

# Preliminary Ecological Appraisal

of

# The land at Fairview, Hemingstone, Suffolk

#### Carried out for:

Mr and Mrs Boardley

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# 1. Background to Commission

- 1.1 Abrehart Ecology Ltd was commissioned by Mr and Mrs Boardley to carry out a Preliminary Ecological Appraisal (PEA) of the land for the proposed development, off Hemingstone Road in Hemingstone, Suffolk (central grid reference TM 16647 54136; Fig. 1; hereafter referred to as the Site).
- 1.2 The survey was required to inform a planning application at the Site; to include the construction of a new dwelling and cartlodge with associated access and parking/ infrastructure. The site covers an area of 0.4 ha.

#### Aims of Study

1.3 This report provides an ecological appraisal of the Stefollowing the completion of a desk study and site visit. The aim of this study was to:

Provide a description of existing habitat type s;

To determine the existence and location of any ecologically valuable areas;

To identify the potential (or actual) presence of protected and/or notable species;

To provide the legislative and/ or policy protection afforded to any habitats present or any species assessed as likely to be associated with the site; and

To recommend any further ecological surveys considered necessary to inform mitigation requirements for the planning application within the Site.

To provide an assessment of potential impacts to protected species, habitats, or protected sites.

#### Site Description

The survey area is located on Hemingstone Road to the east of the village of Hemingstone, Suffolk. The proposed site area is approximately 0.4 hectares and consisted of the existing hard standing driveway leading to the grassland field, which covered the majority of the site. The grassland was of poor quality and appeared regularly managed with an average sward height of approximately 10-20cm. The sward was dominated with high numbers of common forbs which included bristly oxtongue (*Helminthotheca echioides*), creeping thistle (*Cirsium arvensè*), dandelion (*Taraxacum officinale agg.*), and white clover (*Trifolium repens*). The grassland also appeared to show damage from vehicle access/movements and loose spoil associated with former developments. Also present within the northern portion of the grassland were several planted tree saplings of a range of common species, these lacked suitable structure to provide ecological niches of interest at the time of survey.

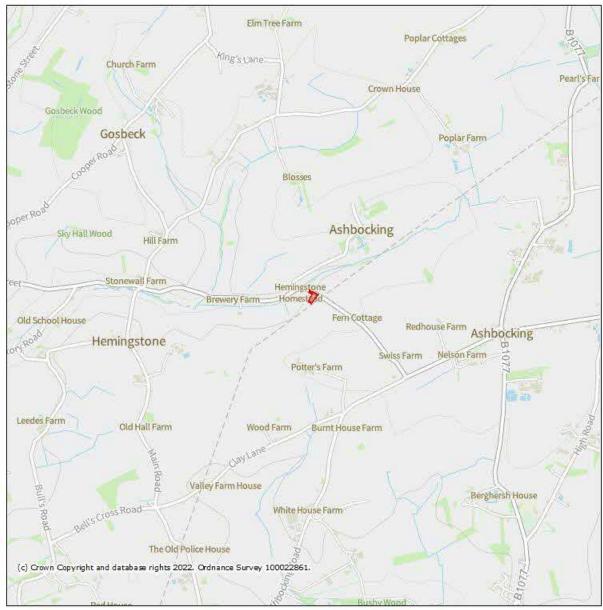
The northern boundary consisted of a managed hedgerow running adjacent the roadside, the hedge was approximately 1.5 – 2m tall at the time of survey and consisted of a mix of hawthorn (*Crataegus monogyna*), dog rose (*Rosa canina*), blackthorn (*Prunus spinosa*) and sycamore (*Acer pseudoplatanus*). The eastern hedgerow was heavily managed and consisted of a hawthorn monoculture of approximately 1.5m tall. The southern boundary hedgerow was dominated by blackthorn with occasional dogwood (*Cornus sanguinea*) and field maple (*Acer campestre*). The western boundary was open to the wider garden area and similar grassland associated with the existing dwelling at Fairview. A map showing the habitat types on Site can be seen in Appendix II.

