptiles. Due to the grazed nature of the fields onsite, and lack of connectivity with wider site with local surroundings dominated by arable/grazed fields, it was considered the site was likely unsuitable for reptiles and therefore no surveys were required.</p>	<p>Site assessed on the 20th May 2019, 2nd June 2021, and 14th May 2024.</p>	Herpetofauna Workers Manual (Gent and Gibson 1998).

Faunal Group	Survey Methodology	Date of Surveys	Guidance
Dormice	<p>As part of the PEA, the site was assessed for hazel dormice. Due to some suitable foraging and commuting habitat located in the field boundaries, subsequent presence / absence surveys were undertaken in 2024 as a precautionary measure.</p> <p>Dormouse nest tubes were installed in suitable habitat and checked once a month.</p>	<p>Site assessed during PEAs on the 20th May 2019, 2nd June 2021, and 14th May 2024.</p> <p>Nest tube installation: 25th April 2024</p> <p>A total of 50 dormouse tubes established.</p> <p>Surveys were undertaken once a month in May – October 2024.</p>	Dormouse Conservation Handbook - 2 nd edition (Bright <i>et al.</i> 2006)
Birds	<p>As part of the PEA, the site was assessed for its potential to support nesting birds. The hedgerows, treelines, and scrub retained suitability for nesting birds. A breeding bird survey was undertaken over two dates.</p>	<p>Site assessed during PEAs on the 20th May 2019, 2nd June 2021, and 14th May 2024.</p> <p>Two breeding bird surveys conducted on 21st April & 25th May 2024.</p>	British Trust for Ornithology (BTO) Breeding Birds Atlas method (Balmer <i>et al.</i> 2013)

Ecological Assessment Methodology

2.6 This assessment has been carried out with reference to 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM 2018). The guidelines help in determining baseline conditions, what features are important, what impacts are significant and how to apply the mitigation hierarchy. The sequential application of the guidelines to this assessment are outlined in the following paragraphs.

Baseline condition

2.7 The baseline condition of the site is the situation documented in this report (section 3) from data (field surveys and desk study) gathered during 2019, 2021, and in 2024 plus any relevant modifications within or outside the red line within the zones of influence.

Important ecological features

2.8 Important ecological features are those for which the decision maker (LPA or other regulator) needs the EcIA to help to assess the effects (negative, neutral or positive) and to guide the determination of the planning application. Important features are therefore generally defined by whether legislation or policy requires their consideration. For example, a European site within the zone of influence of the development is important and needs an assessment of effects. Similarly, at different levels, any legally protected species and any features such as wildlife corridors and section 41 species, with national or local policy support, are important features. Features that cannot be referenced to legislation and policy are generally not important and the next step of the EcIA (impact assessment) is not necessary. There may occasionally be situations where professional judgement and local expertise is relevant in defining local rarity as important, regardless of a lack of current legislative and planning support.

2.9 The CIEEM guidelines (2018) avoid rigid guidance on the levels of importance, which is often required within EIA, along with the level of magnitude of an effect, as one axis of an impact matrix. Sometimes a label of European, national or local importance may be obvious, for European sites, SSSIs and Local Wildlife Sites respectively. It is often less clear whether a small population of a Section 41 priority species or small extent of a Section 41 habitat should be of local or greater or less importance, as this may depend on data that does not exist on the distribution and abundance of the feature. Legally protected species can be important solely because of the need to meet legislation, or because they are also a feature of a County Wildlife Site or target of a local Biodiversity Action Plan. In these cases, the same species could warrant different levels of importance, possibly with different implications for what is reasonable mitigation or compensation, beyond legislative compliance.

2.10 This report follows CIEEM guidelines (2018) in not forcing features into a level of importance, but using ranked importance where possible. Sites are given three levels, corresponding to their legislative and planning support: European, National and Local. Habitats and species, where not a qualifying feature of the hierarchy of sites, are simply referenced to the planning policy or legislation that supports their importance and where possible assessed from the extent, range or population size within zone of influence in

relation to the extent, range or population size in the relevant administrative unit, for example LPA boundary or BAP boundary.

Impact assessment

2.11 According to CIEEM guidelines (2018), the only essential purpose of impact assessment in EcIA is: *"to assess and report significant residual effects that remain after mitigation measures have been taken into account. However, it is good practice for the EcIA to make clear both the potential significant effects without mitigation and the residual significant effects following mitigation".*

2.12 Impact assessment is required for each feature determined as important and not for other features. CIEEM guidelines (2018) advise that each impact assessment should consider, if possible, the different stages of a development (construction, operation and decommissioning) and that it should be characterised by the following:

- Positive or negative - whether the impact leads to an adverse, beneficial or neutral effect;
- Extent – the spatial area over which the impact occurs;
- Magnitude – change in, for example, the amount of habitat or the size of population;
- Duration – both in relation to the life cycle of the ecological feature and of the life of the project;
- Frequency and timing – for example, the number of disturbance incidents to birds and their timing in relation to the breeding cycle; and
- Reversibility – if and at what timescale recovery is possible.

2.13 As with the assessment of importance, CIEEM guidelines (2018) do not encourage a classification of the magnitude of impacts on a scale of severity. Rather, the significance of each impact should be assessed as the quantity of a feature of importance impacted; for example, residual loss of 5% of the extent of woodland within a Local Wildlife Site or gain of 10% in the extent of a section 41 habitat (hedgerows) on the site.

Avoidance, mitigation, compensation and enhancement

2.14 CIEEM guidance (2018) recommends a mitigation hierarchy. Once important features and significant impacts are identified, the project design should be modified where possible to

avoid significant impacts. If avoidance is not possible, mitigation then compensation should be sequentially considered. A residual impact is an impact that remains after mitigation but is documented here both before and after compensation, as mitigation, particularly if embedded in the design, is assumed to be delivered without input from the LPA or other regulator, whilst compensation may require planning conditions and have some uncertainty on which the regulator should deliberate. Enhancement is an activity that results in a net gain in biodiversity, generally for an important feature, “over and above” anything required for mitigation or compensation. The terms mitigation and compensation are not always clearly defined and there is difference of opinion on their definitions. This report follows the Information Paper on the subject developed in consultation with Natural England for HS2 (2017), from which this quote and illustration are taken:

“A clear distinction is made between the use of the terms ‘mitigation’ and ‘compensation’ reflecting the habitual use in ecological impact assessment of ‘mitigation’ to mean ‘measures taken to avoid or reduce negative impacts’, as separate from ‘compensation’ meaning ‘measures taken to make up for the loss of, or permanent damage to, biological resources through the provision of replacement areas”

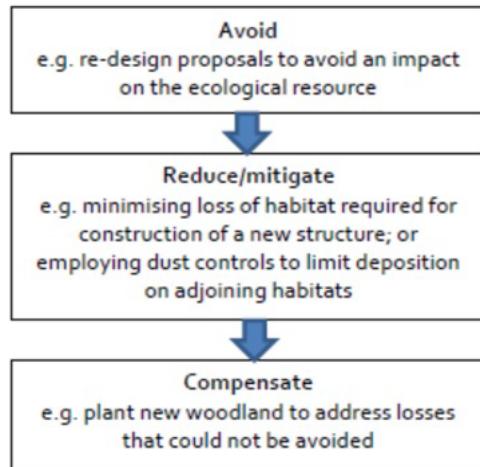


Figure 2: The mitigation hierarchy (from HS2 2017)

Limitations of the Assessment

2.15 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no single investigation could ensure the complete characterisation and prediction of the natural environment. The site was visited over the period of several site visits, as such seasonal variations cannot be fully observed and potentially only a selection of all species that potentially occur within the site have been recorded. Therefore, the survey provides a general assessment of potential nature conservation value of the site and does not include a definitive plant species list. However, the survey area was visited on a number of occasions over the optimal period, ensuring that detailed habitat information could be gathered. It is therefore considered that the survey work has allowed a robust assessment of habitats and botanical interest across the site.

