Preliminary Ecological Appraisal

Land south of Smugglers Lane, Barns Green

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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 maybe 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 Miller Homes to undertake a Preliminary Ecological Appraisal (PEA) of land south of Smugglers' Lane, Slaughterford Farm, Itchingfield, Barns Green, Horsham, West Sussex, RH13 0PS, hereafter referred to as the 'site' (Figure 1). This is in support of a planning application for 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 comprises one field of modified grassland bordered by hedgerows on each aspect. Ancient and deciduous woodlands are adjacent to the south western boundary, with a large fishing pond to the west. The site is approximately 3.2ha and located southwest of the town of Barns Green in Horsham, at a central grid reference TQ1246727020. In the wider area supports a fishery and campsite to the south and west, residential development to the east and blocks of woodland connected by arable land and hedgerows.

1.5 A close view of the site boundary and survey area is shown in Figure 1 below, and the wider extent of the site is shown in Figure 2.

Figure 1: Approximate location of the red line boundary
Satellite imagery obtained from Google Earth Pro on 01/04/2025

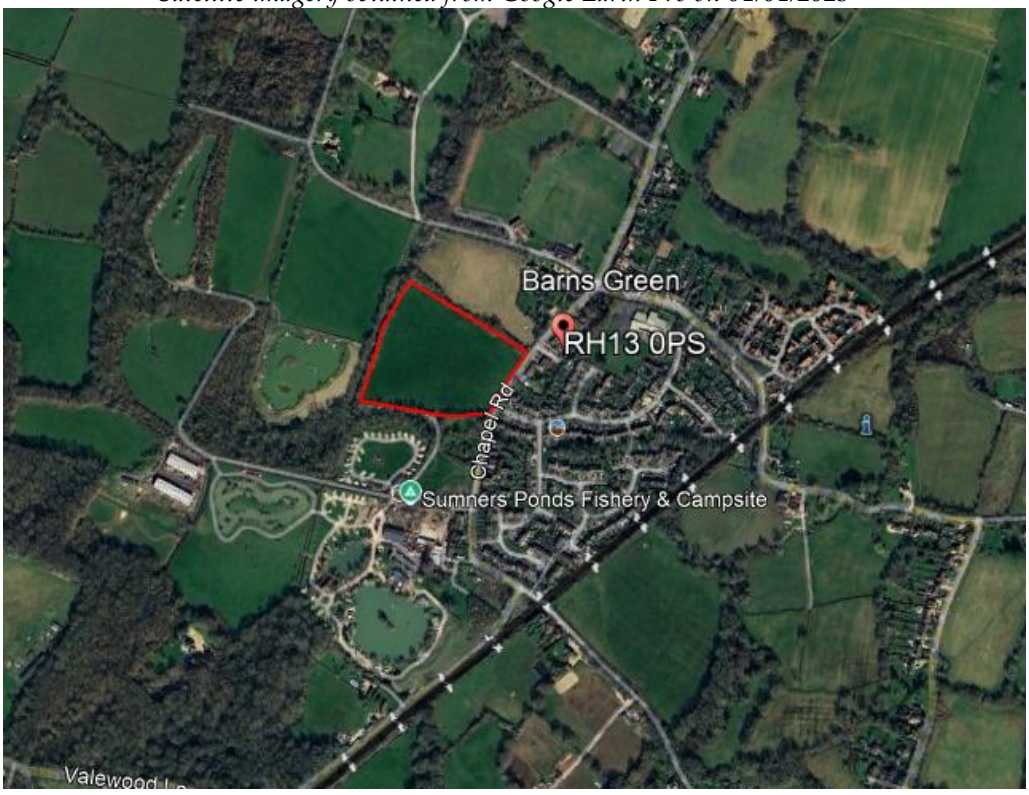


Figure 2: Approximate location of the red line boundary showing the wider landscape *Satellite imagery obtained from Google Earth Pro on 01/04/2025*

Description of the Proposed Development

1.6 The proposals are for a residential development with associated access road and garden space. Amenity areas include a play area and open space supporting a SuDS basin. Additional tree planting will be present across the site. A 20m vegetated buffer is to be maintained along the boundary of the adjacent ancient woodland to the west of the site.

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 2024), as well as relevant planning policies from the Horsham District Planning Framework (November 2015). The policies which are considered relevant to ecology, biodiversity and nature conservation included:

- Policy 24- Environmental protection
- Policy 25- The Natural Environment and Landscape Character
- Policy 31- Green Infrastructure and Biodiversity

1.8 This report addresses the site in relation to nature conservation and wildlife and indeed to the local planning requirements as well as national planning and nature conservation legislation.

1.9 The Environment Bill (Environment Act 2021) 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%.

1.10 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.

1.11 The report has been produced with reference to current guidelines for preliminary ecological appraisal (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 and habitat linkages and features (ponds, woodlands etc.) within the wider landscape. Data for non-statutory sites, and local protected and notable species within 2km of the site was obtained from Sussex Biological Records Centre (SxBRC).

Preliminary Ecological Appraisal

2.2 An extended preliminary ecological appraisal was undertaken on 16th April 2025 by Principal ecologist Matt Pendry BSc (Hons) MCIEEM and assistant ecologist Hayley Gale BSc (Hons).

2.3 The surveyors identified the habitats present, following the standard UK Habitat classification system (UKHab) 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 of the site to support protected species was also assessed.

Protected Species Assessments

2.4 Any evidence of additional protected species was recorded. Standard methods of search and measures of presence, or likely presence based on habitat suitability were used for bats in trees (Collins 2023), breeding birds (BTO 2020), hazel dormice *Muscardinus avellanarius* (Wells *et al* 2025), great crested newts *Triturus cristatus* (ARG 2010), reptiles (Froglife 2015), [redacted] and water voles *Arvicola amphibius* (Strachan *et al*. 2011).

Limitations

2.5 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.

2.6 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.

3.0 Results

Desktop Study

3.1 There are three internationally designated site within 15km of the red line boundary (Figure 3).

- **The Mens** Special Area of Conservation (SAC) located approximately 8.4km west. The Mens SAC supports deciduous woodland and is designated for Annex I Atlantic acidophilous beech forest and Annex II species Barbastelle *Barbastella barbastellus.*
- **Arun Valley** SAC, Ramsar and Special Protection Area (SPA) located approximately 10.9km south west. Arun Valley mainly supports humid grassland and Mesophile grassland and is designated for Annex II species, Ramshorn Snail *Anisus vortculus.*
- **Ebernoe** SAC located approximately 13.5km west, designated for Annex I habitat, Atlantic acidophilous beech forest and Annex II species such as Barbastelle *Barbastella barbastellus* and Bechstein's Bat *Myotis bechsteinii.*

