Glaven Ecology

Five Oaks
Fressingfield Road
Stradbroke

Ecological Impact Assessment

Prepared by
Glaven Ecology

on behalf of
Howe & Boosey
Architectural Services

September 2023

Reference: 320-2200-GE-HB

www.glavenecology.co.uk | 07532444829 | office@glavenecology.co.uk

CIEEM
REGISTERED
PRACTICE 2023-2024

Contents

Version	Status	Changes	Date	Author
1.1	Draft	-	12/09/2023	Sally McColl MCIEEM
1.2	PRA Issued	Reviewed	15/09/2023	Carolyn Smith BSc (Hons), MCIEEM

The data contained within the report are accurate to the best of our knowledge and have been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

The report conforms to the British Standard 42020:2013 Biodiversity – Code of practice for planning and development.

We confirm that any opinions expressed are our best and professional true opinions. This report has been prepared by an ecology specialist and does not purport to provide legal advice.

1 Summary

1.1 Glaven Ecology was commissioned to undertake a Preliminary Roost Appraisal on a residential dwelling Five Oaks, Fressingfield Road, Stradbroke, IP21 5NJ. The survey work was completed by Sally McColl MCIEEM on 8th September 2023.

1.2 The Site was a 0.3ha plot in an arable landscape which contained a single storey residential dwelling, Nissan hut and gardens within a larger ownership area.

1.3 Planning is sought to demolish the current buildings and construct a replacement dwelling and three bay cart lodge. A line of leylandii hedge will also be removed.

1.4 The Site sits within a SSSI Impact Risk Zones for Chippenhall Green SSSI (2.6km north-east). However, the proposal does not fall within the categories requiring further consultation with Natural England.

1.5 Bats were confirmed as present within the building with droppings found in the roof void. The oak trees were assessed as having low potential to support roosting bats. Three nocturnal surveys May-August will be required to characterise roosts and an EPSM licence required for works to proceed. However, given the low number of droppings in the roof space it is not through to be a large/maternity roost.

1.6 The leylandii hedge should be removed outside the bird breeding season of March-August. The woodpile and surrounding ruderal vegetation offer habitat to nesting birds, hedgehogs, reptiles and amphibians therefore clearance must take place in September/October, or failing that, following confirmation by a suitably qualified ecologist that animals are absent from the habitats to be cleared.

1.7 The retained trees and hedgerow must be protected during construction works by not working or storing of materials within root protection zones.

1.8 Mitigation measures recommended include;

Keeping grassland mown prior to construction, and diverse species grass mix to be used;

Off-ground storage of construction materials and backfilling of excavations;

Relocating woodpile to under a boundary hedge.

2 Introduction

2.1 Background

2.1.1 Glaven Ecology was commissioned to undertake a Preliminary Roost Appraisal on a residential dwelling at Five Oaks, Fressingfield Road, Stradbroke. IP21 5NJ. The survey work was completed by Sally McColl MCIEEM on 8th September 2023.

2.1.2 This survey and report aim to establish the baseline ecology of the site and its suitability to support any protected species. It assesses potential impacts on these features as a result of the works and advises on the need for further surveys. It sets out the mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects.

2.2 Site Location and Description

2.1.1 The Site was located at OS Grid Reference TM258742 (Appendix 1) and was a 0.3ha plot which contained a residential dwelling, Nissan hut and gardens within a bigger plot (total 0.9ha) which was a predominately grass field.

2.1.2 There were drainage ditches on the southern and western sides with leylandii trees and native hedgerow to the road. There was a small area of cherry laurel hedging along the southern boundary with two mature oak trees. The northern and eastern boundaries were open to the adjacent field which contained some scattered trees.

2.2.3 Immediately adjacent to the south was an area of land planted with willow trees with the wider landscape being arable farmland with scattered villages.

2.3 Project Overview

2.3.1 Planning is sought to demolish the current property and Nissan hut and to construct a replacement dwelling and three bay cart lodge.

3 Legislation

2.3.1 The main piece of legislation relating to nature conservation in Great Britain is The Wildlife and Countryside Act 1981 (as amended). This Act is supplemented by provision in The Countryside and Rights of Way (CRoW) Act 2000 and The Natural Environment and Rural Communities Act 2006 (in England and Wales). This act provides varying degrees of protection for the listed species of flora and fauna, including comprehensive protection of wild birds and their nests and eggs.

2.2.3 UK wildlife is also protected under The Conservation (Natural Habitats &c.) Regulations 1994 (which were issued under the European Communities Act 1972), through inclusion on Schedule 2. In 2010, these Regulations, together with subsequent amendments, were consolidated into The Conservation of Habitats and Species Regulations 2010.

