

Preliminary Ecological Appraisal

of

Grange Farm, Wenham Road, Copdock,

Suffolk

Carried out for:

Vision DPC

1st

Prepared by:

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Authorised	TRA	TRA

CONTENTS

<i>CONTENTS</i>	2
<i>1. Background to Commission</i>	3
<i>2. Methods</i>	6
<i>3. Results</i>	7
<i>4. Protected and Priority Species Within the Site & Potential Impacts and Recommendations</i>	10
<i>5. Conclusions</i>	13
<i>6. References</i>	14
<i>Appendix I: Site Photos</i>	15
<i>Appendix II: Species Lists</i>	17
<i>Appendix III: Figures</i>	18
<i>Appendix IV: Relevant Protected Species Legislation</i>	22
<i>Appendix V: Precautionary Measures for GCN</i>	23
<i>Appendix VI: Precautionary Measures for bats</i>	24

1. Background to Commission

- 1.1 Abrehart Ecology Ltd was commissioned by Vision DPC to carry out a Preliminary Ecological Appraisal (PEA) of the land for the proposed extension of the dwelling at Grange Farm, off Wenham Road in Copdock, Suffolk (central grid reference TM 09810 40786; 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 extension of the dwelling covering approximately 290 m². The extension will square off the existing building on both the ground and first floor as well as extending the ground floor further onto the hardstanding surrounding the property.

Aims of Study

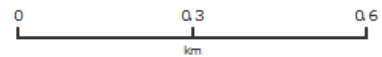
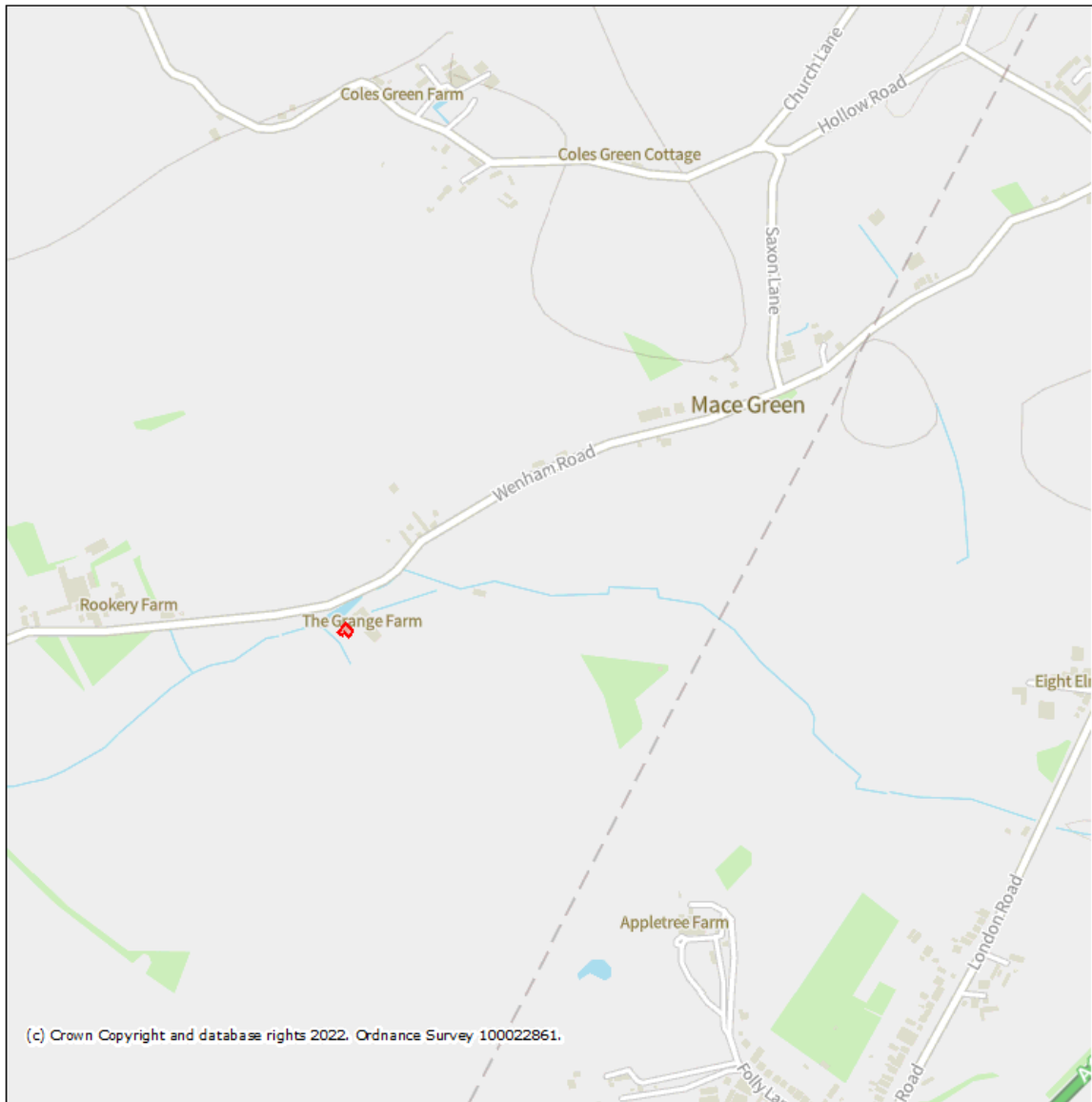
- 1.3 This report provides an ecological appraisal of the Site following the completion of a desk study and site visit. The aim of this study was to:
- Provide a description of existing habitat types;
 - To determine the existence and location of any ecologically valuable areas;
 - To identify the potential (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

