



Preliminary Ecological Appraisal

Land at Red House, Staplefield

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LIABILITIES:

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

This report provides a snap shot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated only dominant species may be recorded.

The recommendations 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

Background

1.1 The Ecology Partnership was commissioned by David Jenkins Design to undertake a Preliminary Ecological Appraisal (PEA) assessment of the land at Red House, Cuckfield Road, Staplefield, RH17 6ET hereafter referred to as the 'site'.

1.2 The key objectives of a PEA (CIEEM 2017) are to:

- Identify the likely ecological constraints associated with a project;
- Identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy' (CIEEM 2016; BSI 2013, Clause 5.2);
- Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA); and
- Identify the opportunities offered by a project to deliver ecological enhancement.

1.3 This report comprises the:

- Legislative and planning context (Section 1);
- Assessment methodologies (Section 2);
- Results (Section 3);
- Implications for development (Section 4);
- An impact assessment (Section 5); and
- Conclusions (Section 6).

Site Context and Status

1.4 The site is located in Staplefield to the east of the Cuckfield Road at central grid reference TQ 27920 27907. The site supports a single residential building and garden located within a rural area. Adjacent to the northern and eastern boundaries is an arable field, and residential development borders the western boundary. The wider area is dominated by arable fields, and parcels of woodland.

1.5 The aerial photography overleaf (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.

Proposed Development

- 1.6 The proposals for the site are as yet unknown.

Planning Policies

- 1.7 The site was surveyed to assess its ecological value and to ensure the proposals were compliant with relevant planning policy and legislation. Policy guidance is provided by the National Planning Policy Framework (NPPF 2023) as well as policies from the Mid Sussex District Council. The following policies are considered relevant to ecology, biodiversity and nature conservation:

Mid Sussex District Plan (Adopted 2018):

- **Policy DP12:** Protection and Enhancement of Countryside
- **Policy DP16:** High Weald Area of Outstanding Natural Beauty
- **Policy DP17:** Ashdown Forest Special Protection Area (SPA) and Special Area of Conservation (SAC)
- **Policy DP18:** Setting of the South Downs National Park
- **Policy DP37:** Trees, Woodland and Hedgerows
- **Policy DP38:** Biodiversity

1.8 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 guidance 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.

1.9 The site has therefore been surveyed to assess its ecological value and to ensure compliance with national and local plan policies and other relevant nature conservation legislation including; Wildlife and Countryside Act 1981, Natural Environment and Rural Communities Act 2006, and the Conservation of Habitats and Species (EU Exit) Regulations 2019.

1.10 The report has been produced with reference to current guidelines for PEA (CIEEM 2017) and in accordance with BS 42020:2013 Biodiversity – Code of Practice for Planning and Development.

2.0 Methodology

Desktop Study

2.1 A desktop study search 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) was used to understand the habitats present in and around the survey area including identifying habitat linkages and features (ponds, woodlands etc.) within the wider landscape.

Preliminary Ecological Appraisal

- 2.2 An extended preliminary ecological appraisal was undertaken on 16th May 2024 by ecologists Digby Hayden BSc (Hons). The surveyors identified the habitats present, following the standard 'UK Hab' auditing method. The site was surveyed on foot and the existing habitats and land uses were recorded on an appropriately scaled map (JNCC 2010). In addition, the dominant plant species in each habitat were recorded. The potential for the site to support protected species was also assessed.

Protected Species Assessments

- 2.3 Any evidence of protected species was recorded. Standard methods of search and measures of presence or likely absence based on habitat suitability were used for bats in trees and buildings (Collins 2016), breeding birds¹, dormouse (Bright *et al.* 2006), great crested newt (ARG 2010), reptiles (Froglife 2015), badgers (Creswell *et al.* 1990) and water vole (Strachan *et al.* 2011).

Limitations

- 2.4 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 one site visit, as such seasonal variations cannot be 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.
- 2.5 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on site, based on the suitability of the habitat and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group. The assessment is only valid for the time when the survey was carried out. Additional surveys may be recommended if, on the basis of this assessment, it is considered reasonably likely that protected species may be present.

¹<https://www.bto.org/our-science/projects/birdatlas/methods/breeding-evidence>

3.0 Results

Desktop Study

- 3.1 There is one internationally designated site within 15km of the redline boundary. Ashdown Forest SPA & SAC is located approximately 12.5km west of the site (Figure 3).