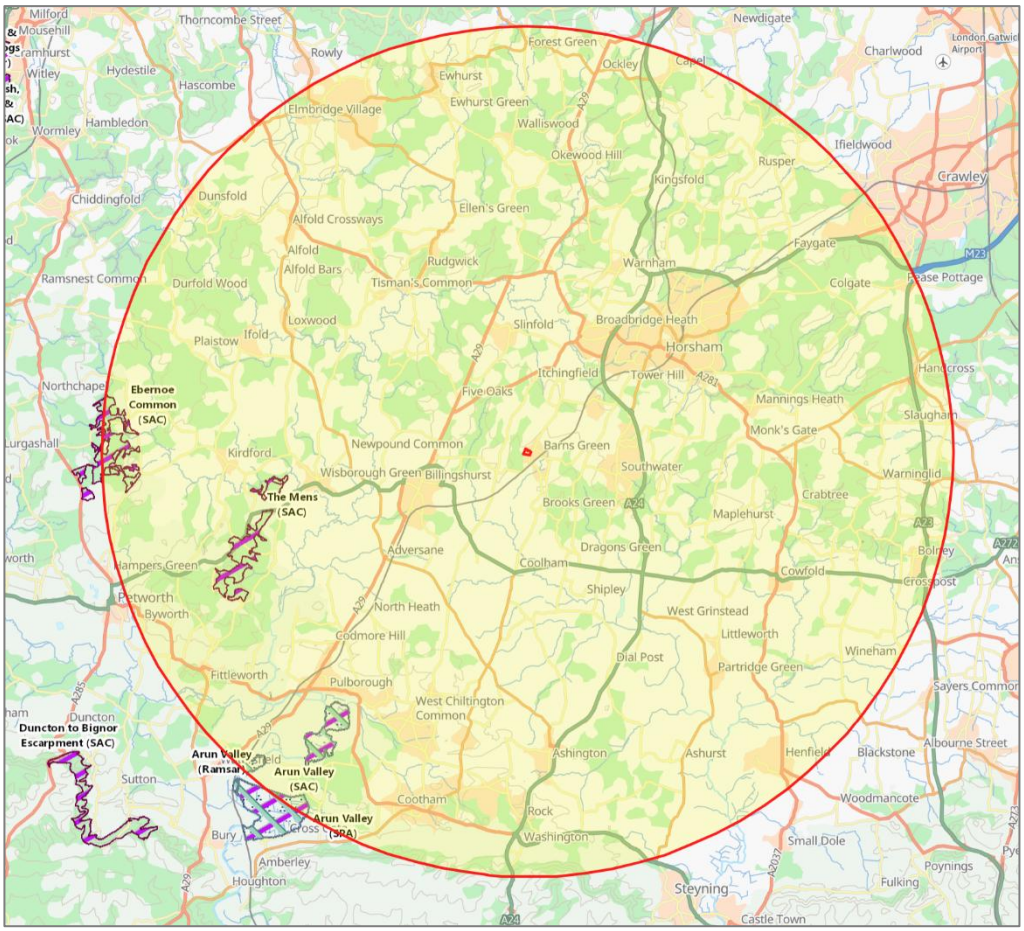


Figure 3: International statutory designations within 15km of the site.

3.2 The site does not fall within or adjacent to any nationally and there are no national statutory designated sites within 2km of the site.

3.3 The site does fall within multiple SSSI Impact Risk Zone (IRZ) however only developments involving Airports, helipads and other aviation proposals, livestock and poultry units and combustion would require a consultation with the Local Planning Authority.

3.4 In terms of non-statutory designations, there is one Local Wildlife Sites (LWS) within 2km of the site:

- Bishop's Wood LWS located approximately 1km north west of the site.

3.5 The site is surrounded by a number of priority habitats (Figure 4), including:

- Numerous parcels of **ancient and semi natural woodland**, which lies adjacent to the west side of the site boundary.
- A number of **ancient replanted woodland parcels**. The closest is approximately 1.2km south east of the site.

- A greater number of priority **deciduous woodland** parcels, the closest of which lies adjacent to the south western corner of the red line boundary and is also ancient semi-natural woodland.
- Several **traditional orchards**, the closest being approximately 330m north east of the site.
- One parcel of **good quality semi improved grassland** located approximately 1.9km south.

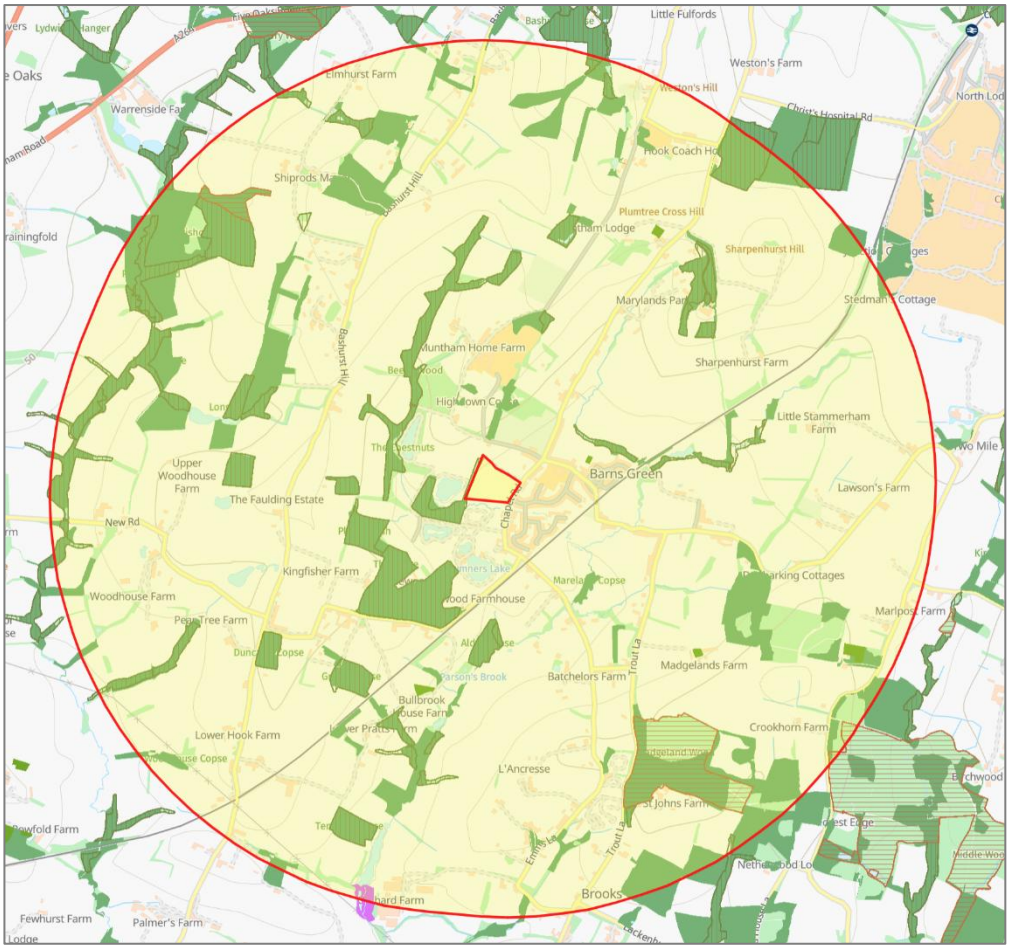


Figure 4: deciduous woodland (dull green), ancient woodland (green vertical hatching), ancient replanted woodland (brown horizontal hatching), traditional orchard (lime green) and good quality semi improved grassland (purple) within 2km of the site

3.6 Figure 5 overleaf shows the extent of ancient woodland habitat adjacent to the site boundary, as well as the required 15m buffer which extents onsite.