- 1.4 The survey area is located off Wenham Road to the west of the village of Copdock, Suffolk. The proposed construction zone is approximately 290 m² and consisted of the existing house and associated hardstanding. Within the hardstanding was areas where common forbs were growing such as cleavers (*Galium aparine*), nettles (*Urtica dioica*), Canadian fleabane (*Erigeron canadensis*), and petty spurge (*Euphorbia peplus*).
- 1.5 Habitats surrounding the Site included a managed grassland garden with ornamental shrubs with mature trees and hedgerow to the southwest and northwest, consisting of hawthorn (*Crataegus monogyna*), field maple (*Acer campestre*), cherry plum (*Prunus cerasifera*), rose (*Rosa sp.*), dog wood (*Cornus sp.*), and holly (*Ilex aquifolium*). Surrounding the garden to the northeast was an expanse of other neutral grassland in which a derelict barn was situated. In the wider landscape the Site is surrounded by hedgerows and agricultural land in all directions (see Figure 1).

MAGiC

Site Location



Projection = OSGB36
xmin = 607600
ymin = 239700
xmax = 612700
ymax = 242100

Map produced by MAGiC on 27 October, 2023.
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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).

2. 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 11th of October 2023.
- 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) and James Roberts BSc (Hons) on the 26th of 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 100% cloud cover, a gentle breeze (Beaufort Scale 3), a temperature of 12°C, and rain. 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.
- 2.4 An updating site visit was carried out on the 28th of November 2023 by Toby Abrehart MCIEEM FLS (Natural England bat class licence WML-CL17, Natural England Great Crested Newt class survey licence WML-CL08) and Alister Killingsworth BSc (Hons) MSc ACIEEM (Natural England bat class licence WML-CL17, Natural England Great Crested Newt class survey licence WML-CL08). This visit was carried out with access possible into the loft space – previously not accessible. Weather conditions during the survey were 0% cloud cover, light air (Beaufort Scale 1), a temperature of 4°C, and excellent visibility.

Survey Limitations

- 2.5 There were no limitations to the survey.

¹ *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; Ancient Woodland; and protected and priority species identified by the:- Wildlife & Countryside Act 1981 Schedules 1, 5 & 8; Conservation of Habitats & Species Regulations 2010 Schedules 2 & 5; Protection of Badgers Act 1992; Bonn Convention Appendix 1 & 2; Bern Convention Annex 1 & 2; Birds Directive Annex 1; Habitats Directive Annex 2, 4 & 5; NERC Act 2006 Section 41; UKBAP (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.