2.16 The specific protected species surveys were undertaken at the appropriate time of year and during suitable weather conditions to an appropriate level of survey effort. Any specific limitations are noted in the relevant sections above or discussed in the results section.

3.0 Baseline Ecological Conditions

Biological Records from SxBRC

3.1 A 2km radius data search was requested from Sussex Biodiversity Records Centre (SxBRC) as part the PEA conducted in 2024. Notable protected species from this search are outlined in Table 2, below. Only records of species which are suited to the habitats present on site and recorded within the last ten years have been included.

Table 2: Notable species records within 2km of the site in the last 10 years

Species*	Legislation	Distance from site	Most recent record
Great Crested Newt <i>Triturus cristatus</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5; NERC Act (2006) Section 41; UK BAP Priority	c. 1.3km north-east	2022
Grass Snake <i>Natrix natrix</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5; NERC Act (2006) Section 41; Bern Convention Appendix 3	c. 1km south-east	2015
West European Hedgehog <i>Erinaceus europaeus</i>	UK BAP Priority, NERC Act (2006) Section 41	c. 730m south-east	2021
Bechstein's Bat <i>Myotis bechsteinii</i>	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat	c. 1.2km NE from the site	2016

	and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.		
Daubenton's Bat <i>Myotis daubentonii</i>	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	c. 1.3km N from the site	2022
Whiskered <i>Myotis mystacinus</i>	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	c. 1.3km N from the site	2017
Natterer's Bat <i>Myotis nattereri</i>	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	c. 1.3km N from the site	2022
Common pipistrelle <i>Pipistrellus pipistrellus</i>	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	c. 1km NE from the site	2021
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	c. 115m E from the site	2017
Brown long-eared Bat <i>Plecotus auritus</i>	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	c. 500m SE from the site	2021
Red Kite <i>Milvus milvus</i>	Wildlife and Countryside Act (1981 as amended) Schedule 1 Pt1, Birds Directive Annex 1	Within 2km	2022
Linnet <i>Linaria cannabina</i>	UK BAP Priority, NERC Act (2006) Section 41, BoCC5 Red List.	c. 1.3km NW from the site	2015
Nightingale <i>Luscinia megarhynchos</i>	BoCC5 Red List	c. 1.5km SE from the site	2022
Starling <i>Sturnus vulgaris</i>	UK BAP Priority, NERC Act (2006) Section 41, BoCC5 Red List.	Within 2km	2022
Song thrush <i>Turdus philomelos</i>	UK BAP Priority, NERC Act (2006) Section 41, BoCC5 Red List.	c. 100m S from the site	2015

*Additional species are present within the biological records but may be older than 10years or outside our search radius. Some species have not been included due to the likelihood of presence on site due to habitat types.

Designated sites

3.2 There are two nationally designated sites within 15km of the site. These include:

- The Mens Special Area of Conservation (SAC) and SSSI, located approximately c. 7.8km south-west of site, is designated for the broad-leaved deciduous woodland and presence of Barbastelle *Barbastella barbastellus*.
- Ebernoe Common SAC, c. 10.6km south-west of site, is designated for the broad-leaved deciduous woodland and mixed woodland, in addition to the presence of Barbastelle and Bechstein's bat *Myotis bechsteinii*.

3.3 There were no designated sites within 2km of the site. The closest designated sites were the Slinfold Stream and Quarry Site of Special Scientific Interest (SSSI) approximately c. 4.4km south-east and the Chiddington Forest SSSI approximately c. 5.1km west of the site's red line boundary.

3.4 There are four non-statutory sites within 2km of the site, these are:

- Lynwick Hanger LWS is approximately c. 240m north-west of the site, designated for the semi-natural woodland and stream.
- Baynards Tunnel LWS is approximately c. 1.2km north-west of the site, designated for the disused railway tunnel that is used as a hibernation site by a significant number of bat species during the winter months.
- Smithwood & Tittlesfold Copses LWS is approximately c. 1.4km south-east of the site, designated for the semi-natural woodland, stream, and pond.
- Godley's Copse LWS is approximately c. 1.5km north-east of the site, designated for the semi-natural woodland and stream.

Habitats

Context and surrounding priority (Section 41 list) habitats

3.5 There are a number of priority habitats present in the local surroundings including deciduous woodland and traditional orchard. The Habitat of Principal Importance, ancient woodland, was also present in the local area (Figure 3). The closest of each habitat type include:

- Traditional orchard located adjacent to site to the south;

- Deciduous woodland located *c.* 50m south of site;
- Ancient and semi-natural woodland located *c.* 160m north-west of site;
- Ancient replanted woodland located *c.* 1.2km north-west of site.



"Map produced by MAGIC on [05/02/2025]. © Crown Copyright and database rights [2025]. Ordnance Survey AC0000805307. Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGIC is a snapshot of information that is being maintained or continually updated by the originating organisation. Please refer to the documentation for details, as information may be illustrative or representative rather than definitive at this stage".

Figure 3: Priority habitat: deciduous woodland (dark green) and traditional orchard (medium green). The Habitat of Principal Importance: ancient and semi-natural woodland (vertical stripes) and ancient replanted woodland (horizontal stripes) was also present in the local surroundings.

Baseline habitats on the site

3.5 There have been few changes to the habitats present on site in 2024 since the initial surveys was conducted in 2019 and 2021. The site is dominated by two parcels of cow-grazed grassland, labelled F1 and F2 in Figure 4 below. Boundary habitats included scrub, broadleaved treelines, and a hedgerow with trees. The habitats are detailed in the PEA report 2024. The habitat map is shown in Figure 6.