3.2 Bats

2.3.1 All UK bat species are protected under The Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended). This legislation fully protects bats and their breeding sites or resting places, making it an offence to deliberately capture, injure or kill bats, deliberately disturb bats, damage or destroy a bat breeding or resting place.

3.3 Birds

2.3.1 All birds, their nests and eggs are protected by law under Part 1 of the Wildlife and Countryside Act 1981 (as amended).

2.2.3 Certain species (including barn owl *Tyto alba*) are also listed under Schedule 1 of the Wildlife and Countryside Act 1981, which prevents disturbance of the species or its nest and/or eggs at any time with protection by special penalties.

3.4 Great Crested Newt

2.3.1 Great crested newts Triturus cristatus and their habitat (aquatic and terrestrial) are afforded full protection by The Wildlife and Countryside Act 1981 (Section 9, Schedule 5 and as amended) and The Conservation (Natural Habitats & c.) Regulations 1994. It is an offence to:

1) Disturb, injure or kill recklessly a great crested newt.

2) Disturb or destroy recklessly great crested newt habitat (a breeding site or place of shelter).

3.5 Reptiles

2.3.1 Reptiles are all given limited legal protection under part of Section 9 (1) and all of Section 9 (5) of the Wildlife and Countryside Act 1981 (as 1.1.1amended). This means that it is an offence to intentionally kill, injure and offer for sale.

3.6 Water Voles and otters

2.3.1 The water vole and otters are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and is a priority conservation species. This means it is offence to:

1) intentionally capture, kill or injure water vole.
2) damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care)
3) disturb them in a place of shelter or protection (on purpose or by not taking enough care)
4) possess, sell, control or transport live or dead water voles or parts of them.

3.7 Statutory Designated Conservation Sites

2.3.1 National designations such as Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR), are afforded statutory protection. SSSIs are notified and protected under the Wildlife and Countryside Act 1981 as amended. SSSIs are notified based on specific criteria, including the general representativeness and rarity of the site and of the species or habitats supported by it.

4 Survey Methods

4.1 Desk Study

2.1.1 Records held on Magic.gov.uk on Designated Sites and granted European Protected Species Licences were reviewed in September 2023.

2.1.2 A data search was requested from Suffolk Biodiversity Information Services (SBIS) in September 2023.

2.2.3 The types of features considered within the desk study includes designated sites, habitats and species of principal importance for conservation of biodiversity and protected species.

4.2 Field Survey

2.1.1 A brief Phase 1 habitat survey of the Site was conducted using the methodology to describe habitats as laid down in NCC (1990) and an assessment made for the presence of protected species.

2.1.2 The survey was undertaken on 8th September 2023 by Sally McColl MCIEEM (Natural England Level 1 Licence for bats [reference 2019-39376-CLS-CLS] and Great Crested Newts [reference 2017-32812-CLS-CLS]).

2.2.3 The weather was dry with 6/8 cloud cover at the time of the survey, 21ºC with light air.

4.3 Protected Species

Badger

2.3.1 The habitats on site and in the immediate surrounding area were assessed for their potential to support badgers.

2.2.3 Evidence of badger activity (including setts, footprints, latrines, trails, scratching posts, guard hairs and foraging activity) was searched for within the Site.

Bats

2.2.3 A general assessment was made of the suitability of site features for roosting, commuting and foraging bats and the likely presence of bats within the site area.

2.2.3 A Preliminary Roost Assessment was completed on the buildings and trees in accordance with the Bat Conservation Trust's "Bat Surveys for Professional Ecologists" (Collins, 2016). A scoring system was applied to the buildings and trees using the criteria shown in Table 1.

4.3.5 The buildings were investigated for evidence of bat use and evaluated for bat roosting potential. The visual search for signs of bats consisted of a slow methodical search both internally and externally for actual roosting bats and their signs:

Droppings on walls, windowsills and floors can be used to identify species;
Scratch marks and staining at roosts and exit holes can be used to identify the presence of bats;
Dense spider webs at a potential roost can often indicate bat absence;
The presence of butterfly wings may be an indication of bat presence.

Table 1: Assessing the potential suitability of a development site for bats (Collins, 2016)

Suitability	Description of roosting habitats	Description of commuting and foraging habitat
Negligible	Negligible habitat features on site likely to be used by roosting bats	Negligible habitat features onsite likely to be used by commuting or foraging bats
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate. conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats. A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed)	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge

Birds

2.2.3 Evidence of nesting birds was searched for and the Site was assessed as to its potential to support nesting birds.

Amphibians and reptiles

2.2.3 The habitat was assessed for reptiles and amphibians and suitable materials were lifted to check for signs of reptiles.

4.3.5 There were four ponds within 250m of the property.

Water voles and otters

4.3.5 The Site was assessed for its suitability to support water voles and otters signs such as burrows, footprints and latrines/spraints were searched for.