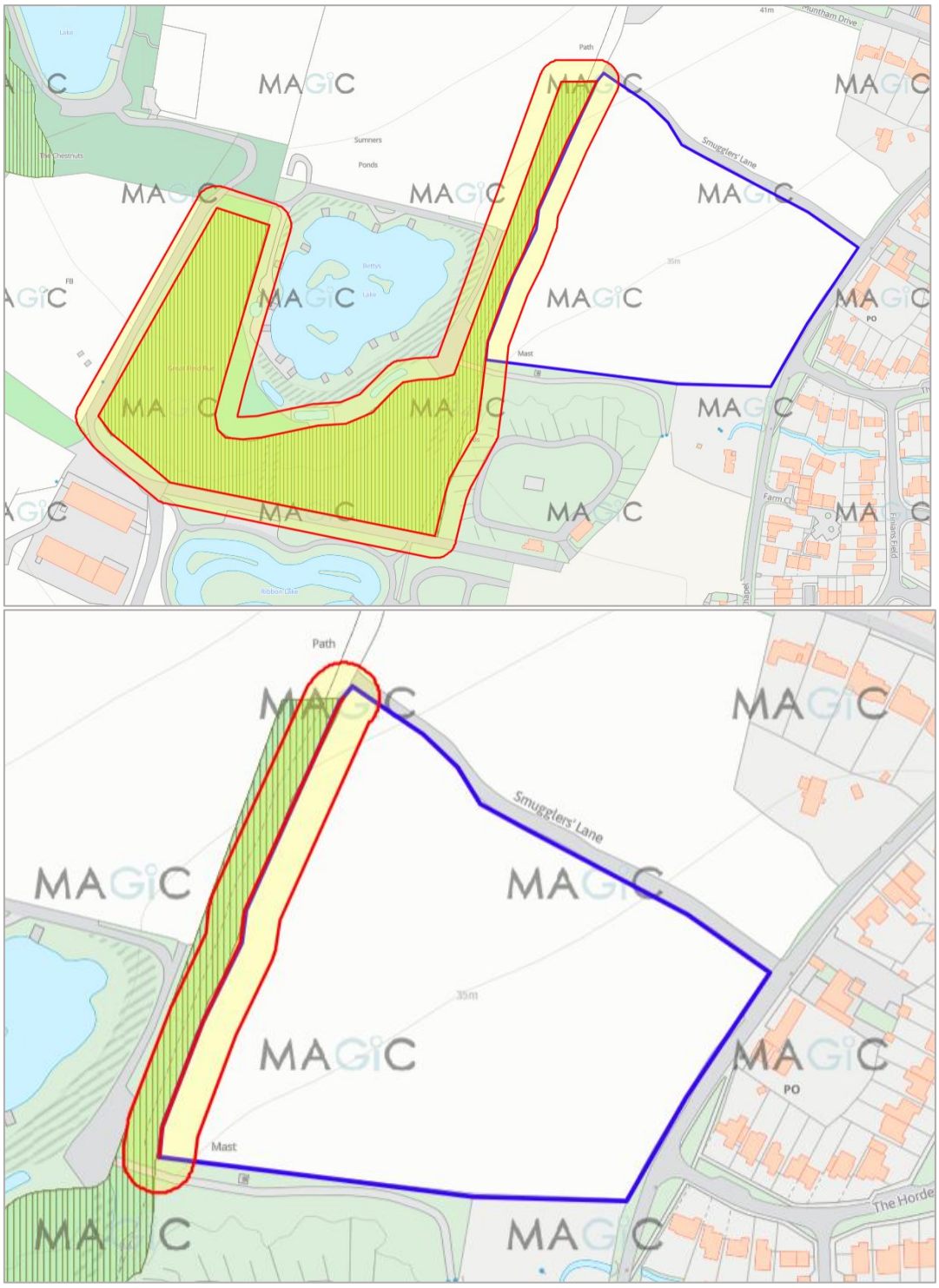


Figure 5: The site boundary (blue line) with ancient woodland (vertical hatching) adjacent to the site with 15m buffer (pale yellow).

3.7 OS mapping found no ponds on site but two ponds within 250m of the red line boundary (Figure 6). There are other waterbodies within 250m of the site however, these lakes and ponds associated with a fishery, and support extensive populations of large fish in the lakes and fry in the ponds.

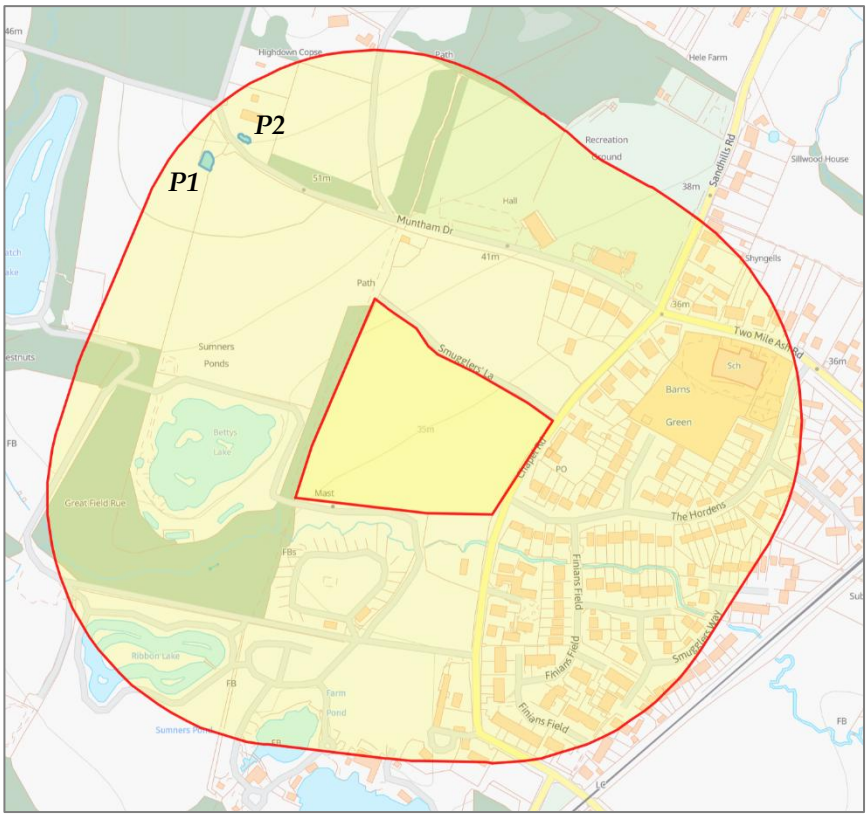


Figure 6: Ponds within 250m of the red line boundary.

3.8 There are two past European Protected Species (EPS) licences for bats within 2km. The closet of which is located c. 130m south of the site, 2015-2020 (2015-14456-EPS-MIT). The licence is for the damage and destruction of a resting place site for common pipistrelle *Pipistrellus pipistrellus* and brown long ear *Plecotus auratus*. The location of these are shown in Figure 7 below.

3.9 There are no great creasted newt class licence returns within 2km of the site boundary.

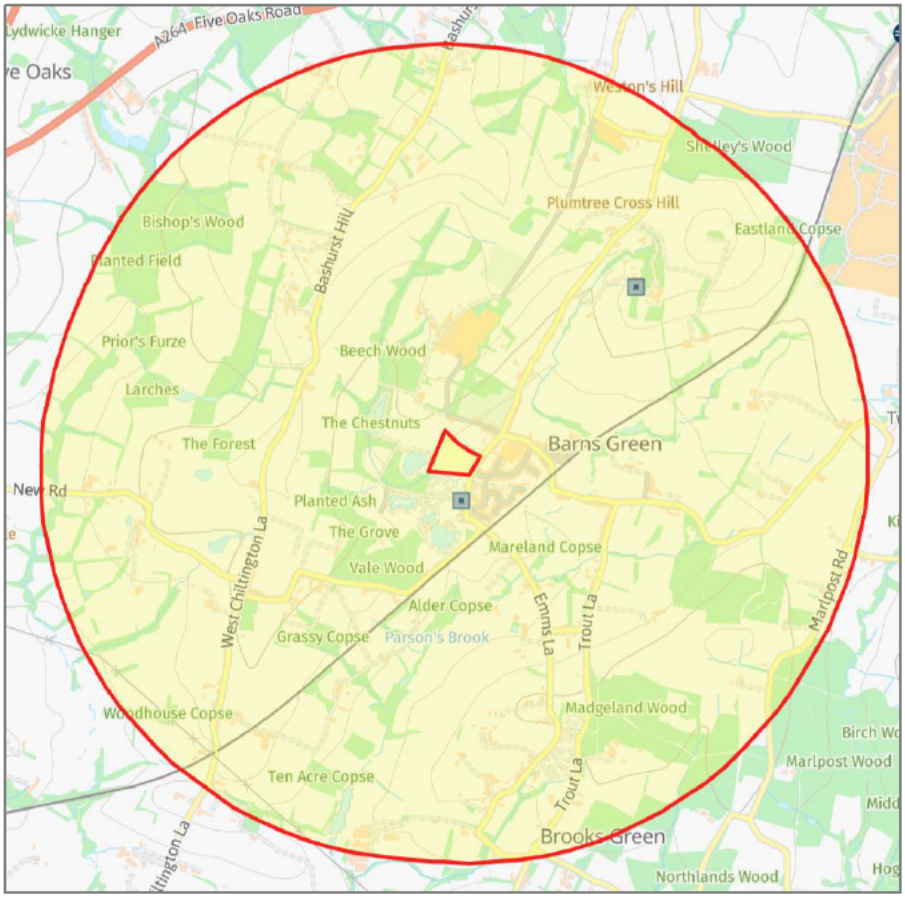


Figure 7: EPS licences within 2km of the site blue sqaures (bats)

3.10 Data for non-statutory sites, and local protected and notable species within 2km of the site was obtained from SxBRC. The records closest to site and species relevant to the habitats on site have been included in Table 1. Notable species over the last 10 years have been included in Table 1, excluding dormice and great crested newts where longer records have been considered.