Figure 5: Fields, treelines, and scrub onsite

Table 3. Habitats present in on site, and their relative importance

Habitat	Description	Importance
Modified grassland	<p>Both fields onsite are characterised as modified grassland due to the abundance of perennial ryegrass, Yorkshire fog, cocksfoot, and the species-poor nature of the grasslands. Both were grazed by cattle at the time of the 2024 survey therefore vegetation height varied between c. 5 to 15cm tall.</p> <p>F1 also supported frequent meadow foxtail and sweet vernal grass. Species richness varied between the two fields, with an average of 8 and 5 species per m² in F1 and F2, respectively.</p> <p>Both fields supported occasional common daisy, creeping buttercup, and dandelion and a number of rarely occurring forbs.</p>	Site

Line of trees	Two broadleaved treelines were present on site: an ecologically valuable line of mature oak trees bisected the two fields in the centre of the site (TL1 in Figure 5), and a sycamore-dominated treeline was present along a portion of the southern boundary (TL2 in Figure 5). TL2 also supported species such as lime and horse chestnut.	Local
Hedgerow with trees	The hedgerow on the western boundary which extended around the southern boundary was considered uniform enough in structure and composition to be classed as a single hedgerow with trees. Species present included ash, hawthorn, blackthorn, sycamore, wild privet, dogwood, with standard field maple, horse chestnut and pedunculate oak trees. Cow parsley, barren brome, lords and ladies, herb Robert, wood avens, foxglove, common vetch, common nettle, cleavers, creeping thistle and creeping cinquefoil were present within the ground layer.	Local
Mixed scrub	Mixed scrub was present at the southern end of the central treeline (S1 in Figure 5) and on the eastern site boundary (S2 in Figure 5). Due to trampling from the grazing cows passing between the two fields likely preventing notable regeneration of the central scrub, this area scored a lower condition than the eastern boundary scrub. S1 was made up of blackthorn, field maple, hawthorn, rose and bramble, with very little in the way of understorey. S2 was made up of blackthorn, hawthorn, damsons, oaks and sycamore. The ground layer was dominated by bramble, broadleaved dock, common nettle, and common ivy.	Site
Bramble scrub	Bramble-dominated scrub was located parallel to the southern site boundary. Rare willow sp. trees were also present within this habitat. Due to the density of the bramble, no ground layer was noted.	Site
Individual trees	Scattered trees were present within the site boundary distinct from the surrounding habitats and boundary features. This included two small, nine medium, and three large trees. Species included oak, ash, field maple, horse chestnut, and red beech.	Site

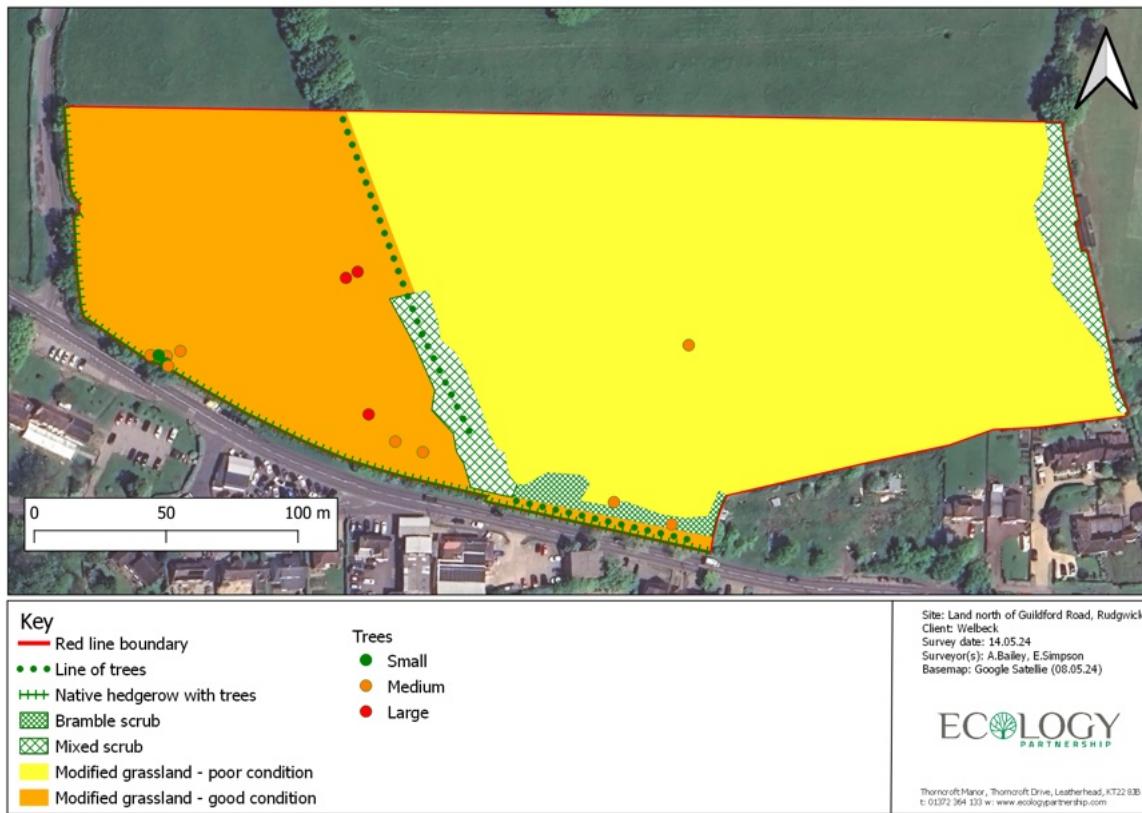


Figure 6: Habitat Map

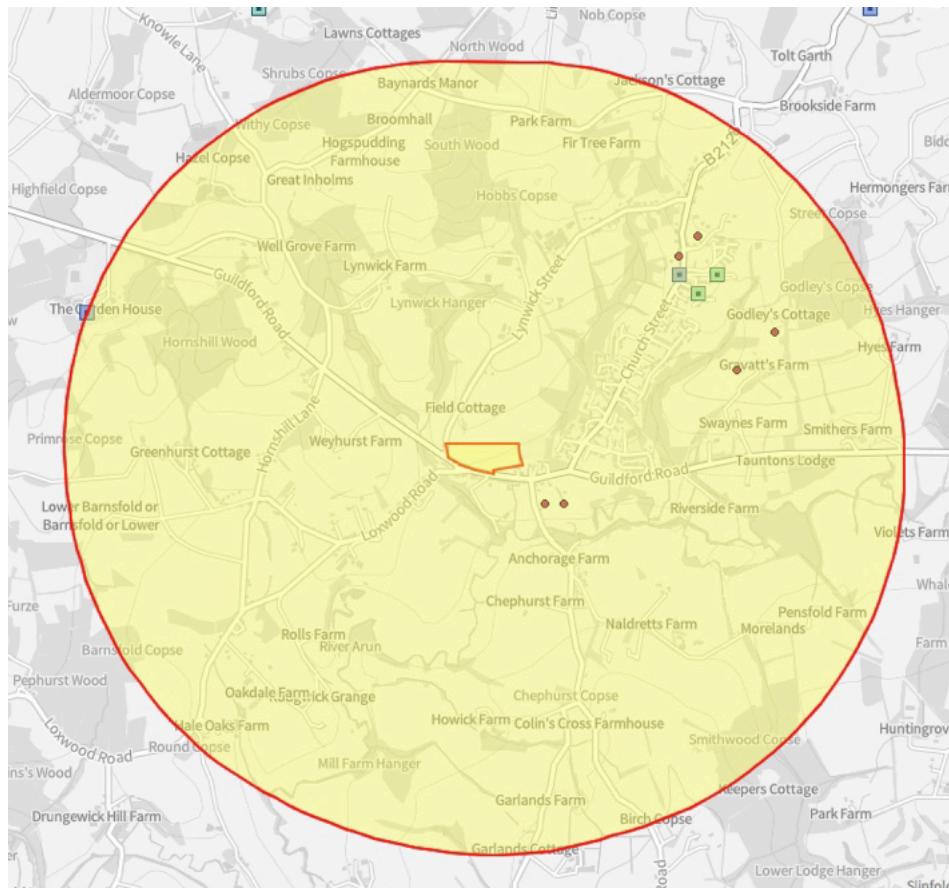
Species and species groups

3.6 Species data is derived primarily from the 2km biological records from the Sussex Biological Records Centre (SxBRC). These are detailed in Table 2 and within the PEA.