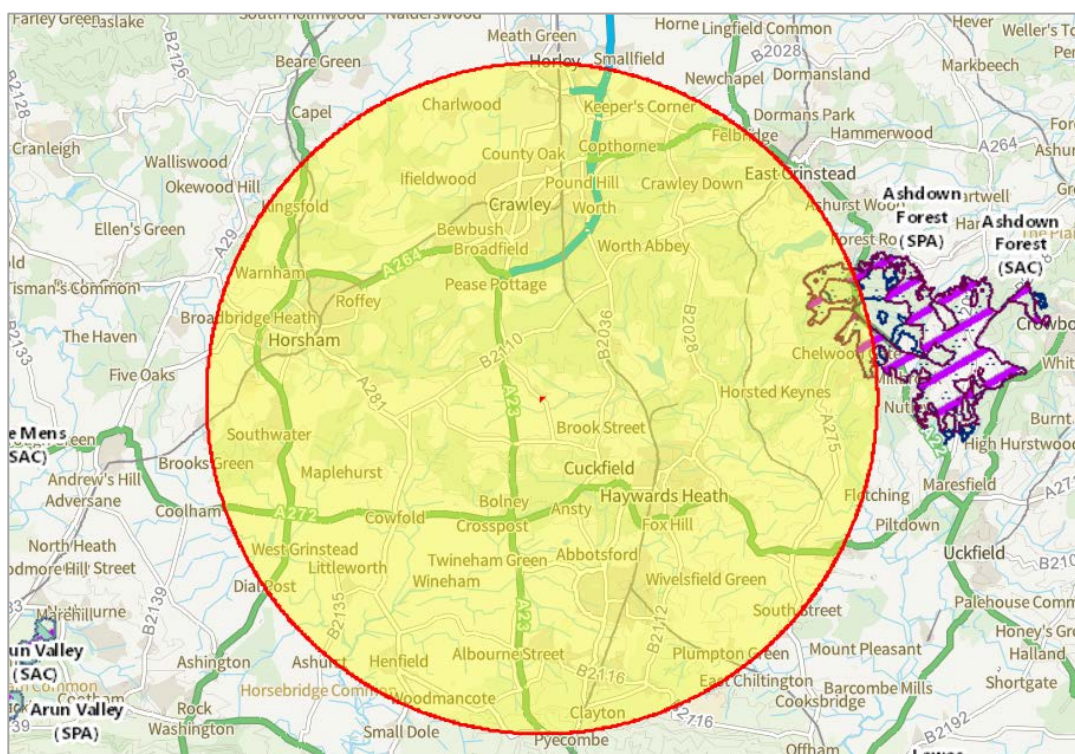


Figure 3: Internationally designated sites within 15km of the site boundary.

- 3.2 There is one national statutory designated sites within 2km of the site (Figure 4). Cow Wood and Harry's Wood SSSI is located approximately 1.6km north of the site.
- 3.3 There were no non-statutory sites identified within 2km of the site boundary.
- 3.4 There are several units of priority habitat within 2km of the site (Figure 5), the closest of each type include:
- Deciduous woodland c. 600m northeast;
 - Ancient and semi-natural woodland c. 700m north;
 - Ancient replanted woodland c. 1km north;
 - Traditional Orchards c. 160m northwest.

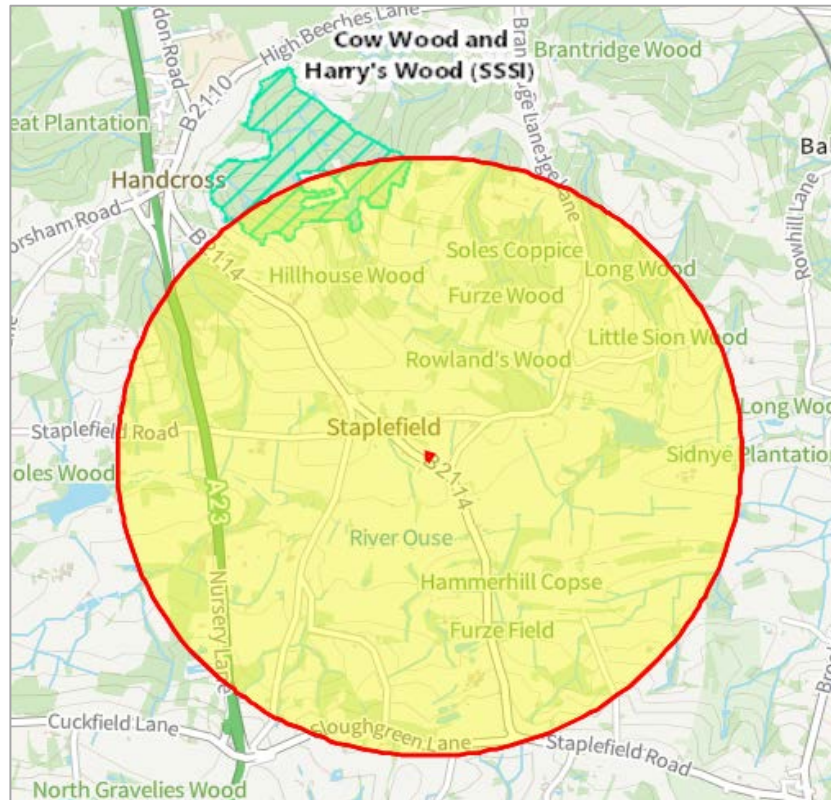


Figure 4: National statutory designated sites within 2km of the site boundary.