Table 1: Notable species records within 2km of the site in the last 10 years

Species	Status	Closest record to site	Most recent record
Great crested newt *Triturus cristatus*	Hab Dir A2 NP; Hab Dir A4; Hab Reg Sch2; WCA Sch5 s9.4b/s9.4c/s9.5a; NERC S41; UK BAP Priority	700m east 2006	800m south 2010
Grass Snake *Natrix Helvetica*	WCA Sch5 s9.1/s9.1 kill/s9.5a, NERC S41; UK BAP Priority	315m north east 2016	345m north east 2017
European hedgehog *Erinaceus europaeus*	NERC S41; UK BAP Priority; RedList GB post2001 VU	1km north 2016	1.6km south 2021
Polecat *Mustela putorius*	Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 Schedule 4; Wildlife and Countryside Act 1981 (as amended) Schedule 6	1.75km north 2017	
Brown Hairstreak *Thecla betulae*	Wildlife and Countryside Act (1981 as amended) Schedule 5; NERC Act (2006) Section 41	75m east 2017	1.85km south west 2023

Hazel dormouse *Muscardinus avellanarius*	Hab Dir A4 Hab Reg Sch2; WCA Sch5 s9.4b/s9.4c/s9.5a; NERC S41; UK BAP Priority; RedList GB post2001 VU	460m south east 2007	
Brown long-eared *Plecotus auritus*	Hab Dir A4; Hab Reg Sch2; WCA Sch5 s9.4b/s9.4c/s9.5a; NERC S41; UK BAP Priority	95m south 2015	1.75km south west 2023
Long-eared bat species *Plecotus*	As above	410m north east 2015	1.2km north east 2017
Common Pipistrelle *Pipistrellus pipistrellus*	As above	95m south 2015	1.2km north east 2017
Soprano Pipistrelle *Pipistrellus pygmaeus*	As above	420m north east 2015	1.2km north east 2016
Pipistrelle *Pipistrellus sp.*	As above	1.75km south west 2024	
Bats *Chiroptera*	As above	170m north east 2019	
Whiskered/Brandt's *Myotis mystacinus/brandtii*	As above	1.2km north east 2017	
Noctule *Nyctalus noctula*	As above	1.2km north east 2017	
Serotine *Eptesicus serotinus*	As above	410m north east 2015	1.2km north east 2017
Barn Owl *Tyto alba*	Wildlife and Countryside Act (1981 as amended) Schedule 1	790m east 2021	
Red kite *Milvus milvus*	Birds Dir A1; WCA Sch1 Pt1; RedList Global post2001 NT; Notable Bird	Within 1km grid square 2022	
Hobby *Falco subbuteo*	Wildlife and Countryside Act (1981 as amended) Schedule 1	Within 1km grid square 2023	
Cuckoo *Cuculus canorus*	NERC S41; UK BAP Priority; Bird Red; Notable Bird	400m north 2017	Within 1km grid square 2023
Skylark *Alauda arvensis*	NERC S41; UK BAP Priority; Bird Red; Notable Bird	Within 1km grid square 2022	
Kestrel *Falco tinnunculus*	Wildlife and Countryside Act (1981 as amended); Bern Convention Appendix 2; Convention on Migratory Species Appendix 2; BoCC Amber List.	Within 1km grid square 2023	
Hawfinch *Coccothraustes coccothraustes*	NERC; S41 UK BAP Priority; Bird Red; Notable Bird	Within 1km grid square 2017	
Dunnock *Prunella modularis*	NERC S41; UK BAP Priority; Bird Amber; Notable Bird	Within 1km grid square 2023	
Starling *Sturnus vulgaris*	NERC S41; UK BAP Priority; Bird Red; Notable Bird	Within 1km grid square 2023	
Song Thrush *Turdus philomelos*	NERC S41; UK BAP Priority; Bird Amber; Notable Bird	Within 1km grid square 2023	
Linnet *Linaria cannabina*	NERC S41; UK BAP Priority; Bird Red; Notable Bird	Within 1km grid square 2020	

Habitat Survey

3.11 The site is made up of a single field of modified grassland used for sheep and cattle grazing pasture with a native hedgerow running along the eastern boundary, a species rich native hedgerow with trees and associated ditch along the southern boundary and species rich native hedgerow with trees along the northern boundary.

Modified grassland

3.12 The majority of the site comprised modified grassland which is used for sheep and cattle grazing. This grassland is dominated by perennial rye-grass *Lolium perenne* and meadow foxtail *Alopecurus pratensis*, with frequent creeping buttercup *Ranunculus repens* and dandelion *Taraxacum officinalis* and occasional daisy *Bellis perennis*, white clover *Trifolium repens*, meadow buttercup *Ranunculus acris*, red-dead nettle *Lamium purpureum* and cock's foot *Dactylis glomerata.* The species richness was poor at only 3-5 species/m^2, based on five quadrats.

Native Hedgerows

3.13 The eastern boundary of the site supported a managed native hedgerow which comprised blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna*, honeysuckle *Lonicera periclymenum*, field maple *Acer campestre* and dog-rose *Rosa canina* but was domainted by hawthorn.

Species Rich Native Hedgerows with Trees

3.14 The hedgerows along the north and south of the site were species rich supporting multiple woody species and trees including oak *Quercus robur*, elder *Sambucus nigra*, ash *Fraxinus excelsior*, hazel *Corylus avellana*, holly *Ilex aquifolium*, hornbeam *Carpinus betulus*, blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna*, honeysuckle *Lonicera periclymenum*, field maple *Acer campestre* and dog-rose *Rosa canina*. Ground flora was present across all the hedgerows onsite and comprised abundant common nettle *Urtica dioica*, with frequent, common vetch *Vicia sativa subsp. segetalis*, bramble *Rubus sp.* and cleavers *Galium aparine*.

Protected Species

Bats

3.15 The data search revealed that the closest bat records was approximately 95m south of the site. The linear hedgerow onsite provides good connectivity to suitable bat habitat, such as ancient and deciduous woodland, within the surrounding area. The hedgerows and trees onsite also provide suitable foraging and commuting habitat. As such, the site is considered to have **'moderate'** potential for commuting and foraging bats.

3.16 The site is also 8.4km east of The Mens SAC which is designated for bat species. The site therefore lies within the wider conservation area of the SAC where 12km zone of influence around the SAC to cover the full extent of the range of foraging areas required by bats.

3.17 The species rich native hedgerows onsite supported a number of trees. Due to the number of trees and presence of a hedgerow these trees were not subject to a full ground level tree assessment (GLTA).