3.7 The desktop study revealed there were four European Protected Species (EPS) licences, and seven great crested newt (GCN) licence return results within 2km of the red line boundary (Figure 7):

- GCN licence return 235m south-east confirming GCN presence May 2016
- GCN licence return 305m south-east confirming GCN presence May & June 2016
- GCN licence return 1.2km north-east confirming GCN presence May 2015
- GCN licence return 1.4km north-east confirming GCN presence May & June 2015
- GCN licence return 1.2km north-east confirming GCN presence May & June 2015
- GCN licence return 1.3km north-east confirming GCN presence May 2015
- GCN licence return 1.4km north-east confirming GCN presence May 2015
- EPS licence dated 2015-2023 for the destruction of a GCN resting place c. 1.2km north-east.

- EPS licence dated 2017-2021 for the destruction of a GCN resting place *c.* 1.3km north-east.
- EPS licence dated 2017-2019 for the destruction of a common pipistrelle *Pipistrellus pipistrellus* resting place *c.* 1.2km north-east.
- EPS licence dated 2014-2016 for the destruction of a common pipistrelle and brown long-eared bat *Plecotus auritus* resting place *c.* 2km north-west.



"Map produced by MAGIC on [05/02/2025]. © Crown Copyright and database rights [2025]. Ordnance Survey AC0000805307. Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGIC is a snapshot of information that is being maintained or continually updated by the originating organisation. Please refer to the documentation for details, as information may be illustrative or

Figure 7: EPS licences within 2km of the red line boundary. Bats (blue square), GCN (green square), GCN Class Survey Licence Returns (purple circle).

Bats

3.8 A Ground Level Tree Assessment (GLTA) of the trees on site was carried out as a precaution, although it is understood that all the trees would be retained as part of the proposed development. Of 18 total trees onsite, 13 were determined to support 'potential roost feature – individual' (PRF-I) and 5 to have 'potential roost feature – maternity' (PRF-M). Locations and details of these trees are detailed in the PEA completed in 2024.

3.9 PRF-I trees have been assessed as having potential to support low numbers of bats most likely individuals, this is through the general size and structure of a tree even though no specific feature has been identified, or through the presence of insignificant small features which may support a roost of low conservation value. PRF – M trees have been assessed as having significant or multiple features which could support multiple numbers of bats, including potential maternity roosts. All trees are to be retained as part of proposals

3.10 The preliminary ecological appraisals in 2021 and 2024 identified the requirement for bat activity surveys due to the limited suitable bat habitat located in the field boundaries.

3.11 Low to moderate levels of bat activity were recorded during transect surveys in 2021 and night time bat walkover surveys in 2024. Activity on site was dominated by common and soprano pipistrelles which are both common and widespread.

3.12 In 2021, three Anabat detectors recorded greater levels of bat activity on site than previously indicated by the transects. Similarly to the transect surveys, activity was dominated by common and soprano pipistrelles. A number of other species not previously identified on site were also recorded including barbastelle, myotis species, and Natusius' pipistrelle.

3.13 In 2024, two Anabats and one song meter detector were established across the site, these identified similar species composition, with the remote recordings being dominated by common and soprano pipistrelles. Myotis species were the third most recorded species during the survey period. Other species, including serotine (19 calls), leisler's (2 calls), noctule (53 calls) and barbastelle (7 calls), were recorded infrequently.

3.14 The majority of boundary habitats utilised by bats are to be retained and enhanced as part of the development. The creation of new linear features and urban trees planted onsite will help to maintain and improve the site's suitability for foraging bats. A sensitive lighting scheme is also recommended, including the enforcement of dark corridors along the existing boundary linear features.

3.15 It is considered that this would be sufficient to mitigate for the potential loss of linear features on site for the new access route onto site. It is also considered that these measures

would also improve the overall ecological value of the site for a range of other native species. The recommendations for habitat retention, mitigation and compensation would be considered sufficient to ensure the development would not impact upon the favourable conservation status of bats within the local area post-development.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Hazel Dormice

3.18 The hedgerow, treeline, and scrub habitats on site could potentially provide opportunities for dormice in the local area. Additionally, broadleaved, and ancient and semi-natural woodlands present in the local area. As a precautionary measure, in 2024 presence/absence nest tube surveys with supplementary footprint tunnel surveys were completed. These surveys found no evidence of dormice present, only wood/yellow-necked mice were found to be using the tubes. Therefore, it was considered that dormice are likely absent from the site.

GCN

3.19 One pond was present within a 250m radius of the site red line boundary (Figure 7) and was located on private land so were not accessible to be surveyed during the PEA conducted in 2024. The pond is located approximately 170m to the south of the site, beyond the A281. Considering the distance from the site and the A281 considered to be a barrier to dispersal, the potential for GCNs to access the site is minimal. Furthermore, the habitats on site which are grazed, reducing the value of the site for species such as GCNs.

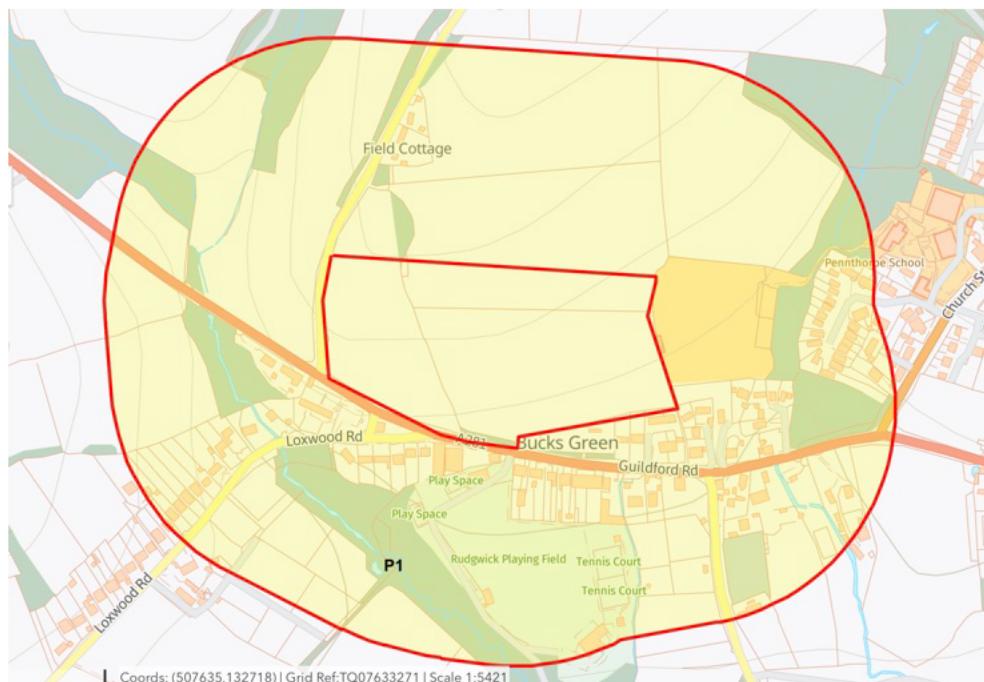


Figure 7: Waterbodies present within 250m of site.