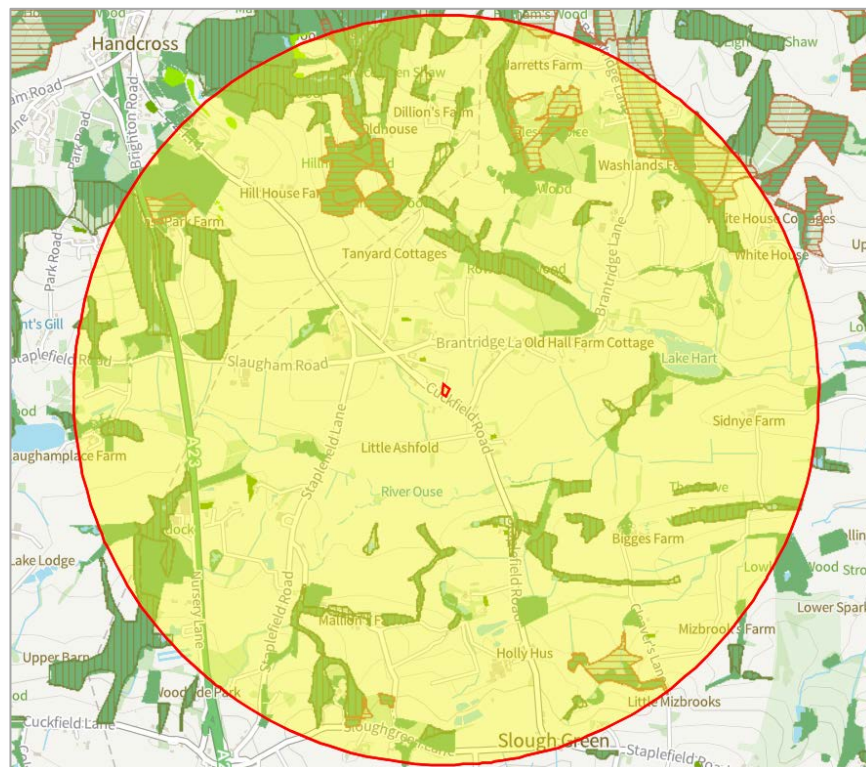


Figure 5: Priority habitat within 2km of the site including ancient and semi natural woodland (green vertical hatching) ancient replanted woodland (brown vertical hatching) deciduous woodland (dark green) and traditional orchards (light green).

- 3.5 OS maps and aerial imagery indicate there were no ponds on site and 2 ponds identified within 250m of the site (Figure 6).

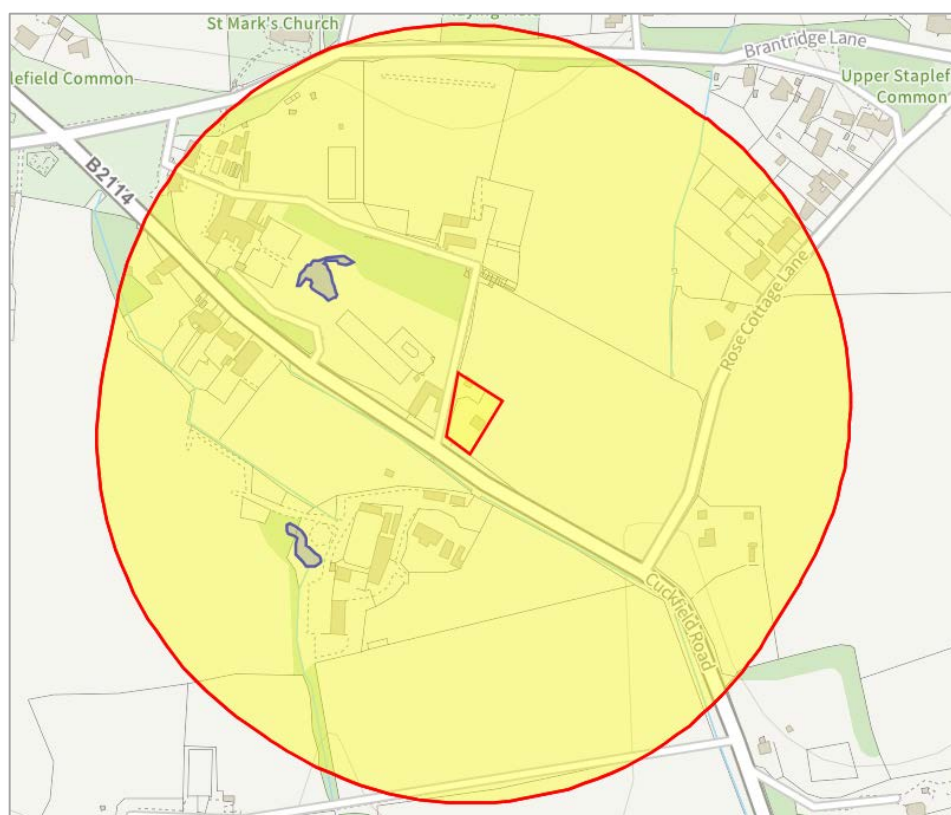


Figure 6: Ponds located within 250m of the site boundary.

- 3.6 The desktop study revealed that three European Protected Species (EPS) licences were issued within 2km of the site boundary, listed below (Figure 7).
- Bat license: 2019-39669-EPS-MIT destruction of a resting place for brown long eared bats and common pipistrelle approximately 300m north;
 - Bat license: 2017-28531-EPS-MIT impact on a breeding site, damage of a breeding site and destruction of a breeding site for brown long eared bats and common pipistrelle approximately 450m southwest;
 - Bat license: 2018-33253-EPS-MIT destruction of a resting place for brown long eared bats approximately 1.7km southwest;
- 3.7 There were three GCN licence returns present and five GCN ponds within 2km of the site boundary (Figure 7).