1.5 Habitats surrounding the Site included Hemingstone Road directly adjacent the northern boundary. To the east, west and south were large expanses of agricultural land with associated ditches, hedgerows and arable margins (see Figure 1).





### **Site Location**



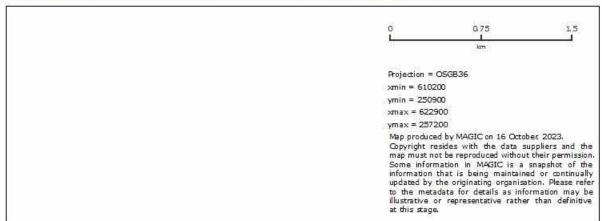


Figure 1. Site location



#### Relevant Legislation

- 1.6 Protected species, as referred to within this report, are taken to be those protected under European Legislation (Conservation of Habitats and Species Regulations 2010, as amended) and UK legislation (Wildlife and Countryside Act 1981; Protection of Badgers Act 1992).
- 1.7 Public bodies have a duty of responsibility to consider species of principle importance in England as listed in Section 41 of the NERC Act (2006).
- 1.8 The National Planning Policy Framework (NPPF) 2021 places responsibility on Local Planning Authorities (LPAs) to aim to conserve and enhance biodiversity in and around developments. Section 40 of the NERC Act requires every public body to "have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". Biodiversity, as covered by the Section 40 duty, is not confined to habitats and species of principal importance but refers to all species and habitats. However, the expectation is that public bodies would refer to the Section 41 list (of species and habitats) through compliance with the Section 40 duty.
- 1.9 "The Local Plan seeks to protect, retain, and enhance the high quality natural environment and designated landscapes and sites found across the Local Plan area which contribute to the overall success of the area and provides economic and social benefits for all..The Local Plan will seek to foster in new developments and to protect, retain, and enhance in existing developments."
- 1.10 "Development proposals should be accompanied by sufficient information to assess the effects of development on priority habitats and species, protected sites, protected species, biodiversity or geology, together with any proposed prevention, mitigation, or compensation measures.."
- 1.11 Appendix V details legislation which protects species and groups relevant to the Site (bats, reptiles, birds, and badgers).



### Methods

#### Desk Study

- 2.1 Data obtained from the Suffolk Biodiversity Information Service (SBIS) were used to conduct a standard data search1 for any information regarding statutory and non-statutory sites and records of protected and priority species within a 2km radius of the Site. The data were received on the 9th O ctober 202 3.
- 2.2 A 7km radius search for conservation areas part of the National Site Network, including Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsars was undertaken using MAGIC (http://www.natureonthemap.naturalengland.org.uk/).

#### Field Survey

2.3 A Preliminary Ecological Appraisal was carried out by Thomas Jordan BSc (Hons) (Natural England Great Crested Newt Class Survey Licence WML-CL08) on the 10<sup>th</sup> October 2023 in accordance with standard best practice methodology for Phase 1 Habitat Surveys set out by the JNCC (JNCC 2010). Weather conditions during the survey were 75 % cloud cover, a light/ gentle breeze (Beaufort Scale 2-3), a temperature of 15 °C, and good visibility. The Site was traversed slowly by the surveyor, mapping habitats, and making notes on dominant flora and fauna. The survey was extended to identify the presence of invasive species and included an assessment of the potential for the habitats in and around the Site to support protected species.

#### Survey Limitations

2.4 There were no limitations to the survey.

The standard data search identifies designated sites including: - Ramsar; Special Areas of Conservation; Special Protection

Areas; Sites of Special Scientific Interest; National Nature Reserves; Local Nature Reserves; County Wildlife Sites; Regionally

Important Geological Sites; A ncient W oodland; and protected and priority species identified bythe: - Wildlife & Countryside A ct

1981 Schedules 1, 5 & 8; Conservation of Habitats & Species Regulations 2010 Schedules 2 & 5; Protection of Badgers A d

1992; Bonn Convention Appendix 1 & 2; Bern Convention Annex 1 & 2; Birds Directive Annex 1; Habitats Directive

Annex 2, 4 & 5; NERC A d 2006 Section 41; UKBA P (both local and national); IUCN Red List species; Red & Amber

Bird List; Nationally Scarce / Rare; Locally Scarce / Rare; and Veteran trees.