3.20 In addition to this, the site appears to be located entirely within the green zone of the NatureSpace GCN risk zone mapping (Figure 8), indicating limited GCN habitat suitability and reduced likelihood of their presence. As such, no further surveys were considered necessary to support the EcIA.

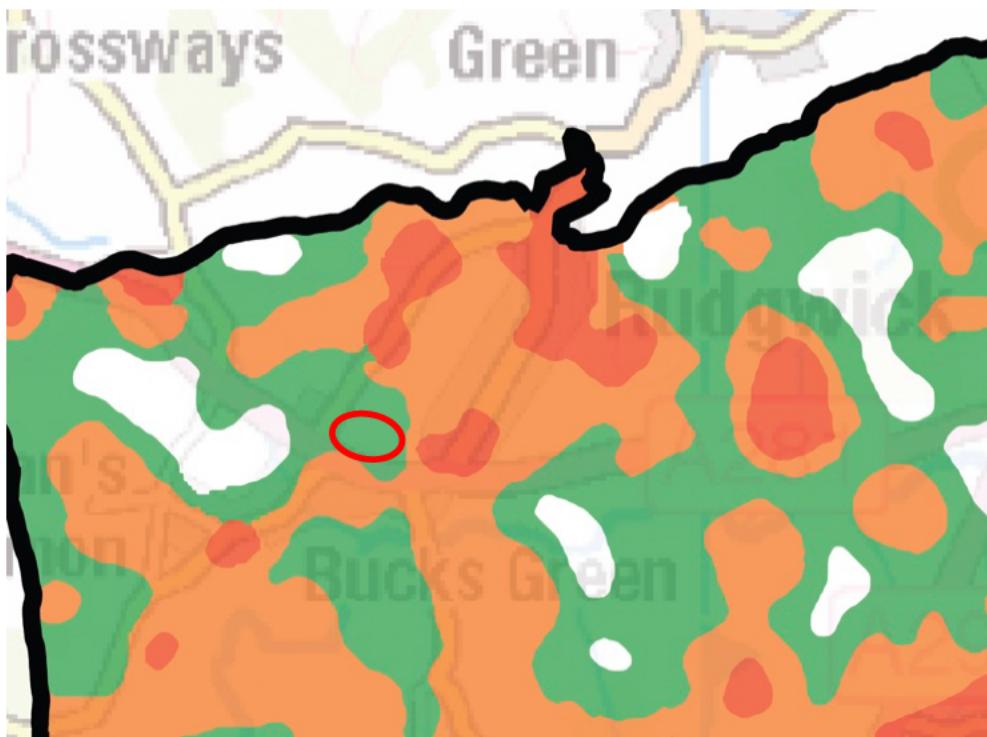


Figure 8: NatureSpace impact risk map showing the site in the green zone

Reptiles

3.21 The grassland on site was considered unsuitable for reptiles due to being frequently grazed. The local surroundings were also dominated by grazed fields, roads and residential housing which provide limited opportunities for reptiles. The closest biological records for reptiles were also separated from the site by distance and several barriers to dispersal.

3.22 It was considered that if grazing regime is maintained prior to any commencement of works, reptiles would not form a constraint on the proposed development. Therefore, reptile surveys were not considered necessary.

Breeding birds

3.23 The survey period included two surveys, conducted on 21st April and 25th May 2024. A total of seven species of conservation concern were observed on or nearby to the site. Of these, three were considered to potentially be breeding within site.

3.24 Species recorded included greenfinch, house sparrow, starling, dunnock, wood pigeon, Eurasian sparrowhawk, and wren. Of these, greenfinch, dunnock, and wood pigeon were considered to be breeding on or directly adjacent to site. A total of 15 other species of bird were also identified to be using the site, of these four were considered to potentially be breeding within site: blackbird, blue tit, great tit, and jackdaw.

3.25 Considering the above, it was determined the site to be of **low** local importance to breeding bird species.

Other Species

3.26 In 2019 and 2021, mammal holes were identified across the site, these were assumed to belong to foxes and rabbits due to their size and shape. Additionally, in all surveys (2019, 2021, and 2024), mammal paths were observed across site.

3.27 If any mammal holes are discovered during small-scale scrub/hedgerow removal and will be affected by the proposals, these should be assessed by a suitably qualified ecologist to determine the species of their inhabitant and whether any further survey measures and mitigation are required. [REDACTED]

3.28 The site was not considered to support habitats considered suitable for other protected species including otters or water voles.

Table 6: Summary table of faunal groups within development zone of influence

Faunal Group/Species	Description	Level of Importance
Bats – roosting in trees	Several trees with bat roost features were identified on site. 13 trees were identified as PRF-Is, possibly able to support small numbers of individuals. Five were considered PRF-Ms, able to support multiple numbers of bats, including potential maternity roosts. These trees are to be retained as part of proposals	Site (legislative implications if roosts are present)
Bats – foraging and commuting	<p>The site has multiple linear foraging and commuting routes which include: tree lines, hedgerows, and scrub.</p> <p>The activity surveys found a low to moderate level of bat activity during the 2021 and 2024 surveys. With both finding low levels of common species with common and soprano pipistrelles dominating the calls.</p> <p>The 2021 surveys found instances of barbastelle, myotis species, and nathusius' pipistrelle picked up on the static detectors. The 2024 activity surveys found sporadic recordings of serotine, leisler's noctule, and barbastelle.</p> <p>The activity surveys indicate the boundary features and central linear mature treeline may form part of a network of foraging and commuting habitat for bats across the landscape.</p>	Local (good quality foraging and commuting habitat in local context)
Reptiles	Due to the nature of the grassland onsite, with a regular grazing schedule, the site was considered unsuitable for reptiles.	N/A (likely absent from site)
GCN	Due to the distance from waterbodies in the wider environment, with all located more than 150m from the site with no barriers for dispersion, it was considered that GCN were likely absent from site.	N/A (likely absent from site)

Faunal Group/Species	Description	Level of Importance
Dormice	Surveys did not identify any dormice or evidence of dormouse activity.	N/A (<i>likely absent from site</i>)
Birds	<p>The 2024 surveys recorded a total of 22 species. Of these, seven of these were species of conservation concern: greenfinch, house sparrow, starling, dunnock, wood pigeon, Eurasian sparrowhawk, and wren. Of these, greenfinch, dunnock, and wood pigeon were considered to likely be breeding on or directly adjacent to site.</p> <p>Four other bird species were considered to potentially be breeding within site, these include; blackbird, blue tit, great tit, and jackdaw.</p> <p>It was considered that the site was of low local importance to breeding bird species.</p>	Site
Water Vole	No evidence of the species on site and lack of records within the local area.	N/A (<i>likely absent from site</i>)
Hedgehog	Local records for hedgehogs within 730m of the site and open rural nature of the site, presence of foraging and commuting hedgehogs onsite cannot be ruled out.	Site (<i>foraging habitat in local context</i>)

Future Baseline

3.29 Future baseline conditions are conditions which would be likely to arise if present conditions continue and a change of land use through the planning system does not occur. These conditions are assumed to be the continued functioning of the site for pasture with associated management of hedgerows, trees and woodland as required.