4.3.10 Table 2 shows the criteria used when assessing the likelihood of a protected species being present within the survey area.

Table 2: Criteria considered when assessing the likelihood of occurrence of protected species

Assessment Category	Criteria
Present	Species are confirmed as present from the current survey or historical confirmed records.
High	Habitat and features of high quality for species/species assemblage. Species known to be present in wider landscape. Good quality surrounding habitat and good connectivity.
Moderate	Habitat and features of moderate quality. The site in combination with surrounding land provides all habitat/ecological conditions required by the species/assemblage. Within known national distribution of species and local records in desk study area. Limiting factors to suitability, including small area of suitable habitat, some severance/poor connectivity with wider landscape, poor to moderate habitat suitability in local area.
Low	Habitats within the survey area poor quality or small in size. Few or no records from data search. Despite above, presence cannot be discounted as within national range, all required features/conditions present on site and in surrounding landscape. Limiting factors could include isolation, poor quality landscape, or disturbance.
Negligible	Very limited poor quality habitats and features. No local records from desk study; site on edge of, or outside, national range. Surrounding habitats considered unlikely to support species/species assemblage.

4.4 Evaluation and Assessment

2.1.1 Ecological features are evaluated and assessed with due consideration for the Chartered Institute of Ecology and Environmental Management (CIEEM) 2019 Guidelines for Ecological Impact Assessment (EcIA).

2.1.2 The following the impact magnitude categories and criteria will be used:

Major negative effect – that which has a harmful impact on the integrity of a site or the conservation status of a population of a species within a defined geographical area (e.g. fundamentally reduces the capacity to support wildlife for the entirety of a conservation site or compromises the persistence of a species' population).

Intermediate negative effect – that which has no adverse impact on the integrity of a conservation site or the conservation status of a species' population but does have an important adverse impact in terms of achieving certain ecological objectives (e.g. sustaining target habitat conditions and levels of wildlife for a conservation site or maintaining population growth for a species).

Minor negative effect – some minor detrimental effect is evident, but not to the extent that it has an adverse impact in terms of achieving ecological objectives.

Neutral effect – that which has no predictable or measurable impact.

Positive effect – that which has a net positive impact on an ecological receptor.

4.5 Survey Limitations

2.3.1 The desk study is not an exhaustive record of species within the area. However, when assessed in conjunction with a field survey, they can contribute to a robust ecological assessment of a site.

2.2.3 Ponds were not accessed at the time of survey due to being in private landownership.

5 Results

5.1 Designations

2.3.1 No statutory designated sites were identified within 2km of the proposed development.

2.2.3 One non-statutory designated sites, County Wildlife Sites (CWS), was identified within 2km of the Site (Appendix 2). Details are in Table 3 below.

Table 3: Statutory Designated Sites within 2km of development site

Site and Designation	Site description	Closet point to site
Stradbroke Cemetery – CWS118	Herb rich neutral grassland on boulder clay on the edge of Stradbroke village.	1,920m west

2.2.3 The Site sits within a SSSI Impact Risk Zones for Chippenhall Green SSSI (2.6km north-east). However, the proposal does not fall within the categories requiring further consultation with Natural England.

5.2 Habitats and Protected Species

Habitats

Notable flora

2.3.1 SBIS data returned no notable flora species for the Site. There were no notable plants or non-native invasive species noted on the survey.

Habitats

2.2.3 A habitat map can be found in Appendix 3.

2.2.3 The western boundary bordered Fressingfield Road and was a native hawthorn *Crataegus monogyna* hedgerow (Figure 1) with bramble *Rubus fruticosa* and dogrose *Rosa canina* with four mature oak *Quercus robus* trees. This is considered a UKBAP priority habitat as it is continuous with at least one woody native species and over 20m in length.

2.2.3 Adjacent to the hedge there was a steep sided ivy *Helix hedera* covered drainage ditch (Figure 2) with approximately one inch of water. A line of mature Leylandii trees were on the Site side of the ditch.

2.2.3 The southern boundary was a steep sided dry drainage ditch with some cherry laurel *Prunus laurocerasus* hedge with a field maple *Acer campestre* towards the eastern end.

2.2.3 The northern boundary bordered the adjacent grass field which was cut for hay.

2.2.3 The building was set within the western part of the Site with a Nissan hut to the eastern end which marked the application boundary. Immediately adjacent to the eastern boundary was a bare area of ground, where some debris had been removed from out-buildings which had previously fallen down and an old rubbish tip. There was a grass drive which went along the southern boundary to the Nissan hut.

2.2.3 There was a large woodpile adjacent to the northern end of the Nissan hut which was covered in nettles *Urtica dioica*. The area immediately around the building was mown grass with the areas to the north and east which had previously been used for vegetable growing and housed the old septic tank were now overgrown with ruderal vegetation such as thistle *Cirsium arvense* and nettle.