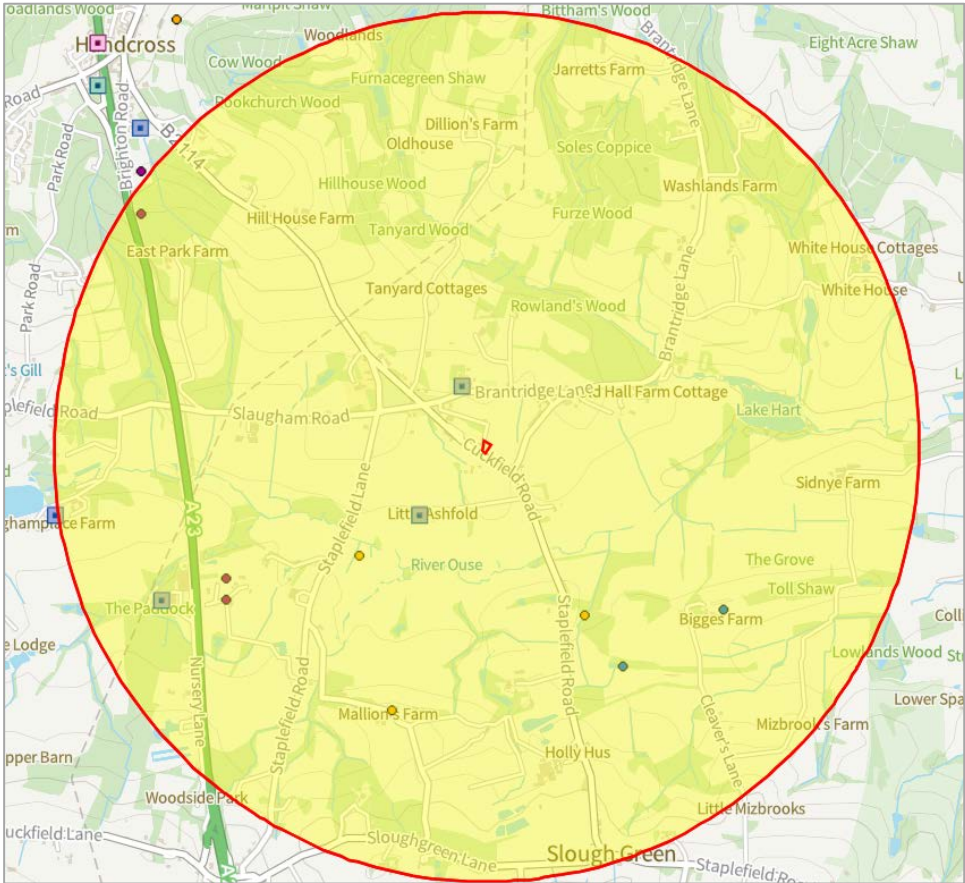


Figure 7: Location of EPS licences, GCN Class Survey Licence Returns and GCN Pond Surveys within 2km of the site boundary and the wider landscape (blue square bats, purple circle GCN Class Survey Licence Returns, blue circle GCN ponds)

3.8 A 2km records search was requested from Sussex Biodiversity Records Centre. The records closest to site, recorded within the last 10 years, and relevant to the habitats on site, have been included in Table 2

Table 1: Notable species records within 1km of the site from the last 10 years.

Species	Status	Closest Record	Date of most recent record
Mammals			
Hazel Dormouse <i>Muscardinus avellanarius</i>	NERC S41; Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch 5 s9.4b/c	c. 850m northeast (18/11/2021)	18/11/2021
Bats			
Western Barbastelle <i>Barbastella barbastellus</i>	NERC S41; Habitat Directive A2 NP; Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c	c. 900m northwest (01/09/2023)	01/09/2023
Serotine <i>Eptesicus serotinus</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c	c. 300m north (14/06/2018)	01/08/2023