4.0 Description of the Proposed Development

4.1 The current proposals for the site are to create up to 90 residential dwellings, with up to 40% affordable housing, with associated access and landscaping which includes the creation of SuDS ponds. The details of onsite embedded mitigation and compensation measures have been designed into the landscape strategy.

4.2 Specified features of the submitted site layout that can be considered in which the scheme has been designed around (**Avoidance/Mitigation**) are:

- The retention and protection of the majority of mature trees, hedgerows, and scrub around the edges of the site

- Access points are strategically placed in areas of sparser vegetation on site.
- Development of SuDS system to prevent harmful run-off into surrounding habitat.

4.3 Additional **species-specific mitigation** measures to be incorporated within the scheme (maybe subject to change as part future reserved matters application):

- Retention of trees with bat roost potential;
- A sensitive lighting scheme, particularly adjoining green linear features, to maintain dark corridors on and off site for bats;
- [REDACTED]
- [REDACTED]
- Ongoing management continued with regards to reptiles;
- Clearance of any suitable nesting bird habitat, including boundary scrub, trees, and outbuildings, outside of nesting bird season or under ecological supervision; and ;
- Sensitive clearance for hedgehogs and inclusion of hedgehog highway holes in any proposed fencing.

4.4 Specified features of the submitted landscape and ecology strategy drawing that are proposed as **compensation** are:

- Planting of trees to compensate for those lost;
- Planting of new scrub/hedgerow to the north of the site, compensating for any loss connectivity resulting from access points;
- Enhancement of areas of greenspace with planting orchard, scrub, native, hedgerow, creation and planting up SuDS as part of BNG strategy for loss of overall habitat to minimise habitat loss on site; and
- Installing additional nesting and roosting provision on site for birds and bats.

5.0 Assessment of Effects and Mitigation Measures

5.1 The impact assessment is for the development as described above (section 4), including the submitted site layout plan and landscape and ecology strategy and their embedded mitigation. The assessment does not separate construction and operation impacts, solely assessing effects on important features that would result from the final layout. Residual impacts are those after mitigation and before compensation, which is considered in section 7.

5.2 Features within the red line that require an impact assessment are those determined as important in section 3, namely;

- Ecologically valuable line of Trees (priority habitat);
- Hedgerow with trees (priority habitat);
- Bats (roosts, and foraging and commuting habitat);
- [REDACTED]
- Breeding Birds;
- Hedgehogs.

5.3 Important features offsite, but within the zone of influence of the development and have the potential to be impacted indirectly, are:

- Lynwick Hanger LWS c. 240m north-west of site;
- Baynards Tunnel LWS c. 1.2km north-west of site;
- Smithwood & Tittlesfold Copses LWS c. 1.4km south-east of site;
- Godley's Copse LWS c. 1.5km north-east of site;
- The Mens SSSI SAC c. 7.8km south-west of site;
- Ebernoe Common SAC, c. 10.6km south-west of site.

Ecologically valuable line of trees (priority habitat)

5.4 The central treeline are to be largely retained within current proposals. There is a section in which canopy connection is expected to be fragmented due to access road through the middle of the site. However, the location of this access road is a portion in which there are no tree bases, the understory of scrub will need to be cleared to create this access point. This design has been created to retain this habitat as much as possible. With the loss of a small area of connectivity, it is considered that there will be a **minor negative impact** upon the line of trees.

Hedgerow with trees (Priority Habitat)

5.5 Sections of hedgerow with trees are present along the site boundaries, with mature trees present within these habitats. The majority of this habitat is to be retained on site, with clearance avoiding mature trees within hedgerow habitat where possible. This habitat will be severed to provide access to the site from Guildford Road. Therefore, there will be a **minor negative impact** for this habitat on site.

Bats (roosts trees)

5.6 All trees with bat potential identified within the current baseline have been retained within the scheme. With this in mind, the installation of bat boxes on retained trees onsite post-development is considered that the development will have a **neutral impact** to roosting bats on site.

Bats (foraging and commuting)

5.7 The majority of the linear features favoured by bats as flight lines on site, including hedgerow, scrub edges and treelines are to be retained and buffered as part of the proposal. This will maintain connectivity of flightlines and foraging habitat across site and the local landscape. Small sections will be lost to provide access across the site. The small loss of suitable habitat (including tree lines, hedgerows and scrub habitat) and potential impacts from lighting, a **minor negative impact** cannot be ruled out without further compensation.

1

For more information, contact the Office of the Vice President for Research and Economic Development at 319-273-2500 or research@uiowa.edu.

For more information, contact the Office of the Vice President for Research and Economic Development at 319-273-2500 or research@uiowa.edu.

For more information, contact the Office of the Vice President for Research and Economic Development at 319-273-2500 or research@uiowa.edu.

1

[REDACTED]

For more information, contact the Office of the Vice President for Research and Economic Development at 319-273-2500 or research@uiowa.edu.

[REDACTED]

1. **What is the primary purpose of the study?** (Please select one)

[REDACTED]

For more information, contact the Office of the Vice President for Research and Economic Development at 505-274-3000 or opred@unm.edu.

© 2013 Pearson Education, Inc.

1

For more information, contact the Office of the Vice President for Research and Economic Development at 319-335-1111 or research@uiowa.edu.

Hedgehogs

5.10 Whilst having no specific legal protection they are protected from certain forms of harm under Wild Mammals (Protection) Act 1996. As such, if any mammal holes are identified during works, these should be assessed by a suitably qualified ecologist to determine the species of their inhabitant. These can then be excavated sensitively by hand rather than mechanical equipment. It is recommended that hedgehog holes are placed within any new panel fencing on site, to allow continued access to hedgehogs across the site for commuting and foraging purposes. With these measures employed **no residual impacts** are predicted.

Breeding birds

5.11 The legislative protection afforded active nests, birds and their eggs and young will be met through the clearance of vegetation outside of the breeding season or after a nesting bird check by a suitably qualified ecologist. The development will result in a temporary loss of suitable nesting habitat through the loss of small areas to provide access to site. The loss of these habitats reflects a negligible loss in the total potential breeding bird suitable habitat on the site, which is being compensated for with additional tree and scrub planting as part of the proposals.

5.12 The majority of the species recorded were within the boundary tree lines, hedgerows and scrub boundaries across the site, which these species use as their nesting locations. It is also considered that as the vast majority of these features are being retained and enhanced, with new and more diverse areas of grassland are being created, which could provide better foraging opportunities for breeding birds in the local area.

5.13 All works to nesting bird suitable habitat should be undertaken outside of the breeding bird season (March-September inclusive) or immediately after a nesting bird check by a suitably qualified ecologist. If active nests are identified, works in the vicinity of the nest must cease until the birds have fledged the nest.

5.14 It is however considered that there may be some increase in disturbance from new residents to nesting birds as part of the operational phase and there is also the potential for predation by domestic pets such as cats.

5.15 Overall, it is considered that with the mitigation measures in place, that the proposals will result in a **negative (minor)** effect on breeding birds over the site, prior to enhancements.