Figure 1: Western boundary looking north

Figure 2: Western boundary ditch looking north

Figure 3: Looking east over the Site

Figure 4: Looking west over to the Site

Amphibians and reptiles

5.2.9 There was no European Protected Species Mitigation Licences for great crested newt.

5.2.10 The SBIS data returned two records for great crested newts at the same location, 1,700m west (2014,2019).

5.2.11 There were no records of reptiles returned by the SBIS search.

5.2.12 Four ponds were within 250m although these were not accessible during the survey. These were all on a farm to the south-west, between 170m and 240m from the Site.

5.2.13 Boundary hedgerows, ditches, overgrown areas and brash piles provided good habitat for amphibians and reptiles. Sunny ditch banks and areas around the Nissan hut provided good basking areas for reptiles.

5.2.14 The Site, well managed until recently is not considered to hold large populations of reptiles, but the presence of transient individuals cannot be ruled out.

5.2.15 The Site had **moderate potential** to support amphibians and reptiles including great crested newts.

[redacted]

[redacted]

Bats

5.2.19 There was one record of granted European Protected Species Mitigation Licences for bats within 2km of the Site. This was 2,000m east for common and soprano pipistrelle, Natterers, barbastelle, brown long eared bats (2020-45391-EPS-MIT).

5.2.20 SBIS data returned 56 records of bats. The nearest was 280m north of the Site for pipistrelle bats (2015).

Foraging and Commuting

5.2.21 The habitats immediately around the Site were considered to have **moderate potential** to support foraging and commuting bats. The wider environment offered moderate foraging and commuting opportunities being dominated by arable land with boundary hedgerows and trees.

Visual inspection

5.2.22 The building was a single storey residential dwelling within an arable setting. There was a separate Nissan hut within the gardens to the east. The building was currently empty.

Building

5.2.23 The building was constructed of brick with pebble dash design with a hipped roof with pantiles (Figures 5&6). There were two areas with pitched rooves to the rear connected by a flat rooved area that wrapped around the southern pitch. There was a chimney on the northern and southern aspects of the hipped roof.

Figure 5: Building looking north-west

Figure 6: Building looking south-east

4.3.10 There were a few visible cracks in the brickwork on the exterior of the building. Doors and windows were well sealed. There were some gaps where the wooden soffit boards met at each corner.

4.3.10 The tiles were of an interlocking design on the hipped roof and appeared well fitted, although some cement was missing from the ridge as was one ridge tile on the northern aspect. A few bricks had fallen from the southern chimney and had created a hole in the southern aspect of the roof. There was evidence of this being patched.

4.3.10 There were raised tiles on the pitched roof and gaps around the ridges. The eastern end of one pitch and the western end of another were patched with felt. There was a small hole in the gable end of the southernmost pitch and above the corner where the flat roof tied into the hipped roof area.

4.3.10 The main loft space in the hipped roof (Figure 7) was open where part of the ceiling had collapsed.

4.3.10 The machine cut timber frame appeared well fitted and in good condition as was the brickwork of the chimneys. There were cobwebs throughout the framework.

4.3.10 The lining was generally well sealed with a hole near the southernmost chimney where the tiles had broken.

4.3.10 The loft was insulated throughout and there were scattered bat droppings visible.

5.2.31 There was an accessible loft space within the southernmost pitched roof (Figure 8). This had machine cut timber frame with battons. There was light visible through here and through a hole in the brickwork at the eastern gable end. The floor was covered in plastic and there were dense cobwebs throughout.

4.3.10 The northern pitched roof area loft space was sealed and not accessible.

Figure 7: Hipped roof loft space looking north

Figure 8: Loft space looking west

Nissan Hut

4.3.10 There was a Nissan hut constructed of corrugated asbestos sheeting at the eastern end of the application boundary (Figures 9 &10). The northern end was bricked with a window although most of the glass was missing. The floor was concrete and well swept.

Figure 9: Nissan hut looking south-west

Figure 10: Nissan hut looking east

Trees

4.3.10 There were a number of mature trees within the grounds of the property. Six of these were considered to have bat potential and are outlined in Table 4 below using the tree numbers allocated within the tree survey.

Table 4: Trees with bat potential

Tree ID	Tree Type	Location	Notes	Bat Potential
T1	English oak	Eastern end of southern boundary	Some deadwood and split branches	Low
T2	English oak	Western end of southern boundary	Some dead wood	Low
G1	English oak x 4	Western boundary hedgerow	Ivy cover and some dead wood	Low

Summary

4.3.10 The Nissan hut was assessed as having **negligible potential** to support roosting bats.

4.3.10 Six trees were assessed as having **low potential** to support roosting bats.

4.3.10 Bats were confirmed as **present** within the house.

4.3.10 The buildings had negligible suitability to support hibernating bats.

Birds

4.3.10 SBIS returned 16 records for barn owl within 2km of the Site. The buildings on Site were not suitable for nesting barn owl.