### 3. Results

3.1 The following section details the results of the desk study and field survey. Consideration has been given to species likely to be found in the habitats recorded on site and potential impacts to designated sites within the local area.

#### Data Search (for maps see Appendix II)

3.2 The following section details the results of the desk study and field survey. Consideration has been given to species likely to be found in the habitats recorded on site and potential impacts to designated sites within the local area. Several protected species have been 'scoped out' of the report, as the Site was not considered suitable to support them. Species scoped out were dormice, water voles, and otters.

#### Data Search

3.3 There were no statutory designated sites within 2 km of the Site however, the site does fall within the impact risk zone for Gosbeck Wood SSSI which is detailed below.

Gosbeck Wood SSSI (approximately 2.2km north-west) — Gosbeck Wood is an ancient coppice-with-standards site with small additions of well-established secondary woodland. It lies on a plateau of calcareous boulder clay soils with pockets of sand. The wood contains a complex mosaic of stand types and is a good example of the type of ancient woodlands found in central Suffolk. The ground flora is typical of woods of this type and locality, and includes several uncommon species.

3.4 There was one County Wild life Site within 2km of the Site. This was:

Blosses meadow — This meadow is a good example of unimproved species-rich grassland, which is a Priority habitat. The grassland includes many species typically found on boulder clay such as agrimony, cowslip, ox-eye daisy, pepper saxifrage and field woodrush. Uncommon species such as sulphur clover (nationally scarce) and adder's tongue fern (found most often in older, undisturbed sites) have also been recorded here. The meadow is divided in to two by a hedge, blackthorn thicket and large pond, all of which add habitat diversity to the site, increasing its wildlife value.

- 3.5 There are no National Site Network conservation areas (Ramsar, SAC, or SPA) within 7km of the Site.
- 3.6 The data search showed records of protected species in the area, which could potentially occur on the Site. These are detailed within the relevant sections below.



# 4. Protected and Priority Species Within the Site& Potential Impacts and Recommendations

#### Statutory Designated Areas

- 4.1 The Site is within the Impact Risk Zone for the Gosbæk Wood SSSI site; however, it does not contain the species or habitats for which it is designated and will not significantly increase footfall or disturbance through the conservation areas.
- 4.2 Given the small size of the development and screening provided by surrounding residential dwellings, tree belts, farm buildings and agricultural fields, it was not considered necessary to carry out a Habitats Regulation Assessment for the development. As with the SSSIs, the proposed construction area does not contain the habitat for which the county wildlife site is designated or the potential to support features of interest. The areas contain extensive footpath networks, and the proposed construction will not significantly increase visitor footfall along the se.

#### Flora

- 4.3 No species of interest were recorded during the survey and close grazed and mown grasslands were considered unlikely to support a rich flora. The desk study highlighted several species of rare plant have been previously recorded within 2km of the Site, this included those listed as 'Vulnerable' and 'Endangered' on the England Red List. Almost all the rare and protected species highlighted within the data search are associated with marshland, arable land, and species-rich meadows.
- The proposed development includes the creation of a new residential dwell, with associated cartlodge, parking and access. The construction area covers an area of species-poor, managed grassland and hardstanding; this will result in the loss or change of use of these habitats. The lost habitat is not listed within the Section 41 of the NERC Act 2006 as being of principal important to the conservation of biodiversity within the UK and was not considered suitable to provide opportunities for protected species.
- 4.5 **No further botanical surveys are required**.