3.4 There were four County Wildlife Sites within 2km of the Site. These were:

- **Brimlin Wood** – Brimlin Wood is listed in English Nature's Ancient Woodland Inventory. Part of the western section of the woodland is bordered by a ditch which is possibly a remnant of the medieval wood boundary. A large proportion of the northern half of Brimlin Wood has been altered by the planting of softwoods amongst deciduous trees. The remainder is composed of ash, oak, maple, small-leaved lime and hazel coppice in varying quantities. In addition, small clones of aspen can be found mainly in the centre of the wood. A valuable feature of the wood is the three wide grassy tracks which run from north to south. All the rides are wet in sections and support a species-rich flora including primrose, yellow pimpernel and remote sedge. The ground flora of the rest of the wood is dominated by dog's mercury in areas where there is sufficient light. It is absent from conifer plantations where little light reaches the woodland floor. A pond situated on the edge of the central ride supports a fair diversity of water plants and provides important habitat for dragonfly larvae and other invertebrates.
- **Wenham Thicks** - This small fragment of ancient woodland is listed in English Nature's Inventory of Ancient Woodland for Suffolk. The wood is enclosed by a ditch which is considered to be medieval in origin. In addition, the western edge is bordered by a dense hedge consisting of ash, hazel, elder and hawthorn. A large proportion of Wenham Thicks has been interplanted with conifers. Beneath the dense tree canopy, the ground flora consists mainly of bramble with some dog's mercury. Semi-natural woodland is restricted to a small area at the southern end of the wood. Ash, field maple, oak, cherry and elm are present here with a dense shrub layer of hazel and elder. Dead wood is abundant in the area of broadleaved woodland. Some dead standing elms provide suitable habitat for woodpeckers and dead wood invertebrates. In addition to timber production, Wenham Thicks is managed for game.
- **Bentley Long Wood** - Bentley Long Wood appears on a 1639 map as 'Bentlie Woode' and is listed in Natural England's Ancient Woodland Inventory. It is situated on a hilltop plateau, as part of a cluster of large, interconnected ancient woodlands in the parish of Bentley. The original western side of the wood was lost as a result of widening the adjacent A12. The wood is entirely enclosed by a wood bank. Studies by the historical botanist, Dr.

Oliver Rackham, have shown that this bank has an unusual rounded profile and unlike most ancient woods is not bordered by a ditch. The site is dominated by oak with abundant ash, field maple, spindle, wild cherry and hazel coppice, with birch moving into some areas. The north eastern section is dominated by hornbeam with occasional aspen clones. Small-leaved lime occupies a small area near the south western corner and on the south eastern margin. The ground flora is dominated by bramble with occasional bracken glades. The site also supports a range of flora typical of the habitat, including some ancient woodland indicator plants and uncommon species such as bluebell, wood sorrel, wood spurge, narrow buckler fern, pale sedge and wood millet. The structural diversity of the woodland provides habitat opportunities for a range of invertebrates (including Priority species stag beetle, for which the standing and fallen deadwood is essential) and birds. Priority species hazel dormouse, for which Suffolk records are restricted mainly to the Stour Valley in the south of the county, is also recorded here.

- Brockley Wood - Brockley Wood is one of a number of ancient woodlands in the parish of Bentley listed in Natural England's Inventory of Ancient Woodland. The parish boundary between Bentley and Copdock runs along the northern boundary of the wood. A number of old oak and elm pollards, a characteristic feature of ancient woodlands, are located on the woodland boundaries. A large proportion of the wood is composed of neglected hornbeam coppice. A smaller section in the western half of the wood is a fenced plantation consisting mainly of softwoods. A cleared section in the northern half has been colonised by a dense growth of birch scrub. Bluebell, interspersed with bramble and bracken are the dominant plants in the ground flora. Less common plants, for example wood sorrel and wood anemone, can be found in smaller quantities where the canopy is more open. A pond situated on the site of an old building on the southern boundary of the wood provides an important additional habitat for dragonfly and amphibian larvae.

3.5 There was one National Site Network conservation areas (Ramsar, SAC, or SPA) within 7km of the Site:

- The Stour and Orwell estuaries - The Stour and Orwell estuaries straddle the eastern part of the Essex/Suffolk border in eastern England. The SPA is coincident with Cattawade Marshes Site of Special Scientific Interest (SSSI), Orwell Estuary SSSI and Stour Estuary SSSI. The estuaries include extensive mud-flats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. The mud-flats hold *Enteromorpha*, *Zostera* and *Salicornia spp.* The site also includes areas of low-lying grazing marsh at Shotley Marshes on the south side of the Orwell and at Cattawade Marshes at the head of the Stour. Trimley Marshes on the north side of the Orwell includes several shallow freshwater pools, as well as areas of grazing marsh, and is managed as a nature reserve by the Suffolk Wildlife Trust. In summer, the site supports important numbers of breeding avocet *Recurvirostra avosetta*, while in winter it holds major concentrations of waterbirds, especially geese, ducks and waders. The geese also feed, and some waders roost, in surrounding areas of agricultural land outside the SPA. The site has close ecological links with the Hamford Water and Mid-Essex Coast SPAs, lying to the south on the same coast.