Lynwick Hanger LWS

5.16 This non-statutory designated site is located approximately 240m north-west of site and was designated for its semi-natural woodland and stream. Due to the distance of the site, no direct negative impacts would be anticipated from construction. This site is under private ownership and access onto the site is restricted. The proposed works would result in a **neutral effect** on the LWS with regards to recreational pressure and no impacts associated with construction.

Baynards Tunnel LWS

5.17 This is a non-statutory site designated for its disused railway tunnel that is used as a hibernation site by a significant number of species of bats during the winter months. A grille has been installed at the southern end to prevent human disturbance. This LWS is located c. 1.2km north-west of the site, as such, no direct negative impacts would be anticipated from construction.

5.18 Bat species roosting at this LWS may use the site for commuting and foraging purposes. As such, commuting pathways may be impacted temporarily through the loss of some areas of suitable linear habitat for access points to site. However, this will be compensated through the planting of new scrub to the north of the site creating a new green commuting pathway. Additionally, the implementation of dark corridors and sensitive lighting is predicted to have **no residual effect** on the designated sites or the bat species roosting there.

Smithwood & Tittlesfold Copses LWS

5.19 This LWS, located c. 1.4km south-east of site, is designated for the semi-natural woodland and stream. Due to the distance from the proposed development, no direct negative impacts would be anticipated from construction or during operational phase of the proposals.

5.20 Although there are paths and tracks onsite, recreational usage is not predicted to increase substantially. The site is under private ownership. The site supports a number of dwellings, some of which being used as holiday homes, such as 'Keepers Cottage'. As such, this site is already predicted to be used in some capacity for recreational use and therefore, it is considered that the proposals would result in no residual effect on the LWS.

Godley's Copse LWS

5.21 This LWS, located c. 1.5km north-east of site, is designated for the semi-natural woodland, streams, and pond. Due to the distance from the proposed development, no direct negative impacts would be anticipated from construction or during operational phase of the proposals.

5.22 Although there are paths and tracks onsite, recreational usage is not predicted to increase substantially as the site is under private ownership. As such, it is considered that the proposals would result in **no residual effect** on the LWS.

The Mens SSSI (SAC) and Ebernoe Common SAC

5.23 The Mens SSSI (SAC) and Ebernoe Common SAC are located c. 7.8km and 10.6 km of site. These sites are designated for their broad-leaved deciduous woodland that are host to bat species such as barbastelle *Barbastella barbastellus* and Bechstein's bat *Myotis bechsteinii* (Ebernoe Common only). Due to the distance from the proposed development, no direct negative impacts would be anticipated from construction or during operational phase of the proposals.

5.24 Barbastelle can travel up to 20km to reach foraging areas (Zeale et al., 2012), impacts to commuting habitats can have a significant effect upon the special interest of a European site, through an impact on conservation objective 4 (effect on the population) and 5 (the distribution of the species). Habitats used by significant numbers of qualifying features of the SAC are defined as functionally linked to the site and so require assessment under the Habitats Directive and Regulations, as if they were within the SAC boundary (Chapman and Tyldesley, 2016).

5.25 As the bat surveys identified only a small number of barbastelles using the site (a total of 7 calls identified across the site), it is considered that the site is not functionally linked to

these SACs. The site is not in regular use by these species and only in low numbers. Therefore, it is considered that the proposals would result in no residual effect on the SACs.

6.0 Cumulative effects

6.1 Cumulative effects are those arising from individually insignificant actions that, when combined, result in a significant effect to an ecological feature that is greater than the sum of its parts. Considered in isolation, such individual impacts can be overlooked or not sufficiently scrutinised. It is therefore an important feature of the ecological impact assessment process to identify cumulative impacts.

6.2 Largely the applications which are located within the landscape, are largely small scale housing applications (extensions, demolition of garage units, loft conversion) and agricultural changes of use, including field drainage, with additional developments including camping units. Several larger developments for solar panels (DC/23/1462) are also within the local area. These developments are small scale, consented schemes, which would not result in any cumulative impact.

6.3 The development DC/21/1415 for 37 houses at land at Windacres Farm (all proposed dwellings within Waverley Borough Council boundary) was consented. This is located over 1.6km to the north east of the site. As this is consented, all measures to ensure that impacts on protected species have been agreed and impacts are therefore considered negligible. The granting of planning permission for this site has been a result of assessing potential impacts on surrounding habitats, including designated sites, as required by law and policy. This includes assessing the impacts alone and in combination with other projects and plans within the local landscape.

6.4 Assuming that the nearby developments have mitigation in place to negate any potential negative effects such as increased visitor pressure on surrounding habitats, biodiversity net gain requirements and that protected species surveys have been conducted, a cumulative impact from the developments would be insignificant.

7.0 Compensation

7.1 It is recommended that the compensation methods, outlined below, are included as part of planning conditions for the outline planning application. In this development, compensation covers the loss of the small sections of scrub which have been required for removal to allow for access. Compensation addresses the loss of habitat, which could not be avoided through the development plans.

Ecologically Valuable Line of Trees

7.2 A loss of a small length of the line of trees will occur on site. New tree planting and new species rich hedgerow creation will provide new suitable habitat. As such there will be **no residual impact** through habitat creation.

Priority Hedgerow – Native Hedgerow with Trees

7.3 Replacement of the small section of priority hedgerow on site will be compensated for by the planting of extensive areas of species rich native hedgerow on site, as such **no residual impact** is anticipated for priority hedgerow habitats onsite.

Bats

7.4 The creation of new features for bats on site, including new native hedgerow and tree planting, new scrub and orchard planting and wildlife friendly SuDs, will mitigate the loss of any small areas of hedgerow, scrub and tree lines on site.

7.5 The erection of a bat boxes upon a mature trees and buildings, and the use of sensitive lighting design then it is considered that there will be **no residual impact** upon roosting bats on site.

Birds

7.6 With replacement habitat planted and provision of compensatory bird boxes, no residual impact is predicted.

Hedgehogs [REDACTED]

7.7 The new high quality habitat creation included within the development will compensate for the loss of nesting [REDACTED] habitat, result in a net gain of suitable breeding and

foraging habitat for [REDACTED] hedgehogs post development. As such, there will be no residual impacts.

8.0 Enhancement

8.1 Biodiversity gain, to meet NPPF and the Environment Act, is proposed and should be secured by planning condition. The following enhancements are proposed are to be incorporated into the site design:

- Provision of bird boxes on trees and buildings;
- Provision of bat boxes on trees and buildings;
- Provision of bee bricks within new buildings;
- Landscape strategy includes additional native tree and scrub planting, species rich grassland, hedgerow, SUDS, enhancing the site for commuting and foraging bats, dormice, reptiles, [REDACTED] nesting birds, hedgehogs and invertebrates;
- Long-term management of retained and newly created wildlife areas outside of residential curtilage to benefit wildlife and biodiversity;
- Provisions of additional log/brash pile habitats for reptiles, GCN, small mammals and invertebrates; and
- Purchase of offsite credits to satisfy trading summary and net gain for habitat units.

9.0 Monitoring

9.1 Ecological clerk of works tasks will be required during construction, to ensure there is no change in the baseline that may alter the implementation of the development.