#### Bats

- 4.11 There were no buildings within the Site boundary and no mature trees within the construction boundary; therefore, there will be no impacts to roosting bats.
- 4.12 Although the Site offered limited foraging potential as the overall extent of the grassland is small and the habitats on Site were very unlikely to support assemblages of invertebrates (prey species), the boundary features (hedgerows) could be used by foraging and commuting bat species.
- 4.13 The data search returned records of at least three species of bat within 2km of the Site; these were western barbastelle (*Barbastella barbastellus*), common pipistrelle (*Pipistrellus pipistrellus*), and brown long-eared (*Plecotus auritus*) bats within 2km of the Site. With only 8 individual records.
- 4.14 No further survey is necessary; however, the Site will incorporate sensitive lighting ensuring the boundaries are not illuminated as it could be an important commuting corridor for nocturnal species. This will follow guidance provided by the Bat Conservation Trust and Institution of Lighting Professionals (Bats and artificial lighting at night, 2023), to ensure foraging and commuting bats using adjacent habitats are not negatively impacted. Lighting measures should also be applied to temporary security lighting used during the construction phase. This will include low pressure sodium lamps, with hoods, cowls, or shields, to prevent light spillage.

#### **Birds**

- 4.15 Mature hedgerow growth along the north, west and south boundaries provided excellent nesting and foraging habitat for a range of bird species. A number of common finch and tit species were recorded using the hedgerows, and various finch species were heard within the adjacent habitats.
- 4.16 The grassland lacked a suitable structure for ground nesting species and appeared regularly disturbed and was in very close proximity to the existing dwelling and roadway.
- 4.17 The data search returned a high number of records of common and protected species that have been observed in the local landscape. The hedgerows at the boundaries and along fence lines offered nesting and foraging habitat for BoCC red listed and NERC S41 species such as dunnock (*Prunella modularis*) and linnet (*Linaria cannabina*).
- 4.18 Due to the minimal amount of scrub lost from the construction zone, no further survey is necessary. This habitat will be cleared outside the nesting bird season or following a nesting bird survey (carried out by an experienced ornithologist/ecologist); should any active nests be found, then clearance will stop until young have fledged.

#### Great Crested Newts & Reptiles

- 4.19 Habitats recorded throughout the Site were considered unsuitable for herptiles, particularly the common and protected amphibian species recorded in the local area (detailed below). The short, mown grassland did not have structure for either foraging or sheltering amphibians (including great crested newts (*Triturus cristatus*)); and the site lacked suitable refugia to provide foraging, sheltering, and hibernating animals. The hedgerows surrounding the site could be used by commuting or foraging herptiles but wont be impacted throughout the proposals.
- 4.20 There were six ponds highlighted on OS maps within 500m of the Site boundary. Four of these were north of Hemingstone Road and were considered disconnected from the site. The two remaining ponds were both surrounded by much higher quality amphibian habitat (scrub and higher quality grassland) therefore, it was considered extremely unlikely for possible amphibians



to cross from the suitable habitat into the poor-quality habitat within the site.

- 4.21 There were nine records of GCN returned in the data search, all being approximately 1km away from the site to the north, east and south; other amphibians recorded in the local area were common frog and common toad a NERC S41 species of principal importance in England. None of the four species of common and widespread reptiles (adder (*Vipera berus*), slow-worm (*A nguis fragilis*), grass snake (*N atrix helvetica*), and common lizard (*Z ooloca vivipara*)) were recorded in the local area.
- 4.22 Despite the local records, no further survey is necessary due to the overall extent of the site and poor quality habitat throughout the works area.

#### Hedgehogs

- 4.23 Grassland habitats within the Site offered potential foraging habitat for hedgehogs; the shorter grassland provided good access to potential prey items. The adjoining hedgerows offered an extension of this foraging habitat and could also be utilised as a potential commuting corridor, and cover for sheltering and hibernating animals.
- 4.24 Although no evidence of hedgehogs was recorded during the survey, the data search returned 46 records of hedgehog within 2km of the Site from 2011 to 2019. The records were mostly from Ashbocking to the east, with other records to the north, west and south. One record was from within 350m of the Site boundary.
- 4.25 No further survey is necessary; however, as the Site provides suitable foraging habitat for foraging mammals, and hedgehogs and badgers have been recorded in the local area, construction works will implement several precautionary measures, including the following:
  - Covering excavations overnight to prevent animals falling in, or the provision of an escape ramp:
  - Safe storage of materials that may harm animals; and
  - Security lighting to be set on short timers to avoid disturbing nocturnal animals using the Site and immediate surrounding area – it will be directional to avoid boundary features (trees and hedgerows).