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.

Field Survey Results

- 3.7 The Site comprised an existing dwelling and hardstanding including a driveway and paved path, which sat in a wider garden space with a derelict barn in the northeast.

Areas within the Construction Boundary

- 3.8 **Building:** the building was a Georgian residential dwelling. It was of two storey, painted brick construction with a pitched slate tile roof. The southeastern side of the property was single storey with a pitched slate tile roof.
- 3.9 **Hardstanding:** a concrete driveway was situated to the front of the residential dwelling in the northeast. It was well sealed with some patches of rye grass (*Lolium perenne*) and mosses growing between the slabs. To the rear of the building in the southwest was an area of concrete paving with rye grass and several forbs including Canadian fleabane (*Erigeron canadensis*), cleavers (*Galium aparine*), and petty spurge (*Euphorbia peplus*) growing between the paving slabs.
- 3.10 A map showing the habitat types on Site can be seen in Appendix II.

Areas within the Ownership Boundary (outside construction boundary)

- 3.11 **Building:** To the northeast of the construction boundary was a derelict multilevel barn constructed of brick and timber with an overlapping wooden board exterior and a pitched slate roof.
- 3.12 **Grassland:** immediately surrounding the construction boundary was a garden space consisting of a managed grassland with rye grass (*Lolium perenne*) dominating and moderate diversity of common forbs including white clover (*Trifolium repens*), daisy (*Bellis perennis*), ox tongue (*Helminthotheca echioides*), and ribwort plantain (*Plantago lanceolata*). There were also ornamental shrubs throughout.
- 3.13 **Other neutral grassland:** to the northeast of the construction boundary, surrounding the derelict barn was an area of other neutral grassland. This had a short and consistent sward height of 10-15cm and moderate forb diversity of common species including white clover (*Trifolium repens*), creeping buttercup (*Ranunculus repens*), self-heal (*Prunella vulgaris*), and ribwort plantain (*Plantago lanceolata*). Several mushroom species were also observed including white dapperling (*Leucoagaricus leucothites*) and pestle puffballs (*Lycoperdon excipuliforme*).
- 3.14 **Standing water:** to the north of the garden outside the construction boundary was a ditch-fed pond with no emergent or submergent plants and turbid water.
- 3.15 **Trees and Hedgerows:** surrounding the garden of the house was a mature mixed species hedgerow associated with a ditch consisting of mature ash (*Fraxinus excelsior*), hawthorn (*Crataegus monogyna*), field maple (*Acer campestre*), cherry plum (*Prunus cerasifera*), rose (*Rosa sp.*), dogwood (*Cornus sp.*) and holly (*Ilex aquifolium*).

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

Flora

- 4.1 No species of interest were recorded during the survey and the 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 on Schedule 8 of the Wildlife and Countryside Act 1981 and classified as ‘Vulnerable’ and ‘Endangered’ on the England Red List. Almost all the rare and protected species highlighted within the data search are associated with woodland, arable land, heathland, and species-rich meadows.
- 4.2 The proposed development includes the extension of the existing house without infringing on grassland habitat.
- 4.3 **No further botanical surveys are required.**

Badgers

- 4.4 The Site was visually searched for evidence of the presence of badgers (*Meles meles*), including setts, footprints, latrines, and snuffle marks. Habitats within the Site were not suitable for foraging animals; however, the habitats immediately surrounding the construction site such as other neutral grassland and hedgerow could be utilised by foraging badgers. Evidence recorded was of rabbits only.
- 4.5 Where possible, habitats within 30m of the construction zone were assessed. No further evidence was found and there were no obvious badger runs leading into woodland or scrub -those found were attributed to rabbits.
- 4.6 The mature hedgerow adjacent to the Site, were suitable for sett creation but won't be impacted by proposals.
- 4.7 Seventeen records of badgers were returned within the desk study from 2006 to 2021; the nearest of which was from approximately 180m east of the Site.
- 4.8 **No further survey is necessary; however, precautionary measures detailed in paragraph 4.24 will be adhered to, to avoid disturbing nocturnal species and foraging mammals.**