Myotis Bat <i>Myotis</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c; NERC S41	c. 300m north (14/06/2018)	01/09/2023
Daubenton's Bat <i>Myotis daubentonii</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c	c. 1km northwest (19/08/2023)	19/08/2023
Whiskered Bat <i>Myotis mystacinus</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c	c. 1km northwest (19/08/2023)	19/08/2023
Noctule Bat <i>Nyctalus noctule</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c	c. 300m north (14/06/2018)	01/09/2023
Nathusius's Pipistrelle <i>Pipistrellus nathusii</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c	c. 900m northwest (01/07/2023)	01/09/2023
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c; NERC S41	c. 300m north (25/06/2018)	01/09/2023
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c; NERC S41	c. 300m north (14/06/2018)	01/09/2023
Long-eared Bat species <i>Plecotus</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c; NERC S41	c. 350m southwest (12/08/2016)	01/09/2023
Brown Long-eared Bat <i>Plecotus auritus</i>	Habitat Directive A4; Habitat Regulations Sch 2; Wildlife and Countryside Act (1981 as amended) Sch5 s9.4b/c; NERC S41	c. 300m north (14/06/2018)	25/06/2018
Birds			
Goshawk <i>Accipiter gentilis</i>	Wildlife and Countryside Act (1981 as amended) Sch 1 Pt 1	Within 2km	26/10/2022
Red kite <i>Milvus milvus</i>	Wildlife and Countryside Act (1981 as amended) Sch 1 Pt 1; Birds Directive A1	Within 2km	31/03/2022
Lapwing <i>Vanellus vanellus</i>	NERC S41	Within 2km	23/02/2018
Herring Gull <i>Larus argentatus</i>	NERC S41	Within 2km	17/04/2022
Turtle Dove <i>Streptopelia decaocto</i>	NERC S41	Within 2km	01/06/2021
Kingfisher <i>Alcedo atthis</i>	Wildlife and Countryside Act (1981 as amended) Sch 1 Pt 1; Birds Directive A1	Within 2km	17/07/2019
Hobby <i>Falco subbuteo</i>	Wildlife and Countryside Act (1981 as amended) Sch 1 Pt 1	Within 2km	19/07/2016
Hawfinch <i>Coccothraustes coccothraustes</i>	NERC S41	Within 2km	08/11/2021
Brambling <i>Fringilla montifringilla</i>	Wildlife and Countryside Act (1981 as amended) Sch 1 Pt 1	Within 2km	13/02/2021
Bullfinch <i>Pyrrhula pyrrhula</i>	NERC S41	Within 2km	17/04/2022
Grasshopper Warbler <i>Locustella naevia</i>	NERC S41	Within 2km	09/04/2015
Spotted Flycatcher <i>Muscicapa striata</i>	NERC S41	Within 2km	16/05/2020
Marsh Tit	NERC S41	Within 2km	17/04/2022

<i>Poecile palustris</i>			
House Sparrow <i>Passer domesticus</i>	NERC S41	Within 2km	04/03/2016
Dunnock <i>Prunella modularis</i>	NERC S41	Within 2km	17/04/2022
Firecrest <i>Regulus ignicapilla</i>	Wildlife and Countryside Act (1981 as amended) Sch 1 Pt 1	Within 2km	16/03/2021
Starling <i>Sturnus vulgaris</i>	NERC S41	Within 2km	17/05/2021
Redwing <i>Turdus iliacus</i>	Wildlife and Countryside Act (1981 as amended) Sch 1 Pt 1	Within 2km	02/01/2022
Song Thrush	NERC S41	Within 2km	05/05/2022

Habitat Survey

- 3.9 The site supports a single residential dwelling, with vegetated garden and hardstanding pathways. The habitat map is presented in **Appendix 1**, site photos in **Appendix 2** and a full species list in **Appendix 3**.

Buildings

- 3.10 A two storey residential dwelling was present within the centre of site. The building supported a clay tiled roof in moderate condition, as well as hanging tiles on all four aspects. Internally, no roof lining was present, with tiles open to the internal environment.

Modified Grassland

- 3.11 The site was dominated by well-managed modified grassland at a uniform short sward. Species were dominated by perennial ryegrass, red fescue and common bent. Other species present included lesser-hop trefoil, field woodrush and creeping buttercup.

Individual trees

- 3.12 Two small apple trees were present in the southwestern section of the site. These were managed within the vegetated garden habitat.

Pond

- 3.13 A small ornamental pond was present in the north of the site, sunken into and surrounded by a tiled patio. Vegetation within the pond included water lily, and yellow flag iris.

Hedgerow

- 3.14 The site was bound by a hedgerow dominated by cherry laurel. This hedgerow was well managed.

Protected Species***Roosting Bats***

- 3.15 The single building on site supported a clay tile roof in moderate condition, as well as hanging tiles on all aspects. Many tiles were slipped and missing providing suitable roosting opportunities for crevice-dwelling bat species such as *Pipistrellus sp.*, and suitable entrances to the void for larger bat species such as *Plecotus sp.* The building was internally accessed, and a brown long eared bat was observed roosting within the loft void. As such, the building is considered to support a bat roost.
- 3.16 No mature trees supporting potential roosting features were present on site.

Foraging and Commuting Bats

- 3.17 The areas of vegetated garden on site are well managed, and not substantial enough to form significant parts of commuting routes across the local landscape. The value of the on site habitat for foraging bats is limited given the scale of the site. As such, the site is considered unlikely to support significant foraging or commuting bat activity.

Badgers

- 3.18 No evidence of badgers, including setts, latrines or holes, were found within the site boundary at the time of the survey. Given the rural surroundings of the site, badgers may occasionally use the site for foraging or commuting.

Great Crested Newts

- 3.19 A single, ornamental pond was present on site. However, this was sunken into a concrete patio, with no suitable entry or exit points for amphibians, and was also too small and shallow to support GCN.
- 3.20 Two ponds were identified within 250m of site, one lying approximately 110m to the west, and one approximately 130m southwest of the site. Given the rural surroundings of the site, no significant dispersal barriers are present between the closest pond and the site. The habitats on site, however, are all well-managed, and regularly maintained,

and provide little to no opportunities for GCN in their terrestrial phase. As such, it is considered unlikely that GCN are present on site.