#### Invertebrates

- 4.26 The mown grassland areas were unsuitable for supporting assemblages of common and rare/protected terrestrial invertebrates. Much of the habitat was disturbed, and there was limited forb, ruderal, or scrubby/woody species. Encroaching scrub growing along the fence line offered very limited foraging opportunities; however, much higher quality and abundant habitat was available within the adjacent hedgerows.
- 4.27 The data search included records of several S41/UKBAP moths and rare butterflies such as small heath butterfly (*Coenonympha pamphilus*) and centre-barred sallow moth (*Atethmia centrago*) which are listed as 'Near threatened' on the England Red List. There was not suitable habitat for either of these species on the Site. Small heaths require sparse heath vegetation or fine grasses which the Site lacked and the centre-barred sallow moth requires mature ash trees in woodland/ he dgerows which it utilises as a food source for its young, none of the hedgerows on the Site contained ash. Also returned was one stag beetle (*Lucanus cervus*) record; however, the Site lacked suitable deadwood for this species to breed/for grub development.
- 4.28 **No further survey is necessary**.



### Conclusions

5.1 The preliminary ecological appraisal found the Site contained habitats suitable for supporting protected species – bats, terrestrial mammals and breeding birds. Hedgehogs are listed as a Species of Principal Importance in England (and listed on Schedule 6 of the Wildlife and Countryside Act 1981 – making it illegal to kill or injure through certain methods) and so should also be considered as part of this application. The following measures will be implemented to minimise the risk of harm to individual animals:

Covering of excavations and/ or provision of exit ramps is recommended during works to prevent harm to mammals.

Recommendations for precautionary working methods should be followed during clearance of any scrub to prevent harm to hibernating/sheltering hedgehogs.

Dense vegetation clearance to be carried out outside the breeding bird season or following a nesting bird survey by a suitably experienced ecologist.

Sensitive lighting measures to prevent disturbance to foraging bats or other nocturnal species. An experienced ecologist will liaise with construction staff to inform these measures.

- As detailed in Paragraphs 1.9 and 1.10, the Local Policy requires new developments to have consideration for priority habitats and species, protected sites, protected species, and biodiversity. The proposed creation of a single dwelling will not cause significant harm or disturbance to such features. The development will follow the mitigation hierarchy and avoid negative impacts to biodiversity wherever possible. Any remaining short-term impacts (such as the removal of very limited areas of scrub) or potential long-term impacts (such as disturbance to ecological corridors) will be ad equately mitigated for through the above measures.
- In addition to having a negligible impact to biodiversity within the construction boundary, the development will not negatively impact species or habitats within the wider ownership boundary or adjacent land. There will be no impact on SSSIs or National Site Network conservation areas and no requirement for a Habitat Regulations Assessment.



### 6. References

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

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

JNCC (2010) Handbook for Phase 1 habitat survey: a technique for environmental audit (revised reprint) JNCC: Peterborough.

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Stace, C. (1997). New Flora of the British Isles (2nd Edition). Cambridge University Press, Cambridge.

#### Web references

http://www.bats.org.uk/data/files/bats and lighting in the uk final version version 3 may 09.pdf http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx



# Appendix I: Site Photos





Bare earth and damage within the grassland.



Southern boundary hedgerow.



Eastern boundary hedgerow.



Northern boundary hedgerow.



Small brash pile consisting of recent hedge trimmings.