Dormouse

3.18 Using the methodology provided in the Mammal Society Hazel Dormice Mitigation Handbook a habitat quality assessment of the hedgerows onsite was undertaken (Wells et al 2025). On average the hedgerows were considered to support a high species diversity, as greater than 6 suitable species were present across the hedgerows. The structural complexity was considered medium suitability as the width of the hedgerows were between 2 to 3 meters, with very few gaps and dense growth was present to ground level with an average height of above 2m. On this basis the habitat was considered to be of 'good' quality.

3.19 The local records reveal that dormice were identified 460m south east of the site in 2007. Considering the good quality habitat onsite and a known presence of dormice in the wider surroundings, the site has the potential to support dormouse.

Great crested newt (GCN)

3.20 No ponds were identified on the site however there were two ponds within 250m of the red-line boundary. The edge grassland habitat onsite and hedgerow ground flora

are considered suitable to support GCN in their terrestrial phase and the local records showed the closest great crested newts being 700m east, suggesting that GCN are in the local area.

3.21 Pond 2 was viewable from the roadside. and was assessed as being a lined ornamental garden pond which featured a heron statue, indicating that this pond is likely to support fish. As such, this pond was considered likely unsuitable to support GCN.

3.22 Pond 1 however, did feature suitable marginal habitat and smooth newts were observed in the pond, and therefore, this may also support GCN.

3.23 Fishing lakes as part of a fishery are also present within 250m of the redline boundary. The main fishing lake and fry ponds are considered unsuitable to support GCN due to the presence of large fish and fry respectively.

[redacted]

Reptiles

3.25 The grassland on site and hedgerow edges provides some suitable habitat to support common reptile species such as slow worm and common lizard. However, as the field is used for sheep and cattle grazing the sward length will maintain at a short sward and distubance to this grassland will make this habitat less suitable for reptiles beyond the edges.

Breeding birds

3.26 The grassland onsite is actively grazed, which may deter ground nesting birds such as skylark. However, the hedgerow on site provides suitable nesting habitat for breeding birds. As such, the site is considered to have potential to support breeding birds.

Other Species

3.27 Owing to a lack of suitable habitat on site and within the surrounding area, no potential for any other protected species, such as otters and water voles, was identified within the site.

3.28 Due to the presence of hedgerows on site, the adjacent woodland and records of hedgehogs in the wider surroundings, the site is considered to suitable to support hedgehogs.

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.

Effects on designated sites

4.2 The site does not fall within or adjacent to any designated sites, however, it does fall within the 12km zone of influence for The Mens SAC, which is approximately 8.4km west of the site.

4.3 This area is protected by the Habitats Directive (EC Directive 92/43/EEC on the Conservation of Natural and Semi-Natural Habitats and of Wild Fauna and Flora) and the Habitats Regulations (The Conservation (Natural Habitats &c.) Regulations 1994).

4.4 In Great Britain, the Habitats Regulations implement the requirements of the Habitats Directive. The Regulations aim to protect sites in the UK that have rare or important habitats and species, such as The Mens SAC, in order to safeguard biodiversity. Under these Regulations, the LPA have a duty to assess whether there is a risk of any plan or proposal having a significant impact on the integrity of the SAC.

4.5 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features', here listed as barbastelle bat and Bechstein bat listed below), and subject to natural change.

'Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- *The extent and distribution of the habitats of qualifying species*

- *The structure and function of the habitats of qualifying species*
- *The supporting processes on which the habitats of qualifying species rely*
- *The populations of qualifying species, and,*
- *The distribution of qualifying species within the site. '*

4.6 Bats are mobile and species that are qualifying features of the SAC, which can forage or roost on land outside of the SAC boundaries. Occasionally impacts to such 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 species 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).

4.7 As the site lies within the 12km wider conservation area, impacts must be considered and avoidance, mitigation, and compensation must be considered in relation to bats associated with the SACs.

4.8 Advice laid out within Sussex Bat Special Area of Conservation, Planning and Landscape Scale Enhancement Protocol states that all proposals within this zone should take: '*reasonable steps to avoid impacts to the SACs and biodiversity in general and where this cannot be achieved, 'mitigation' measures should be implemented and if there are still residual impacts then compensatory measures will need to be provided*'.

4.9 The definitions of avoidance, mitigation and compensation are shown overleaf in Table 2.

Table 2: Definitions of avoidance, mitigation and compensation measures in relation to bats associated with the Sussex SACs.

Measure	Definition
Avoidance	This normally means redesigning the scheme to avoid all direct and indirect impacts
Mitigation	This normally involves measures that reduce and/or minimise impacts such as altering the timing of works or using a different technique
Compensation	This generally involves the creation of new habitat, either on or off site and should only be considered as a last resort.

4.10 As such, the development proposals must not impact flight paths, and where there are breaks in linear features, mitigation measures and compensation measures should be incorporated into the scheme. A site level HRA is required to assess impacts on the integrity of the SAC.

4.11 The site is approximately 13.5km east of Ebernoe SAC which has a wider conservation area of 12km. As such, the site is considered to be of sufficient distance from the SAC that no negative impacts to this designated site is anticipated.

4.12 Development within 5km of Arun Valley SPA needs to consider if the existing land is suitable for wintering Bewick Swan. Arun Valley SPA is located approximately 10.9km south west of the site, therefore lying outside of the 5km impact risk zone. As such, development is not anticipated to impact the integrity of this designated site.

4.1 However, the site does fall within the Sussex North Water Resource Zone and as such, is subject to water neutrality requirements associated with Arun Valley SAC site. As such, in order to avoid contributing to the cumulative impact of water extraction from the Arun Valley, the development will need to demonstrate that it will not result in a net-increase in water extraction. For applications where increased demand for water resources is the only pathway for impacts, Natural England's substantive advice (Position Statement Interim Approach, September 2021) is that such applications - without mitigation - will result in a likely significant effect on the Arun Valley SAC/SPA/Ramsar site in combination with other developments in the Sussex North WSZ. It is for the utilities and services teams to identify if water neutrality can be met on this site or if offsetting is required.

4.13 There is one non-statutory site (Bishop's Wood LWS) within 2km of the site. Due to the residential nature of development, lack of linked habitats onsite and the distance between the sites, it is considered that the development will not result in any direct or indirect impacts on this non-statutory site within the local area.

Effects on Priority Habitats

4.14 Native hedgerows are present along the northern, southern and eastern extents of the redline boundary. Hedgerows are habitats listed under S41 of the NERC Act 2006 and as such are considered to be Habitats of Principle Importance. As Habitats of Principle Importance, the council/decision maker has to have 'due regard' for these habitats,

and it is recommended that these features are considered within any masterplan and be retained where possible.

4.15 The west adjacent ancient and semi natural woodland is also priority habitat in close proximity.

4.16 The National Planning Policy Framework (NPPF) (2024) is the key government policy document relating to planning decisions affecting ancient woodland. The importance of ancient woodlands as an irreplaceable habitat is set out in paragraph 193 c) of the NPPF, which states: '*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists'*.

4.17 Whilst ancient woodland is not protected under statute, there is a presumption that ancient woodland should be maintained where possible. Benefits of development affecting ancient woodland must be significant in terms of social or economic drivers and mitigation measures and/or compensation must be provided to reduce where possible significant impacts.

4.18 Woodlands are considered to be ancient or semi natural even if they have been disturbed. The soil and the seed bank is considered to be of primary importance rather than the maturity or otherwise of the trees.

4.19 On 26 January 2024, the Government introduced a new duty requiring local planning authorities to consult the Secretary of State regarding developments that impact ancient woodland.

4.20 This Direction is made under the Town and Country Planning (Development Management Procedure) (England) Order 2015 (Statutory Instrument 2015 No 595). It requires local planning authorities in England to consult the Secretary of State before granting planning permission for certain types of development including planning applications which would "*result in the loss or deterioration of ancient woodland, where the local planning authority considers that potential adverse impacts cannot be mitigated*". This means that from 26 January 2024, no English planning application for development which adversely impacts ancient woodland can be granted without first being referred to the SOS.