Dormice

- 3.21 The site is mostly comprised of unsuitable dormice habitat due to the dominance of hardstanding, and regularly maintained garden habitats.

Reptiles

- 3.22 The majority of the site was considered suitable for reptile species given the highly-managed, short-sward nature of the garden habitats.

Nesting Birds

- 3.23 The hedgerow and shrubs on site were considered to have potential to support nesting bird species.

Badger

- 3.24 Although no evidence of badgers was recorded on site, due to the rural surroundings of the site, it is considered possible that badgers use the site for occasional foraging and commuting purposes.

Other Species

- 3.25 All habitats on site are considered suitable for hedgehogs. Although no direct evidence was recorded at the time of the survey, there are records of western European hedgehog in the local area.
- 3.26 Due to a lack of suitable habitat, water voles and otters are considered unlikely to be present on site and are not considered a constraint to development. As such, they will not be discussed further in this report.

4.0 Discussion

- 4.1 The following paragraphs consider the effects of the development on designated sites, priority habitats and protected and priority species. Where the desk study and habitat survey provide sufficient evidence for an assessment of effects on any of these groups to be taken through planning, these are detailed below, the need for additional surveys and when and how these should be completed are summarised, if required.

- 4.2 Provisional recommendations are also given for means to enhance biodiversity net gain, following the principle (CIEEM et al. 2016) of following the mitigation hierarchy of; avoidance, minimisation of loss, compensation on site and biodiversity offset.

Effects on Designated Sites

- 4.3 The site does not fall within or adjacent to any statutory sites. The nearest internationally designated site, Ashdown Forest SPA & SAC, is located c. 12.5km west of the site. The site lies outside the 7km impact of development radius for Ashdown Forest SPA & SAC. As such, no impacts upon these designated sites are considered likely.
- 4.4 One nationally designated site was located within 2km of the site, Cows wood and Harry's wood lies 1.6km north of the site. At this distance, residential development is not considered likely to impact the designated site.
- 4.5 One nationally designated site was located within 2km of the site, Cows wood and Harry's wood lies 1.6km north of the site. The site lies within the SSSI Impact Risk Zones, however, residential development is not listed as those which are likely to have a significant impact on the integrity of the SSSI. Furthermore, it is considered that due to the size of the development and the distance from all designated sites, that no impacts, direct or otherwise, would be predicted as a result of the proposals.

Effects on Priority Habitats

- 4.6 The closest parcel of priority habitat is lowland deciduous woodland, approximately 600m northeast of the site. However, this habitat is not functionally linked to the site, nor are any related habitats present on site. Therefore it is considered unlikely that development onsite will impact this priority habitat.
- 4.7 Impacts on other parcels of priority habitat are considered unlikely due to the surroundings of the site, lack of connectivity and lack of related habitats onsite.

Effects on On-site habitats

- 4.8 The majority of habitats on site, including buildings, modified grassland and hedgerow, are common and widespread, and are of limited biodiversity value.

Protected Species

Roosting Bats

- 4.9 A Brown long eared bat was observed within the lone building on site. As such, the building is considered to be a confirmed bat roost, and therefore will require 3 dusk emergence surveys to establish the use of the building by roosting bats.
- 4.10 These surveys must be undertaken when bats are most active, which is between May and August. Dusk emergence surveys commence at least 15 minutes before sunset until 2 hours after sunset, during which time, bats are identified and recorded using a bat detector, such as the EchoMeter Touch 2. Surveyors should also be equipped with infrared cameras. In addition to the above, bat surveys are required to be undertaken during suitable weather conditions, when conditions are relatively dry and mild with little/no wind.

Foraging and Commuting Bats

- 4.11 The site was considered to have limited suitability for foraging and commuting bats, with habitats of low value, such as hardstanding and managed grassland dominating the site.
- 4.12 According to Bat Conservation Trust guidelines it is important that proportionality is employed when recommending further survey work for bat species on a proposed development site. As stated within section 2.2.19 of the latest survey guidelines (2023), the following points need to be considered with regard to planning bat surveys:
- Likelihood of bats being present;
 - Type of proposed activities;
 - Scale of proposed activities;
 - Size, nature and complexity of the site;
 - Species concerned;
 - Number of individuals.
- 4.13 The scale and nature of the proposals appear to be limited to the onsite building and potentially tall ruderal habitats and some scrub removal around the derelict buildings. If no tree lines are considered likely to be impacted by the process, the ecological functionality of the landscape will not be impacted upon by the proposed

development. Considering the above and the nature of the proposed development, it is considered that transect surveys for bats would not be required.

4.14 However, it is always recommended that any proposed lighting scheme as part of the development must consider bats in the surrounding area as well as site. All bat species are nocturnal, resting in dark conditions in the day and emerging at night to feed. Bats are known to be affected by light levels, which can affect both their roosting and foraging behaviour. This needs to be considered with a sympathetic lighting scheme for the development. Recommendations include:

- Installing lighting only if there is a significant need;
- Using sodium lamps instead of mercury or metal halide lamps where glass glazing is preferred due to its UV filtration characteristics;
- Directing lighting to where it is needed and avoiding light spillage;
- Using baffled lighting where light is directed towards the ground and
- Avoid putting lighting near trees suitable for roosting bats, woodland, trees or hedgerows and angling light away from these linear features which are used by commuting and foraging bats.