4.3.10 Boundary trees and hedgerows and brash piles provide good nesting and feeding habitat for birds.

5.2.31 Although no nests were found on the survey, birds are considered to have **moderate potential** to nest within the Site.

Water vole

4.3.10 SBIS returned one record for water vole from 2020 within 2km.

4.3.10 Although no signs were found, the ditches which hold water primarily in the winter provide habitat for water vole.

4.3.10 These ditches are connected by other ditches and streams within the wider landscape to tributaries of the River Waveney.

4.3.10 It is therefore possible that water voles searching for new territories may occasionally pass through the boundaries of the Site. Therefore, the Site had **low potential** to support water vole within its boundaries.

Otter

4.3.10 SBIS returned one record for otter from 2022 within 2km.

4.3.10 Although no signs were found, the ditches which hold water primarily in the winter provide commuting habitat for otters dispersing to new territories.

4.3.10 These ditches are connected by other ditches and streams within the wider landscape to tributaries of the River Waveney.

4.3.10 Therefore, the Site had **low potential** to support transient otter.

Other priority species

4.3.10 SBIS returned no records for hedgehogs within 2km.

5.2.31 The grass, hedgerows, overgrown areas and brash piles provided foraging, nesting and hibernation potential for hedgehog.

4.3.10 There is good connectivity to the wider countryside via connecting ditches and hedgerows, however considering the isolation of the Site within an intensively arable landscape, it is considered to have **low potential** to support hedgehogs.

4.3.10 SBIS returned one record for brown hare within 2km from 2021.

4.3.10 Whilst the habitat within the Site itself is only suitable for foraging hare, the adjacent grass field would be suitable for nesting hare and the individuals are likely to come into the application area.

4.3.10 it is therefore considered to have **low potential** to support brown hare.

6 Assessments of Effects

6.1 Designated Sites

Predicted Effects

2.3.1 No potential pathways of impact are anticipated on any Designated Sites given the scale of the development and the distance to the Designated Sites.

6.2 Habitats

Predicted Effects

2.3.1 0.05ha of mown grassland and ruderal vegetation and leylandii trees will be lost. This is of low botanical and ecological value.

2.2.3 Boundary trees and hedgerow may be damaged by the works.

2.2.3 Minor negative effects are predicted.

Mitigation

2.2.3 Tree protection guidance within BS5837:2012 should be followed, with no storage of materials within root protection zones (RPZ).

2.2.3 Any new grass on the developed site will use a diverse species mix, with at least four grass species and eight herb species. This will encourage invertebrates on the developed site which in turn will provide feeding opportunities for bats and birds. Suitable mixes are available online and can be targeted to the desired grassland style, for example Emorsgate offers mixes for flowering lawns (where regular mowing is required) and for wildflower grassland (where infrequent mowing is possible).

2.2.3 130m of mixed native hedgerow to be planted within the adjacent field to separate it from the arable land to the east. The hedgerow will be planted in double staggered rows, 40cm part with at least five plants per metre. The following hedgerow species are suggested for this location:

- Common Hawthorn *Crataegus monogyna*
- Hazel *Corylus Avellana*
- Field Maple *Acer campestre*
- Dogwood *Cornus sanguinea*
- Dog Rose *Rosa canina*

2.2.3 Plants such as clematis or honeysuckle should be planted within the retained hedgerow to help improve the habitat for wildlife.

2.2.3 Commonly used non-native species such as cherry laurel will not be used because they can have ecologically detrimental impacts such as acidification of underlying soils and overshadowing native vegetation.

6.3 Fauna - Amphibians and Reptiles

Predicted Effects

2.3.1 There is low risk of injuring or killing great crested newts or reptiles during clearance and construction works.

2.2.3 A Natural England Rapid Risk Assessment was carried out assuming great crested newt presence in Ponds 1-4. The removal of the current buildings and addition of new buildings equates to 0.9ha of land disturbed. This gave a result of Green: Offence unlikely (Table 5).

2.2.3 There are no ponds on site and none will be directly affected by the works

Table 5: Natural England Rapid Risk Assessment

Component	**Likely effect** (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	**Notional offence probability score**
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.01
Rapid risk assessment result:	**GREEN: OFFENCE HIGHLY UNLIKELY**	

2.2.3 It is considered that the risk of potential impact of the proposals upon the conservation status of great crested newts is low. No further surveys are considered necessary or appropriate in respect of this species at this site.