Bats

- 4.9 The Georgian-style house within the site boundary had well-sealed painted walls and the windows were well sealed, meaning no ingress points for bats were noted.
- 4.10 Current proposals centre around the single-storey section of the dwelling. On the northeastern and southeastern single-storey sides of the house there was evidence of minor lifting and broken slate tiles on the roof. These were inspected closely using binoculars and torches and did not appear to lead into crevices or provide roosting opportunities for bats. An internal inspection of the loft space, over the single-storey section, revealed the tiles were limed internally by modern plastic sheeting in excellent condition – a thermal imaging scope and torch revealed no ingress points – and there was no evidence of bats recorded. Therefore, it was considered to have negligible bat roost potential.
- 4.11 Additionally, immediately adjacent to the construction site is a mature hedgerow to the south of the ownership boundary which could act as a commuting corridor for bats.

- 4.12 The data search returned records of at least nine species of bat within 2km of the Site; these were barbastelle (*Barbastella barbastellus*), serotine (*Eptesicus serotinus*), Myotis sp., Natterer's (*Myotis nattereri*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Nyctalus/Eptesicus agg., pipistrelle species, noctule (*Nycatalus noctula*), and brown long-eared (*Plecotus auritus*) bats within 2km of the Site.
- 4.13 **The single-storey section (subject of current proposals) had negligible potential for roosting bats and so no further survey is necessary. It was noted that the main house appeared to have several loose tiles that may be impacted should plans extend to creating a 'lantern' area within the centre of the roof. Should these plans be used, then further investigation will be required.**
- 4.14 **Suitable foraging habitat is located immediately adjacent to the construction site and within the wider ownership boundary therefore the development will incorporate sensitive lighting – ensuring the site is not illuminated during works during and post construction.** This will follow guidance provided by the Bat Conservation Trust (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 There was no suitable nesting habitat for any bird species within the construction boundary. There was no dense vegetation used by nesting bird species and no suitable grassland or opportunities for ground nesting species. No nests or ingress points suitable for birds were noted on the building.
- 4.16 The data search returned a high number of records of common and protected species that have been observed in the local landscape. However, there were no suitable nesting locations within the construction boundary.
- 4.17 **Due to no suitable habitat within the construction zone, no further survey is necessary.**

Great Crested Newts & Reptiles

- 4.18 Habitats recorded throughout the Site were not suitable for herptiles. However, in the wider ownership boundary, adjacent to the construction boundary, there were suitable areas of scrub and derelict buildings which could be utilised by herptiles but is unlikely to be impacted by construction.
- 4.19 There were six ponds highlighted on OS maps within 500m of the Site boundary. These were not accessible at the time of survey.
- 4.20 There were twelve records of GCN returned in the data search with the nearest being 13m from the construction boundary and the rest being around 1.5km north of the site; amphibians recorded in the local area were a single record of a common toad – a NERC S41 species of principal importance in England. One of the four species of common and widespread reptiles were recorded in the local area with a single record of a grass snake (*Natrix helvetica*) which was 2.8km to the south.
- 4.21 **Due to no suitable habitat for herptiles found on the Site, no further surveys are required for reptiles or amphibians. However, precautions outlined in Appendix V should be adhered to, to minimise the risk of harm to individual GCN that might be using surrounding habitats.**

Hedgehogs

- 4.22 No suitable habitat for hedgehogs was found within the construction boundary.
- 4.23 The adjoining other neutral grassland and hedgerow in the wider ownership boundary could be utilized by hedgehogs but is unlikely to be impacted by construction.
- 4.24 The data search returned 13 records of hedgehog within 2km of the Site from 2012 to 2018. The records were mostly London Road leading up to Copdock, with several records from Washbrook and Capel St Mary. No records were from within 350m of the Site boundary.
- 4.25 **No further survey is necessary; however, as the land within the wider ownership 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 site lacked suitable habitat for both common and rare invertebrate species and is unlikely to have a diverse invertebrate assemblage.
- 4.27 The data search included records of several S41/UKBAP moths, flies, and rare butterflies – such as White Admirals (*Limenitis camilla*) butterflies which are listed as ‘Vulnerable’ on the England Red List. However, the site lacked mature woodland which this species requires.
- 4.28 Also returned were a stag beetle (*Lucanus cervus*) records; however, the Site lacked suitable deadwood for this species to breed/for grub development.
- 4.29 **No further survey is necessary.**

5. Conclusions

5.1 The preliminary ecological appraisal found the Site contained habitats suitable for supporting protected species – bats. 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:

- Adherence to Precautionary Measures in Appendix V to minimise the risk of harm to GCN that might be using the habitats surrounding the Site and could enter the construction zone. Such measures would also minimise the chance of GCN entering the construction zone.
- Adherence to Precautionary Measures in Appendix VI to minimise the risk of harm to bats that might be using the habitats surrounding the Site.
- 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.
- 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.