4.21 Impacts relating to ancient woodland which will require consideration are listed on the gov.uk (2022) and are reviewed in terms of both direct effects and indirect effects as a result of development practises.

4.22 Direct effects of development can cause the loss or deterioration of ancient woodland or ancient and veteran trees by:

- damaging or destroying all or part of them (including their soils, ground flora or fungi)
- damaging roots and understorey (all the vegetation under the taller trees)
- damaging or compacting soil
- damaging functional habitat connections, such as open habitats between the trees in wood pasture and parkland
- increasing levels of air and light pollution, noise and vibration
- changing the water table or drainage
- damaging archaeological features or heritage assets
- changing the woodland ecosystem by removing the woodland edge or thinning trees - causing greater wind damage and soil loss

4.21 Indirect effects of development can also cause the loss or deterioration of ancient woodland, ancient and veteran trees by:

- breaking up or destroying working connections between woodlands, or ancient trees or veteran trees - affecting protected species, such as bats or wood-decay insects
- reducing the amount of semi-natural habitats next to ancient woodland that provide important dispersal and feeding habitat for woodland species
- reducing the resilience of the woodland or trees and making them more vulnerable to change
- increasing the amount of dust, light, water, air and soil pollution
- increasing disturbance to wildlife, such as noise from additional people and traffic
- increasing damage to habitat, for example trampling of plants and erosion of soil by people accessing the woodland or tree root protection areas

- increasing damaging activities like fly-tipping and the impact of domestic pets
- increasing the risk of damage to people and property by falling branches or trees requiring tree management that could cause habitat deterioration
- changing the landscape character of the area

4.23 The proposed development does not include any works within 15m of the ancient woodland and therefore there is no direct loss of ancient woodland habitats. In addition, construction safeguards should be implemented to avoid impacts from dust, water, noise, and light on the adjacent ancient woodland.

4.24 In terms of other impacts, the most significant is the fragmentation of landscape linkages and therefore the reduction of the movement of species across the landscape, as well as the potential impacts this would have on ancient woodland habitats, notably pollinators and seed dispersal agents.

4.25 The proposed development does not result in the loss of habitat linkages of the ancient woodland to the south and west of the site, notably the areas of more extensive ancient woodland. The development will lie within the grazed fields, and therefore there is no fragmentation of semi naturalised habitats. Proposals will result in an increase in trees and native species planting, providing a more robust ecological network within the site, which would otherwise not be present.

4.26 Impacts resulting from the loss semi natural habitats is not considered significant as the site is dominate by moidifed grassland utilsied for grazing. The loss or alteration of this habitat is not ecologically significant in terms of ancient woodland edge. The design of any development would aim to enhance the edge habitats through the creation of a more naturalised landscape. Planting of native scrub and tree species and the creation of species rich grassland, will provide this transition between ancient woodland and development, creating a more naturalised ecotone.

4.27 With regards to impacts resulting from an increased in local population and potential impacts resulting from increased recreational pressure, wear and tear, fly tipping and pet impacts, a range of measures have been employed to minimise any associated risks.

4.28 The ancient woodland is located on either side of the PROW, which is in active use. The small sections of woodland are limited to singular rows of trees on either side of the PROW. One section of the woodland will be retained, buffers and made more robust within the application area. However, the PROW is existing and will not be altered.

4.29 The proposals aim to link footfall from the site to the existing PROW through the existing field gate (Figure 8 below). There will be no loss of ancient woodland habitat, however, there will be an increase in footfall along the PROW.

Figure 8: the existing access to the PROW

4.30 It is recommended that the PROW is managed to support the additional footfall and dog waste bins and other bins are provided to reduce the impacts. A review with the PROW team is recommended.

4.31 The implementation of fencing and construction safeguards would ensure the proposed development does not have any direct or indirect impacts on the ancient woodland or any other priority habitats.

Effect on other habitats

4.32 The modified grassland habitats on site are in poor condition as well as being common and widespread in the local area. As such, this habitat is considered to be of low ecological value.

Protected Species

Bats

Bat Roosting

4.33 The trees onsite were not subject to a full GLTA to assess their potential to support roosting bats. These trees should be retained where possible. If any trees are to be removed as part of development a full GLTA is required.

Bat foraging and commuting potential

4.34 The hedgerows with trees on site provide linear habitats which is considered suitable habitat for commuting/foraging bats. The site is also connected to ancient and deciduous woodland through these linear hedgerows. The closest records of bats including common pipistrelles and brown long-eared bats were identified 95m south of the site. As such, the site is considered to have **'moderate'** potential to support foraging and commuting bats.

4.35 The Bat Conservation Trust survey guidelines (Collins, 2023) state in table 4.1 that the "*guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, are to be applied using professional judgement*". It is important that proportionality is employed when recommending further survey work for bat species on a proposed development site. As stated within section 8.2.47 of these guidelines (Collins 2023), the following points need to be considered with regard to planning activity surveys:

- Likelihood of bats being present;
- Likely species concerned;
- Levels of activity/relative abundance
- Type and diversity of habitat affected;
- Predicted impacts of the proposed development on bats;
- Type and scale/size of proposed development.

4.36 Considering the size of the site, scale/nature of the development, and the distance from SACs designated for barbastelles and Bechstein's bats, it is considered that a full

bat activity survey would be required to accurately determine the use of habitats onsite by foraging and commuting bats. This will include three seasonal night time bat walkover (NBW) surveys; one in spring, summer and autumn, as well as remote recording surveys. Remote detectors would be deployed for five consecutive nights each month to give an idea of bat pass frequency and to record any additional species which might be less likely to be detected during the activity surveys.

4.37 It is also recommended that any proposed lighting scheme as part of the development will have to take into account bats in the surrounding area, as well as on 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 behaviour as well as their foraging behaviour. This needs to be taken into account, with a sympathetic lighting scheme for the development, creating dark wildlife corridors which avoid the use of street lighting and only installing lighting if there is a significant need. Recommendations include:

- Lighting should only be installed if there is a significant need;
- Light levels should be kept low, the use of low-pressure sodium lamps or high pressure sodium instead of mercury or metal halide lamps where glass glazing is preferred due to its ultra-violet filtration characteristics;
- Lighting should be avoided near woodland, trees and hedgerows, with light angled away from these areas, bats use linear features such as treelines to commute across the landscape to forage; and
- Lights should have focussed luminance on their target area, preventing light spill and pollution into other areas of the site and local area.

Dormice

4.38 The hedgerows onsite and adjacent ancient woodland habitat are considered to have potential to support dormice due to a high species diversity with medium structural complexity. There is also a known presence of dormice 460m south east of the site. The site is also connected to large areas of ancient semi-natural and deciduous woodland through hedgerows and arable fields. As such, the site is considered suitable to support dormice and further surveys are required.

4.39 Footprint and nest tube surveys must be undertaken in the active season for dormice, April to November inclusive. Nest tubes or footprint tunnels will be established

within suitable dormice habitat and will be checked at monthly intervals, with the number of checks determined after the installment of nest tubes and footprint tunnels.

Great crested newts

4.40 The edge habitats within the site support some terrestrial habitat that is considered suitable to support GCN. There is also a known presence of GCN in the wider surroundings. Pond 1 north west of the site is considered suitable to support GCN and no significant dispersal barriers are present between this pond and the site.

4.41 As such, it is recommended that environmental DNA (eDNA) surveys are undertaken of pond 1 to determine presence or likely absence of GCN. The collection of water samples for eDNA surveys can be taken between the 15th April and 30th June. If the pond does support GCN a review of the impacts should be made to assess whether further surveys and / or licensing is required

Reptiles

4.42 The grassland and hedgerow edge on site and woodland habitats adjacent to the site are suitable to support common reptile species such as slow worm and common lizard.