2.2.3 In the absence of mitigation, a minor adverse effect is predicted at a Local level.

Mitigation Measures

2.2.3 As a precautionary measure the grassland should be kept short prior to and throughout the development period by regular mowing. This will discourage wildlife from entering this area.

2.2.3 The woodpile should be removed by hand outside of the hibernation season of November to February. The ruderal vegetation strimmed to ground level prior to construction works.

2.2.3 Any construction materials shall be stored on pallets off the ground or on areas of hard standing so potential refuge areas for amphibians and reptiles are not created.

2.2.3 All excavations (i.e. footings) should be covered / back filled each evening to prevent foraging or commuting amphibians or reptiles from falling in and becoming trapped. If this is not possible then an escape ramp – made from earth or wooden sticks – will need to be placed within each excavation.

6.4 Badgers, Otters and Brown hare

Predicted Effects

2.3.1 Badger, otter or brown hare could become trapped in footings dug during construction whilst passing through the site.

2.2.3 In the absence of mitigation, a minor adverse effect is predicted at a Local level.

Mitigation Measures

2.2.3 All excavations (i.e. footings) should be covered / back filled each evening to prevent foraging or commuting amphibians or reptiles from falling in and becoming trapped. If this is not possible then an escape ramp – made from earth or wooden sticks – will need to be placed within each excavation.

6.5 Bats

Predicted Effects

2.3.1 Bats are confirmed as present within the building. Bats could be killed/injured during the demolition of the building and a roost lost.

2.2.3 Further information on the type of roost present is required before effects can be fully appraised, although it seems unlikely that a maternity roost is present.

2.2.3 It is understood that the oak trees are to be retained. If this changes, then there is the risk of killing/injuring a bat present when felling the tree and a potential loss of a roost.

Mitigation Measures

2.2.3 Full mitigation for bat roosts present within the building will be determined as result of further surveys. Three nocturnal surveys for bats are recommended to be carried out on the building to characterise the roost present. These can be carried out between May and September with of the surveys carried out between May and end of August. An EPSM licence will be required for the works to proceed.

2.2.3 It the oak trees are to be felled, then they should be soft felled with sections of trunk lowered slowly to the ground.

2.2.3 External lights associated with the development should be of a low light level to further minimise impacts on bats that might forage and commute in the vicinity. No external lights will be used on the southern and western ends of the Site.

2.2.3 Warm white lights should be used at <2700k and point away from boundaries. This reduces the ultraviolet component or that has high attraction effects on insects which can lead to a reduction in prey availability for some light sensitive bat species.

6.6 **Birds**

Predicted Effects

2.3.1 During site clearance there is the risk of killing and injuring nesting birds with the clearance of the woodpile and nettles and within the grassland if it grows long.

2.2.3 Nesting sites will be temporarily lost due to the removal of the woodpile and nettles.

2.2.3 In the absence of mitigation, a minor adverse effect is predicted at the Local level.

Mitigation Measures

2.2.3 To avoid committing an offence under the Wildlife and Countryside Act 1981 (as amended), vegetation clearance will take place outside of the bird nesting period (i.e. outside of March to August), or failing that, following confirmation by a suitably qualified ecologist that nesting birds are absent from the habitats to be cleared.

2.2.3 The above could be secured by an appropriately worded planning condition and/or intrinsic design measures.

6.7 **Hedgehog**

Predicted Effects

2.3.1 Hedgehogs could be killed or injured if the woodpile or surrounding ruderal vegetation is removed during nesting or hibernation times.

2.2.3 Hedgehog could become trapped in footings dug during construction or could become injured if they get within stored construction materials.

2.2.3 Without mitigation, a minor effect is predicted at a Local level.

Mitigation Measures

2.2.3 As a precautionary measure the grassland should be kept short prior to and throughout the development period by regular mowing. This will discourage wildlife from entering this area.

2.2.3 The woodpile should be removed by hand and ruderal vegetation strimmed prior to construction works. Works should be carried out September – October to avoid the main breeding and hibernation period or visit by an ecologist to check for hedgehogs. Some of the woodpile should be moved to the boundary under the cherry laurel hedgerow to re-create habitat for hedgehogs.

2.2.3 Any construction materials shall be stored on pallets off the ground or on areas of hard standing so potential refuge areas for amphibians and reptiles are not created.

2.2.3 All excavations (i.e. footings) should be covered / back filled each evening to prevent foraging or commuting amphibians or reptiles from falling in and becoming trapped. If this is not possible then an escape ramp – made from earth or wooden sticks – will need to be placed within each excavation.

7 Enhancements

7.1 The Local Planning Authority has a legal duty to consider enhancements on proposed development sites. Furthermore, the National Policy Planning Framework (NPPF) requires planning decisions to aim to promote net gains in biodiversity on development sites.