5.2 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 extension of the Georgian-style building 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 or potential long-term impacts (such as disturbance to ecological corridors) will be adequately mitigated for through the above measures.

5.3 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

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<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>

Appendix I: Site Photos



View of Georgian-style house looking southwest



View of Georgian-style house looking north



Broken tiles and minor lifted tiles on the eastern single-storey wing of the house. (Looking southwest)



Broken tiles and minor lifted tiles on the eastern single-storey wing of the house. (looking northeast)



Georgian-style house and surrounding garden (looking north)



Concrete hardstanding to the northeast of the house

Updating site visit 28/11/2023



Roof tiles on eastern roof section.



Roof tiles on western roof section.



Internal loft space.



Internal roof lining.

Appendix II: Species Lists

Plants

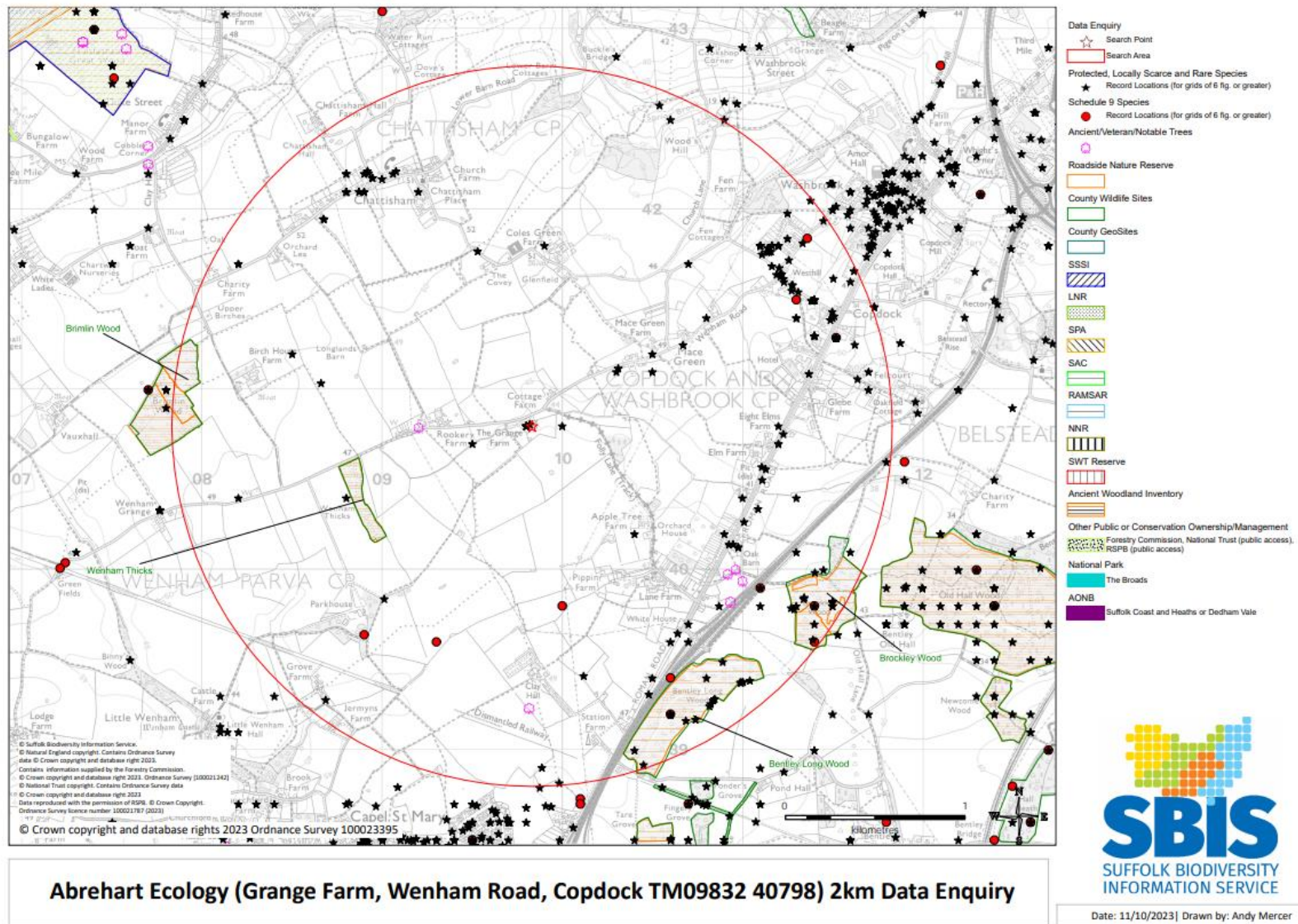
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Galium aparine
Geranium molle
Glechoma hederacea
Helminthotheca echioides
Hypochaeris radicata
Ilex aquifolium
Lamium purpureum
Lolium perenne
Potentilla sp.
Prunella vulgaris
Prunus cerasifera
Ranunculus repens
Rosa sp.
Senecio vulgaris
Stellaria media
Taraxacum officinale
Trifolium repens
Urtica dioica