4.43 The grassland will be largely maintained to a shorter sward height due to cattle and sheep grazing and disturbance of this grassland creates minimal value for reptiles, therefore it is not recommended that reptile presence/absence surveys be undertaken. It is recommended, however, that the grassland is maintained at a short sward height prior to works beginning to deter suitable reptile habitat establishing in the works area.

4.44 It is understood that a small sections of hedgerow will likely be removed to facilitate access to the site as part of the development. To avoid harm to any individual reptiles which may be present the clearance of hedge should be done using reasonable avoidance measures as outlined below:

- Sensitive clearance should be undertaken with the supervision of a suitable qualified ecologist.
- Initially, the ecologist will search through the hedge by hand to identify any reptiles and move them to a safe location.

- Following this, two cuts will take place, the first down to 150mm, and then another down to 5mm.
- The initial cut should take place in one direction, allowing reptiles to move towards retained habitat. Once the initial cut has been completed the arisings should be then hand collected/raked. Finally, once the arisings have been removed, a final cut should be conducted and the arisings removed.
- Any log/brash/soil piles are to be removed sensitively and by hand, not using any heavy machinery. This is especially important if works must be carried out during the winter, when reptiles (and other animals) are likely to be hibernating within such structures. Grass snakes in particular prefer to hibernate in compost piles.
- Following the above, and during construction, the site is to be kept free of piles of debris such as log piles, leaf piles, brick heaps or loose soil, and grassland should be maintained at a short sward throughout the site.
- Any trenches/holes dug within the construction footprint should either be covered over at night, or a plank placed inside to assist any wildlife that may fall in.

Nesting Birds

4.45 The hedgerows on site have the potential to support nesting birds. If the removal of these trees is to be carried out, it should be done 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.

[redacted]

[redacted]

[redacted]

Other Species

4.49 No potential for any other protected species, such as water voles or otters was identified within the site.

4.50 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. Construction safeguards are required to ensure no hedgehogs are harmed during development.

Ecological Enhancements

4.51 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.

4.52 It is recommended that a detailed mitigation and enhancement strategy is drawn up for the site based on the findings of the Phase 2 protected species surveys and through the review of the proposals. This will include but not be limited to the following:

- Creation of new high distinctiveness habitats such as traditional orchard, and ponds, and enhancement of existing habitats of value to be managed in the long term for biodiversity;
- Installation of specialist bird, bat and dormouse boxes on retained mature trees within the site, and,
- Creation of log piles and reptile hibernacula to provide safe refuge and hibernation sites for reptiles, amphibians, and hedgehog.

4.53 A detailed enhancement strategy will be dependent on the results of the phase 2 surveys. This is likely to include the general recommendations above, but also more details recommendations such creation of high distinctiveness habitats.

5.0 Impact Assessment

5.1 A separate EcIA will be prepared for this planning application, following completion of bat and dormouse surveys.

6.0 Conclusions

6.1 The site comprises species-poor modified grassland, grazed by cattle and sheep, and bound by hedgerows. Adjacent to the west of the site is an area of ancient woodland.

6.2 The Mens SAC is located 8.4km west of the site with barbastelle and Bechstein bats as qualifying features of this SAC. As the site falls within the 12km wider conservation area of The Mens SAC, indirect and direct impact to bats and bat flight paths are required to be considered. An HRA is required to determine avoidance measures, mitigation or compensation.

6.3 The site falls within the Sussex North Water Resource Zone and as such, is subject to water neutrality requirements associated with Arun Valley SAC site. As such, in order to avoid contributing to the cumulative impact of water extraction from the Arun Valley, the development will need to demonstrate that it will not result in a net-increase in water extraction.

6.4 There are no national statutory designated sites and one non-statutory site within 2km of the red line boundary. Due to the residential nature of proposals, and the sufficient distance from development, this non-statutory site is not anticipated to be impacted by this development.

6.5 Priority habitat native hedgerows are present onsite which should be retained as part of development where possible. The next closest priority habitat is the ancient woodland located adjacent to west of the site. A buffer zone of at least 15m should be created around to the woodland to prevent root damage.

6.6 If any individual trees within the hedgerows are to be removed as part of development, a ground level tree assessment is required to assess the suitability for roosting bats.

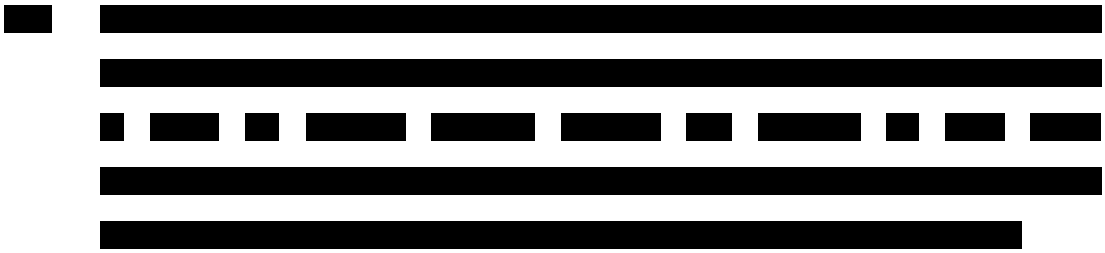
6.7 The site contains linear habitats and open grassland, providing suitability for foraging and commuting bats. As well as this, the site is within close proximity to The Mens which is in part designated for barbastelle and Bechstein bats. As such, further surveys are required. It is also recommended that sensitive lighting be used to reduce impacts on nocturnal bat activity.

6.8 The hedgerows and adjacent woodland were considered 'good' habitat, suitable to support dormouse. It is recommended a full survey using nest tubes or footprint tunnels is carried out to determine the presence or likely absence of dormice.

6.9 A single pond considered suitable to support GCN was present within 250m of the site. As the pond was considered suitable to support GCN and there was a lack of dispersal barriers to the site, eDNA surveys of the ponds are recommended to determine the presence or likely absence of GCN in the local surroundings.

6.10 The majority of the site is considered sub-optimal for reptiles owing to cattle grazing creating disturbance and short sward grassland. It is recommended therefore that the grass length is maintained at a short sward prior to development to deter reptiles from entering the grassland, and any removal of hedgerow is undertaken in a sensitive manner under ecologist supervision.

6.11 The hedgerows and individual trees on site have the potential to be used by birds as nesting habitat during the breeding season. The UK breeding season for most bird species takes place between March and September. Ideally, work affecting these areas should be avoided during this period. If unavoidable, it is recommended that any works affecting trees and scrub on site should be carried out under ecological watching brief.



7.0 References

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Internet resources:

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

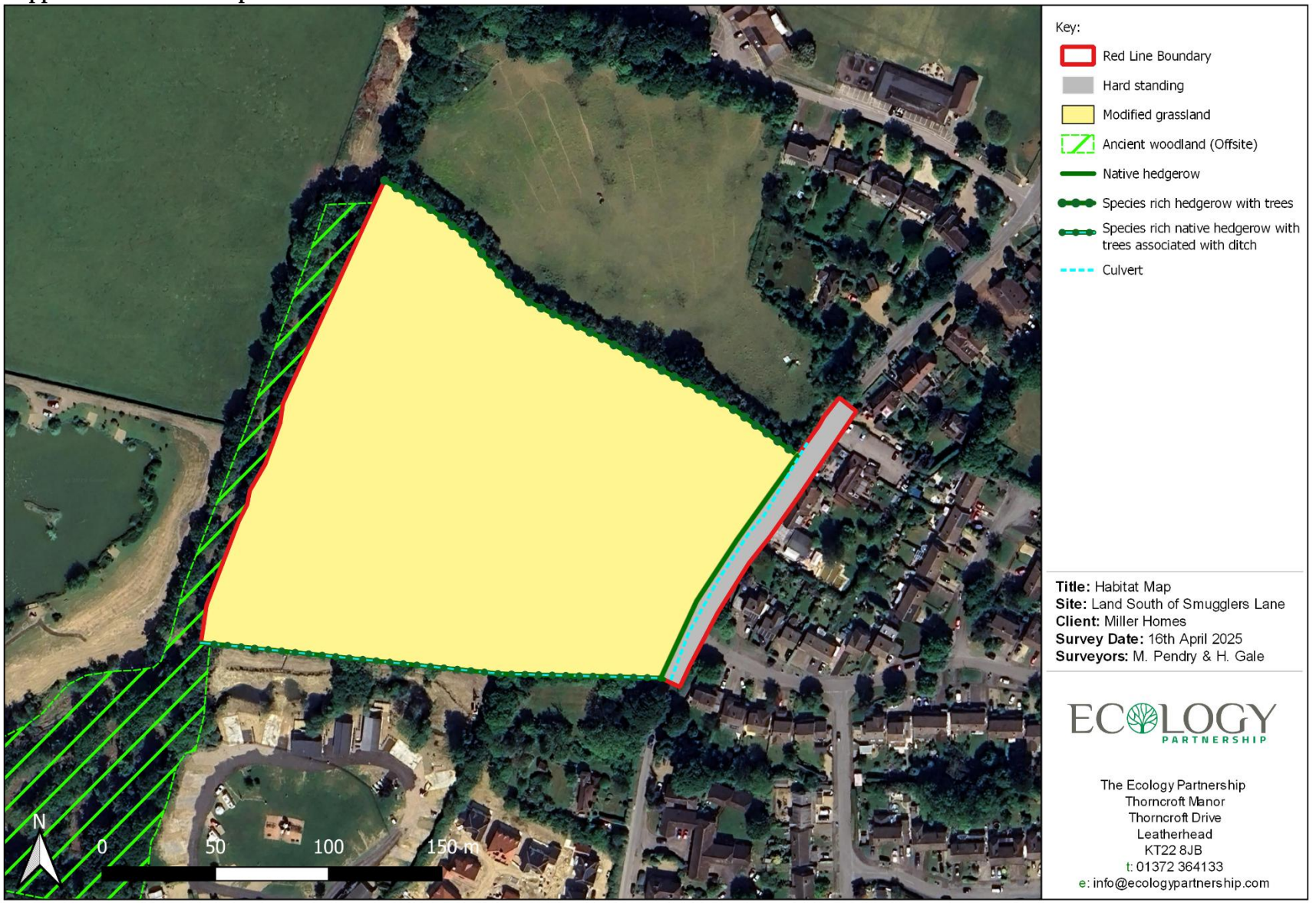
Magic Interactive Map: www.magic.gov.uk

Appendix 1: Photos

Photograph 1: Modified grassland looking east of the site, species rich native hedgerow with trees to the left of the image (north) and a native hedgerow in the east of the site.	
Photograph 2: Modified grassland looking south towards species rich native hedgerow with trees.	
Photograph 3: Species rich native hedgerow with trees in the south of the site.	

Photograph 4: Species rich native hedgerow with trees in the north of the site.	
Photograph 5: Image facing west, towards species rich native hedgerow with trees and associated ditch and adjacent ancient woodland.	
Photograph 6: Native hedgerow within the east of the site.	

Appendix 2: Habitat Map



Appendix 3: Species List

Modified Grassland			Quadrats				
ENGLISH	*LATIN*	Abundance	1	2	3	4	5
Daisy	*Bellis perennis*	O					
Perennial Rye-grass	*Lolium perenne*	D	✓	✓	✓	✓	✓
Dandelion	*Taraxacum officinalis*	F	✓		✓	✓	
Meadow Foxtail	*Alopecurus pratensis*	D	✓	✓	✓	✓	✓
Creeping Buttercup	*Ranunculus repens*	F	✓	✓		✓	
White Clover	*Trifolium repens*	O					
Curled Dock		R					
Cleavers	*Galium aparine*	R					
Meadow Buttercup	*Ranunculus acris*	O					
Red Fescue	*Festuca rubra*	R					
Annual Meadow-grass	*Poa annua*	R					
Red Dead-nettle	*Lamium purpureum*	O					
Hedgerow Crane's-bill	*Geranium pyrenaicum*	R					
Spear Thistle	*Cirsium vulgare*	R					
Common Vetch	*Vicia sativa subsp. segetalis*	R					
Field Horsetail	*Equisetum arvense*	R					
Broad-leaved Dock	*Rumex obtusifolius*	R					
Goldilocks Buttercup	*Ranunculus auricomus*	R					
Cock's-foot	*Dactylis glomerata*	O		✓			
Hard Rush	*Juncus inflexus*	R					
Wood Dock	*Rumex sanguineus*	R					✓

Hedgerow Species		
ENGLISH	*LATIN*	Abundance
Hawthorn	*Crataegus monogyna*	A
Blackthorn	*Prunus spinosa*	F
Common Ivy	*Hedera helix*	F
Field Maple	*Acer campestre*	F
Hazel	*Corylus avellana*	F
Holly	*Ilex aquifolium*	F
Honeysuckle	*Lonicera periclymenum*	F
Holly	*Ilex aquifolium*	F
Hornbeam	*Carpinus betulus*	F
Dog-rose	*Rosa canina*	O
Pedunculate Oak	*Quercus robur*	O
Willow sp.	*Salix sp.*	O
Elder	*Sambucus nigra*	O
Ash	*Fraxinus excelsior*	O
Hedgerow Ground Flora		
Common Nettle	*Urtica dioica*	A
Common Vetch	*Vicia sativa subsp. segetalis*	F
Bramble	*Rubus sp.*	F
Cleavers	*Galium aparine*	F

False-brome	*Brachypodium sylvaticum*	O
Germander Speedwell	*Veronica chamaedrys*	O
Ground-ivy	*Glechoma hederacea*	O
Lords-and-Ladies	*Arum maculatum*	O
Meadowsweet	*Filipendula ulmaria*	O
Stone Parsley	*Sison amomum*	O
Greater Stitchwort	*Stellaria holostea*	O
Bluebell	*Hyacinthoides non-scripta*	O
Cuckooflower	*Cardamine pratensis*	R
Wood Dock	*Rumex sanguineus*	R
Hemlock	*Conium maculatum*	R
Soft rush	*Juncus effusus*	R
Hedgerow Crane's-bill	*Geranium pyrenaicum*	R
Dog's Mercury	*Mercurialis perennis*	R

Appendix 4: Biodiversity Records

Sussex Biodiversity Record Centre

Ecological Data Search SxBRC/25/005 - Summary Report

An ecological data search was carried out for land south of Smugglers Lane, Barns Green on behalf of Hayley Gale (The Ecology Partnership) on 14/04/2025.

The following datasets were consulted for this report:

	Requested	Radius/buffer size
Designated sites, habitats & ownership maps	Yes	2km
Protected, designated and invasive species	Yes	2km

Summary of results

Sites and habitats

Statutory sites	None present
Non-statutory sites	1 LWS
Section 41 habitats	2 habitats
Ancient and/or ghyll woodland	Present

Protected and designated species

International designations	29 species	183 records
National designations	106 species	2,900 records
Other designations	179 species	5,425 records
Total	**195 species**	**5,584 records**
Invasive non-native	15 species	158 records

The report is compiled using data held by Sussex Biodiversity Record Centre (SxBRC) at the time of the request. SxBRC does not hold comprehensive species data for all areas. Even where data are held, a lack of records for a species in a defined geographical area does not necessarily mean that the species does not occur there – the area may simply not have been surveyed.

This summary page may be published.
The full report and maps may not be published or otherwise shared.

The data search report is valid until 14/04/2026 for the site named above.

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Date: 20/06/2025

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