Badgers

4.15 No evidence of badgers including setts, latrines, or holes were identified within the site on the day of the survey. However, due to the presence of ecologically valuable line of trees and deciduous woodland 290m south of the site, it is considered likely that badgers use the site for foraging and commuting. As such, best practice guidelines are recommended to be followed throughout development, to help ensure no individuals are harmed during the construction phase of the project:

- Any excavations and/or trenches associated with construction are either covered at night or supplemented by means of escape for any badgers that may fall into the excavation whilst foraging;
- Any open pipes or conduits laid should be blocked off each night to prevent badgers from entering them;
- As far as possible, construction work should only take place between dawn and dusk with no late evening work to reduce possible disturbance.

4.16 If these methods are followed, no significant residual impacts are predicted on badgers on site or within the local area. These steps will also help to ensure no harm comes to

other mammals such as rabbits which may be present due to evidence of rabbit grazing.

Nesting Birds

- 4.17 The hedgerow and shrubs on site, all have the potential to support nesting birds. If any of these features are to be removed, this 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.

Other species

- 4.23 No potential for any other species, such as reptiles, dormice, otters or water voles was identified within the site boundary. It is considered that if, during any works, a protected species is recorded, then all works must cease, and advice should be sought from a qualified ecologist.
- 4.24 The site has potential to support hedgehog. Whilst receiving no specific legal protection, they are protected from certain forms of harm under the wild mammals (Protection) Act 1996. There is a risk that without mitigation, vegetation clearance on site may result in mutilation or crushing of hedgehog nesting in bramble. As, such, it is recommended that where buildings are removed and where debris is removed, best practice guidelines be followed throughout any development to ensure no individuals are harmed. Areas where dense vegetation needs clearing, should be cut in two stages, the first to 300mm, then then the second to ground level after the area has been searched for hedgehog. If any are found, they will be safely moved to a suitable brash pile outside the clearance area.

Ecological Enhancements

- 4.25 Several enhancements can be made to the final development to help reduce potential ecological impacts and increase ecological opportunities for a range of species. Local planning encourages developments to improve biodiversity, therefore some enhancements are detailed below.
- 4.26 Bat boxes can be integrated into the structure of the new development (Figure 10). These provide good opportunities for crevice-dwelling species such as pipistrelles.

The opening of the bat box/tube will be the only section visible, and they are designed so that they require little to no maintenance. Several of these tubes can be established in a row together providing a good-sized roost space. The bat tubes should be inserted in the brickwork at least 4m from ground level in a location not illuminated by artificial lighting. Habibat, in association with the Bat Conservation Trust, provide a range of boxes which are unfaced for render or designed to match the brickwork of the building.

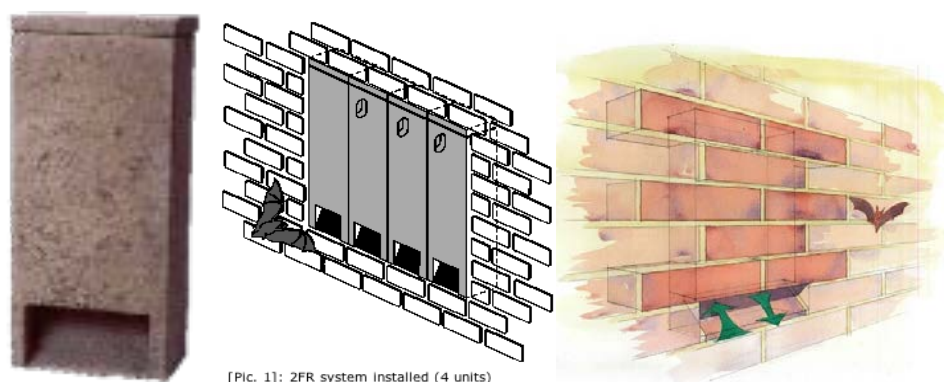


Figure 10: Bat tubes incorporated into the wall of a building to provide roosting space.

- 4.27 Additional nesting opportunities for birds can be installed upon new buildings. Hardwearing woodcrete boxes, or similar, are recommended. Figure 11 below gives examples of suitable bird boxes which could be installed onto the brickwork of building units or onto existing mature trees. The boxes should be positioned on a north or east facing aspect and at least 2m above the ground if possible. These would cater for species such as house sparrows and wagtails and the smaller garden birds.



Figure 11: Examples of suitable bird boxes which could be installed on site – Vivara Pro WoodStone House Sparrow Nest Box (left), Vivara Pro Barcelona WoodStone Open Nest Box (centre) and Vivara Pro Seville 32mm WoodStone Nest Box (right)

5.0 Impact Assessment

- 5.1 This section of the report forms an EcIA (Ecological Impact Assessment) and is designed to quantify and evaluate the potential impacts of the development on habitats and species present on site or within the local area.
- 5.2 The approach to this assessment accords with guidance presented within the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM 2018). In essence, an EcIA assesses the activities associated with a proposed scheme that are likely to generate changes within identified zone of influences, on identified ecological features and receptors. The proposals are subsequently reviewed, and mitigation and compensation measures are outlined which help to reduce negative impacts.
- 5.3 Table 2 summarises the impacts and required mitigation for each receptor as previously detailed in the discussion.