7.2 The following enhancements are suggested for the site:

A wildflower area and native trees and shrubs and night-scented climbers such as jasmine and honeysuckle to encourage pollinators could be incorporated into the landscaping scheme;

A barn owl box to be sited on a tree, pole or attached to the cart shed onto open grassland at a height of approximately 4m facing away from prevailing wind direction;

Two bat boxes to be situated on a sunny aspect at least 4m high for example on the boundary trees. An example of a suitable box is a 2F Schwegler bat box.

8 References

BCT (2023) *Guidance note GN08/23: Bats and Artificial Lighting at Night*. Bat Conservation Trust, London

British Standards (2013) *BS 42020, Biodiversity – Code of practice for planning and development*. BSI, London

CIEEM (2013) *Guidelines for Preliminary Ecological Appraisal Institute of Ecology and Environmental Management*. CIEEM, Hampshire

CIEEM (2019) *Biodiversity net gain – a practical guide*. CIEEM, Hampshire

CIEEM (2019) *Guidelines for Ecological Impact Assessment in the UK and Ireland: terrestrial, freshwater and coastal*. CIEEM, Hampshire

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

Google Earth (2023) https://www.google.com/earth/

Gunnell, K., Murphy, P. and Williams, C. (2013) Designing for Biodiversity: a technical guide for new and existing buildings. RIBA, London.

Magic database (2023) https://magic.defra.gov.uk/

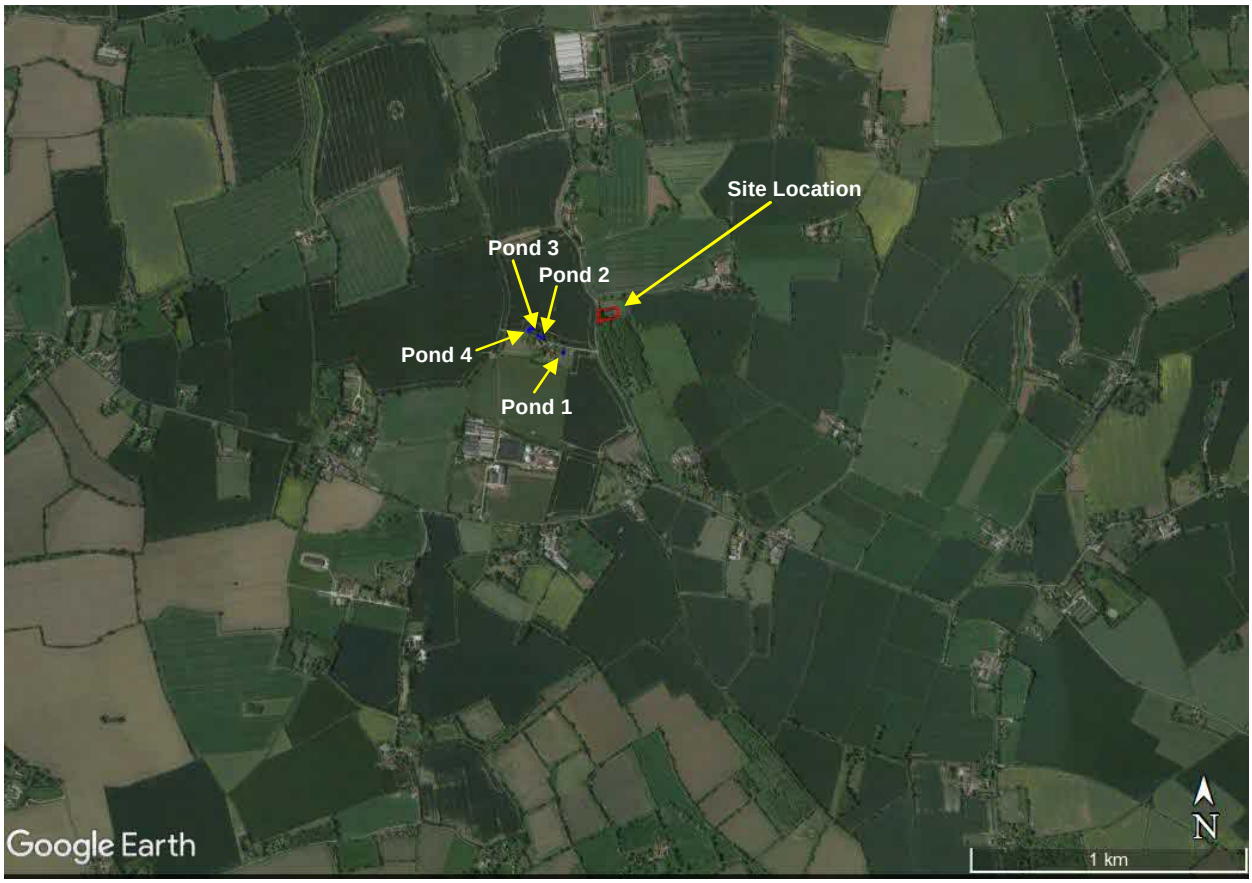
Mammal Society (1989) Surveying badgers. Mammal Society, London

Mitchell-Jones, A. J. & McLeish A. P. (2004) *The Bat workers' manual* 3rd edition. Joint Nature Conservation Committee.