Appendix III: Figures

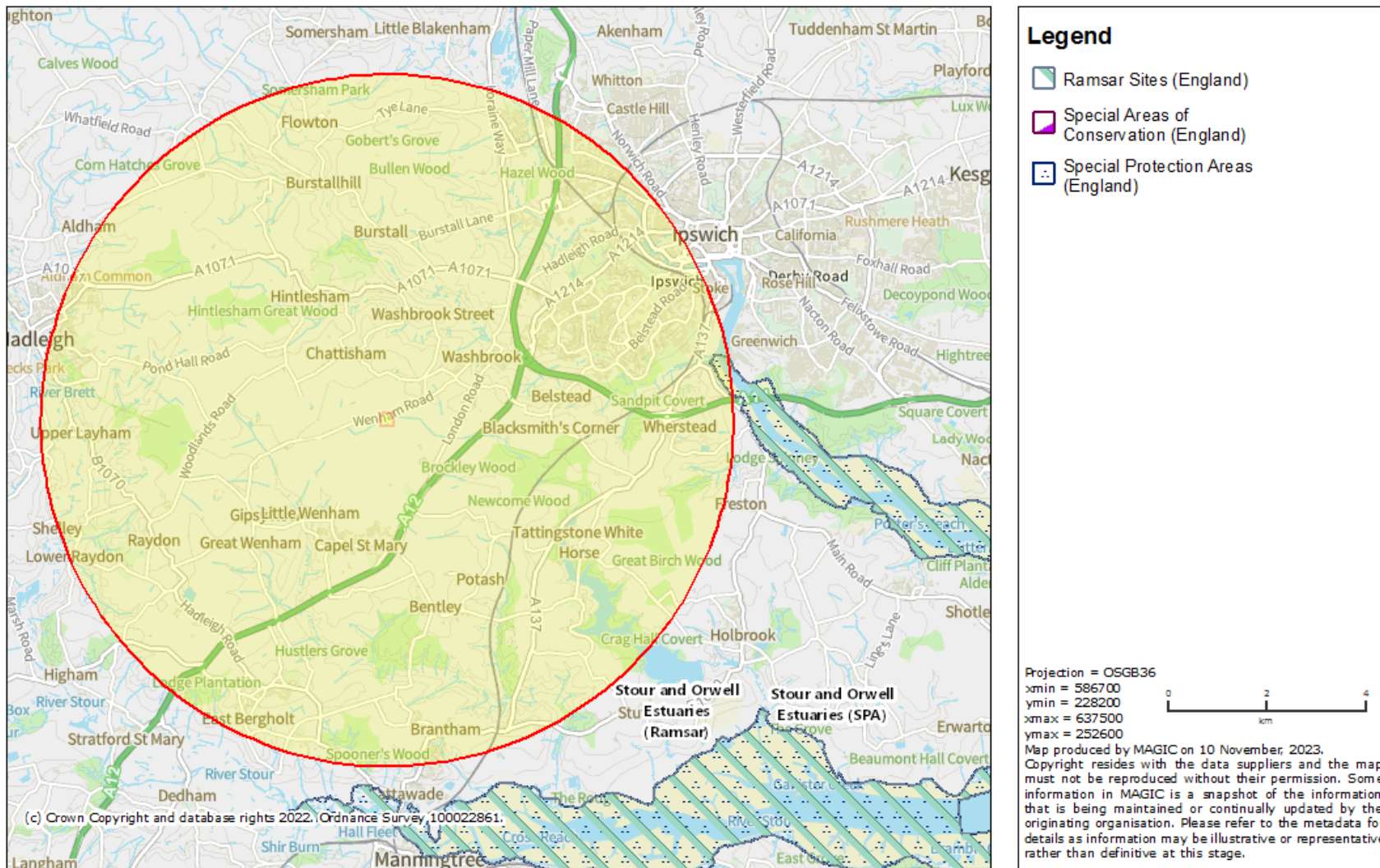
Phase 1 Habitat Map



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



European Conservation Sites within 7km of the Site



Appendix IV: Relevant Protected Species Legislation

Species	Legislation	Protection
Bats	<ul style="list-style-type: none"> ▪ Conservation of Habitats and Species Regulations (2010) (as amended) ▪ Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended) ▪ Wild Mammals Act (1996) 	<p>It is an offence to:</p> <ul style="list-style-type: none"> ▪ Intentionally kill, injure or take any bat ▪ Intentionally or recklessly disturb a bat ▪ Intentionally or recklessly damage, destroy or obstruct access to a bat roost
Great Crested Newts	<ul style="list-style-type: none"> ▪ Conservation of Habitats and Species Regulations (2010) (as amended) ▪ Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended) 	<p>It is an offence to:</p> <ul style="list-style-type: none"> ▪ 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 a great crested newt for shelter or protection
Widespread Reptiles	<ul style="list-style-type: none"> ▪ Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended) 	<p>It is an offence to:</p> <ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ Wildlife and Countryside Act (WCA) (1981) (as amended) 	<p>It is an offence to:</p> <ul style="list-style-type: none"> ▪ 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 <p>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</p>

Appendix V: Precautionary Measures for GCN

Any individual animals (not including GCN) found during work will be safely removed and translocated to adjacent areas of suitable habitat. If GCN are found at any point throughout the development, then work must be stopped immediately, and a Natural England licence will be required.

Safe Working Practices

The Landowner/Site Manager will be responsible for performing a thorough site check each morning to assess the condition of the working practices listed below.

Vegetation within and immediately adjacent the Site is currently very short and unsuitable for GCN. This should be retained as such prior to and throughout the construction period.

There are to be no fires on Site throughout the construction process. Materials stored for fires could attract amphibians as a refuge/shelter.

Vehicles and material storage should avoid better quality habitats identified during the PEA, such as the other natural grassland surrounding the derelict barn.

All materials should be stored on pallets. This will prevent places of refuge being created within the construction zone.