9.2 Prior to any development, a check for any evidence of [REDACTED] will be made. Any tree which is scheduled for removal will be re surveyed prior to felling to ensure compliance with legislative requirements. Sensitive clearance will take place under ecological supervision, including nesting bird checks and the sensitive removal of habitats.

10.0 Summary

10.1 The table below summarised impacts on site to the various identified receptors. Monitoring works as detailed above will be undertaken before and during construction.

Table 7: Features of the site where significant effects are predicted to from the development

Feature	Effect type and magnitude	Mitigation	Residual effect	Compensation to remove residual effects	Residual effect after compensation	Enhancement/biodiversity gain
Designated sites						
The Mens SSSI (SAC) and Ebernoe Common SAC	Neutral	The site is not functionally linked to these off site SACs	Neutral	N/A	Neutral	N/A
Lynwick Hanger LWS Baynards Tunnel LWS Smithwood & Tittlesfold Copses LWS Godley's Copse LWS	Neutral	Construction impacts not considered likely due to distances involved. No impacts from operational impacts	Neutral	N/A	Neutral	N/A
Priority and protected species and habitats						
Hedgerows	Negative (Minor) Loss of small sections of tree line	Restrict loss to as small an area as possible Protection during construction	Negative (Minor)	Creation of hedgerow planting	Neutral	Creation of new mixed species native hedgerow throughout the site Long term management for wildlife
Ecologically valuable line of trees	Negative (Minor) Loss of small sections of tree line	Restrict loss to as small an area as possible Protection during construction	Negative (Minor)	Creation of new tree and hedgerow planting	Neutral	Creation of new mixed species native hedgerow throughout the site Long term management for wildlife
Bats (roosting)	Neutral		Neutral	N/A	Neutral	Additional bat roosting boxes to be incorporated around the site.

	All current trees with bat roosts retained	Retention of bat roost trees onsite Employment of sensitive lighting scheme				
Bats (foraging and commuting)	Negative temporary reduction in habitat, potential damage through artificial light.	Retention of vast majority of bat foraging and commuting habitat within the site and use of a sensitive lighting scheme.	Negative (Minor)	New hedge, scrub and tree planting to replace any features lost.	Neutral	Planting of additional foraging habitats for bats through SUDS, scrub and hedgerows.
						
Hedgehogs	Neutral.	Retention of vast majority of edge habitats which would be used for commuting and foraging.	Neutral	N/A	Neutral	Increase in variety of habitats on site

Breeding birds (active nests, all species)	Negative (Minor) , damage to active nests and loss of habitats. Potential predation from domestic cats from new residents. (BS42020: 2012)	Retention of vast majority of edge habitats which would be used for commuting and foraging. Construction works timing outside of breeding bird season	Negative (Minor)	Replacement habitat and habitat creation, nest box provision	Neutral	Increase in tree planting / scrub and shrub planting across site with provision of additional bird boxes
-----------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------	--------------------------------------------------------------	----------------	----------------------------------------------------------------------------------------------------------

11.0 References

Balmer, D. et al. 2013. *Bird Atlas 2007-11: The Breeding and Wintering Birds of Britain and Ireland*. British Trust for Ornithology.

Biggs, J., Ewald, N., Valentini, A., Gaboriaud, C., Griffiths, R.A., Foster, J., Wilkinson, J., Arnett, A., Williams, P. and Dunn, F., 2014., Analytical and methodological development for improved surveillance of the Great Crested Newt. *Defra Project WC1067*.

Bright, P., Morris, P. & Mitchell-Jones, T., (2006)., *The Dormouse Conservation Handbook*. 2nd edition. English Nature.

Bulmer, D.E., Gillings, S., Caffrey, B.J., Swann, R.L., Downie, I.S. & Fuller, R.J., (2013)., *Bird Atlas 2007-11. The breeding and wintering birds of Britain and Ireland*. BTO, Thetford.

Chapman, C., & Tyldesley, D. (2016). *Functional linkage: how areas that are functionally linked to European sites have been considered when they may be affected by plans and projects—a review of authoritative decisions*. Natural England Commissioned Report, 207.

CIEEM., (2018)., Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, J. (ed.), (2016)., *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). Bat Conservation Trust, London.

Cresswell, P., Harris, S. & Jefferies, D. J., (1990)., *The history, distribution, status and habitat requirements of the badger in Britain*. Nature Conservancy Council, Peterborough.

Froglife., (1999)., *Reptile survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife advice sheet 10, <http://www.froglife.org/advice/sheets/htm>

Gent, T. & Gibson, S. eds., (1998)., *Herpetofauna Workers Manual*. Joint Nature Conservation Committee, Peterborough.

HS2., (2017)., *High Speed Two Phase One Information Paper. E28. Mitigation and Compensation*. HS2, Birmingham.

Institution of Lighting Professionals., (ILP – 2018)., *Guidance Note 08/18 – Bats and artificial lighting in the UK*. ILP, Rugby.

Jehle, R. and Arntzen, J.W. (2000), Post-breeding migrations of newts (*Triturus cristatus* and *T. marmoratus*) with contrasting ecological requirements. *Journal of Zoology*, **251**: 297-306.

Joint Nature Conservation Committee., (JNCC - 2010)., *Handbook for Phase 1 habitat survey - a technique for environmental audit*. JNCC, Peterborough.

Langton, T.E.S., Beckett, C.L. & Foster, J.P., (2001)., *Great Crested Newt Handbook*. Froglife, Halesworth.

Mathews, F., Kubasiewicz, L.M., Gurnell, J., Harrower, C.A., McDonald, R.A. & Shore, R.F., (2018)., *A Review of the Population and Conservation Status of British Mammals: Technical Summary*. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough.

Musgrove, A. et al., (2013)., Population estimates of birds in Great Britain and the United Kingdom. *British Birds*. **106**: 64 –100

Natural England., (2001) *Great Crested Newt Mitigation Guidelines*. Natural England, Peterborough.

Natural England., (2010) *European Protected Species and the Planning Process*. www.naturalengland.org.uk.

Natural England., (2011) *Badgers and Development: A guide to best practice and licensing*. Natural England, Bristol.

Oldham, R.S., Keeble, J., Swan, M.J.S. & Jeffcote, M., (2000)., Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal*, **10**(4): 143-155.

Stone, E.L., Jones, G. & Harris, S. (2009)., Street lighting disturbs commuting bats. *Current Biology*, **19**: 1123-1127.

Stone, E.L., Jones, G., & Harris, S. (2012)., Conserving energy at a cost to biodiversity? Impacts of LED lighting on bats. *Global Change Biology*, **18**: 2458-2465.

Stone, E.L., Jones, G., & Harris, S. (2015)., Impacts of artificial lighting on bats: A review of challenges and solutions. *Mammalian Biology*, **80**: 213-219.

Zeale, M.R., Davidson-Watts, I. & Jones, G., (2012). Home range use and habitat selection by barbastelle bats (*Barbastella barbastellus*): implications for conservation. *Journal of Mammalogy*, 93(4), pp.1110-1118.

The Ecology Partnership Ltd

Thorncroft Manor

Thorncroft Lane

Leatherhead

KT22 8JB

Tel: 01372 364 133

www.ecologypartnership.com

Approved by: Alexia Tamblyn MA (Oxon) MSc CEcol CEnv MCIEEM FRGS

Date: 27/06/2025