# Appendix II: Species Lists

### Plants

#### Species

Acer campestre		
Acer pseudoplatanus		
Betula pendula		
Brassica sp.		
Carpinus betulus		
Cirsium arvense		
Cirsium vulgare		
Convolvulus arvensis		
Cornus sanguinea		
Crataegus monogyna		
Dipsacus fullonum		
Euphorbia peplus		
Erigeron canadensis		
Geranium sp.		
Helminthotheca		
echioides		
Heracleum sphondylium		
Jacobaea vulgaris		
Juglans regia		
Malus sp.		
Plantago lancealota		
Prunus spinosa		
Quercus robur		
Rosa canina		
Rubus fruticosus agg		
Salix sp.		
Sonchus oleraceus		
Sorbus aucuparia		
Taraxacum officinale		
Trifolium repens		
Urtica dioica		
Vicia sp		



# Appendix III: Figures

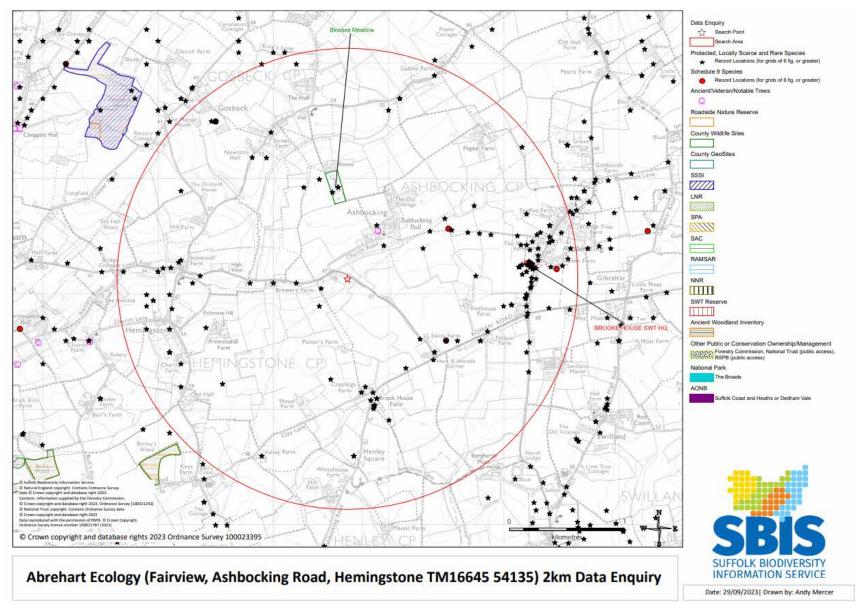
Phase 1 Habitat Map

## TM 16631 54123: Land adjacent to Fairview, Ashbocking Road, Hemingstone, Suffolk





#### Statutory and Non-Statutory Designated Sites within 2km of the Site



# Appendix V: Relevant Protected Species Legislation

Species	Legislation	Protection
Bats	Conservation of Habitats and Species Regulations (2010) (as amended) Wildlife and Countryside Act	It is an offence to:  Intentionally kill, injure or take any bat Intentionally or recklessly disturb abat
	(WCA) (1981), Schedule 5 (as amended) Wild Mammals Act (1996)	Intentionally or recklessly damage, destroy or obstruct access to a bat roost
Great Crested Newts	Conservation of Habitats and Species Regulations (2010) (as amended) Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended)	It is an offence to:  Intentionally kill, injure or take a great crested newt Intentionally or recklessly disturb a great crested newt Intentionally or recklessly damage, destroy or obstruct access to any place used by agreat crested newt for shelter or protection
Widespread Reptiles	Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended)	It is an offence to:  Intentionally kill or injure a reptile Sell, offer or expose for sale, have in possession or transport for the purpose of sale any live or dead reptile or any part of, or anything derived from, a reptile
Birds	Wildlife and Countryside Act (WCA) (1981 (as amended)	It is an offence to:  Intentionally kill, injure or take any wild bird Intentionally take, damage or destroy nests in use or being built Intentionally take, damage or destroy eggs  Species listed on Schedule 1 of the WCA (1981) are afforded additional protection, making it an offence to intentionally or recklessly disturb such species at, on or near an active nest