Any aggregates delivered to Site should be stored in bulk-bags and placed on pallets. Again, this will prevent places of refuge / hibernacula being created within the construction zone.

Any excavated soil should be placed on habitats unsuitable for GCN – such as hardstanding or short-mown grassland.

All waste should be stored in skips prior to removal from Site.

Any excavations (approved by the ECoW) should contain an escape ramp, made from earth or wooden sticks (or multiple ramps within large excavations – to be determined by the ECoW). This will allow amphibians (including GCN) to exit excavations.

The landowner/site manager will check the excavations each morning. Should common amphibians or mammals be found, then these animals will be moved to safe habitat outside the construction zone. If great crested newts are found within the excavations, then a suitably licensed ecologist will be contacted and discussions for future methods/works will take place.

Appendix VI: Precautionary Measures for Bats

Any individual small mammals (not including bats) found during work will be safely removed and translocated to adjacent areas of suitable habitat. If any individual bats are found at any point throughout the development, then work must be stopped immediately, and a Natural England licence will be required.

Safe Working Practices

The Landowner/Site Manager will be responsible for performing a thorough site check each morning to assess the condition of the working practices listed below.

Works to the roof, particularly the removal of the roofing slates must be completed by hand. This is to ensure that no bats are present throughout the works.

There are to be no fires on Site throughout the construction process. Smoke from fires would be detrimental to bats using the structures or other habitats throughout the Site.

External construction lighting must not be used at any point throughout the development. Habitats throughout the wider site (hedgerows, tree lines, ponds, and other buildings) are highly likely to be used by bats. It is essential that these features are not disturbed or illuminated throughout works or following the development.

Bats have been previously recorded within the wooden barn on Site, this building must not be impacted/disturbed throughout works. Any works to be undertaken on this building must be done following details set out in the licence.

If plans are altered and works are to be undertaken which would impact the main roof space of the dwelling, then further advice should be sought from a suitably qualified ecologist.