Table 2: Assessment of effects from the proposal after mitigation and compensation

Feature	Scale of Importance	Mitigation/Compensation Required	Residual Effect
Internationally Designated Sites	International	No mitigation/compensation required – sufficient distance from the designated site.	Not significant

National Statutory Designated Sites	National	Site located within SSSI impact zones, but development is not listed as development that would impact upon the integrity of the SSSI units. No impact predicted.	Not significant
Non-Statutory Sites	County	None required. Orchard incorporated into proposal plans.	Not significant
Priority Habitat	Local	No impact considered on priority habitats due to lack of connectivity with onsite habitats.	Not significant
On site habitats	Local	Most of the existing habitat is of limited ecological value and is common and widespread.	Not significant
Bat (roosting)	Local	Building on site is a confirmed roost, and requires 3 emergence surveys. .	Undetermined
Bats (commuting and foraging)	Up to local	No further surveys. .	Not significant
Badgers and hedgehogs	Local	Best practice guidelines during the construction phase of the project, to ensure no individuals are impacted or harmed when foraging or commuting within the site	Not significant
Nesting birds	Local	Mitigating direct harm to nests by removal of any suitable nesting habitat outside of nesting bird season or after a check by a suitably qualified ecologist. Additional nesting provision to be installed on site.	Not significant
GCN, Dormice, Reptiles	Local	Considered unlikely to be present on site	Not significant

6.0 Conclusions

- 6.1 The site does not lie within or adjacent to any designated sites. The site lies outside the 7km likely impact zone of Ashdown Forest SPA & SAC, and is considered unlikely to impact the internationally designated site.
- 6.2 The site lies within an IRZ of Cow Wood and Harry's Wood SSSI, however no residual negative impacts are anticipated due to the small-scale nature of the development, the distances between the site and all designated sites, and the lack of any related habitat to be lost.

- 6.3 The habitats on site including hardstanding and vegetated garden are considered to be of low ecological value. Furthermore, these habitats are not considered suitable to support protected species including dormice, GCN, reptiles, otters or water vole.
- 6.4 The building on site was confirmed to support roosting bats, and therefore three emergence surveys are required to identify the extent of the bat roosts and the number and potentially the presence of additional species within. No transect activity surveys are recommended. Recommendations for low level lighting and other enhancements have been made.
- 6.5 No evidence of badger activity, such as sett entrances, faeces, or badger hairs, was recorded within the site. Hedgehogs may be present using the scrub and woodland habitats. As a precaution, it is recommended that precautionary construction measures are implemented to avoid impacting badgers and other small mammals including hedgehogs that might forage and commute on the site.
- 6.6 Recommendations for enhancements have been made within this report, aimed at improving the ecological value of the site post-development.

7.0 References

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Internet resources:

Google Maps: www.google.co.uk/maps

Magic Interactive Map: www.magic.gov.uk

Appendix 1: Habitat Map



Appendix 2: Photos

Photograph 1: On site building	 A photograph of a two-story red brick house. The house has a gabled roof with a prominent brick chimney on the left side. A satellite dish is mounted on the roof. The front facade features three windows: a large double window on the left, a smaller single window in the center, and another large double window on the right. The ground floor is painted white. A small yellow plaque is visible on the right side of the upper floor. A satellite dish is also visible on the right side of the house.
Photograph 2: Condition of hanging tiles	 A close-up photograph of the roof tiles. The tiles are red and show significant damage, including missing tiles and broken edges. The roofline is visible, showing the gutter and the edge of the roof.
Photograph 3: Internal Structure of building loft void	 A photograph showing the internal structure of the roof. The view is from below, looking up at the wooden beams and the underside of the roof tiles. The tiles are red and show signs of damage, including missing tiles and broken edges. The wooden beams are light-colored and appear to be in good condition.

Photograph 4: Brown long-eared bat within loft void	
Photograph 5: On site ponds	
Photograph 6: Managed Garden habitats bound by hedgerow	

Appendix 3: Species List

Common name	Latin name	DAFOR score
Vegetated Garden		
Annual Meadow-grass	<i>Poa annua</i>	O
Apple Tree	<i>Prunus sp.</i>	R
Common Bent	<i>Agrostis capillaris</i>	A
Creeping Buttercup	<i>Ranunculus repens</i>	O
Daisy	<i>Bellis perennis</i>	F
Dandelion	<i>Taraxacum officinalis</i>	F
Field Wood-rush	<i>Luzula campestris</i>	O
Lesser Hop-Trefoil	<i>Trifolium dubium</i>	R
Oxeye Daisy	<i>Leucanthemum vulgare</i>	R
Perennial Rye-grass	<i>Lolium perenne</i>	D
Red Fescue	<i>Festuca rubra</i>	D
Yorkshire-fog	<i>Holcus lanatus</i>	O
Hedgerow		
Cherry Laurel	<i>Prunus laurocerasus</i>	D

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