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

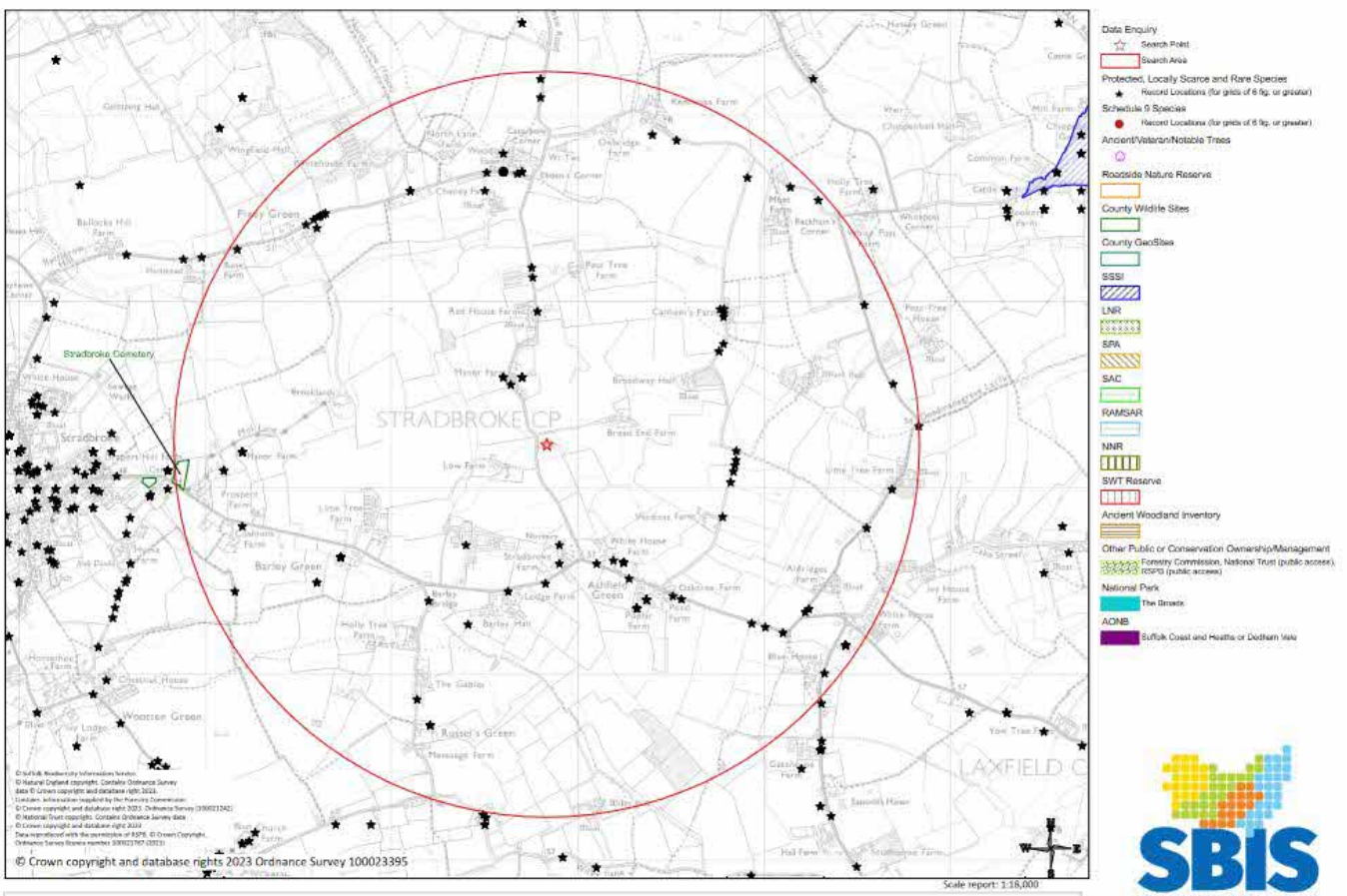
Natural England (2020) Rapid Risk Assessment in *Method Statement to support application for licence under Regulation 55(2)(e) of The Conservation of Habitats and Species Regulations 2017 (as amended) in respect of great crested newts Triturus cristatus.*

Appendix 1 – Site Location



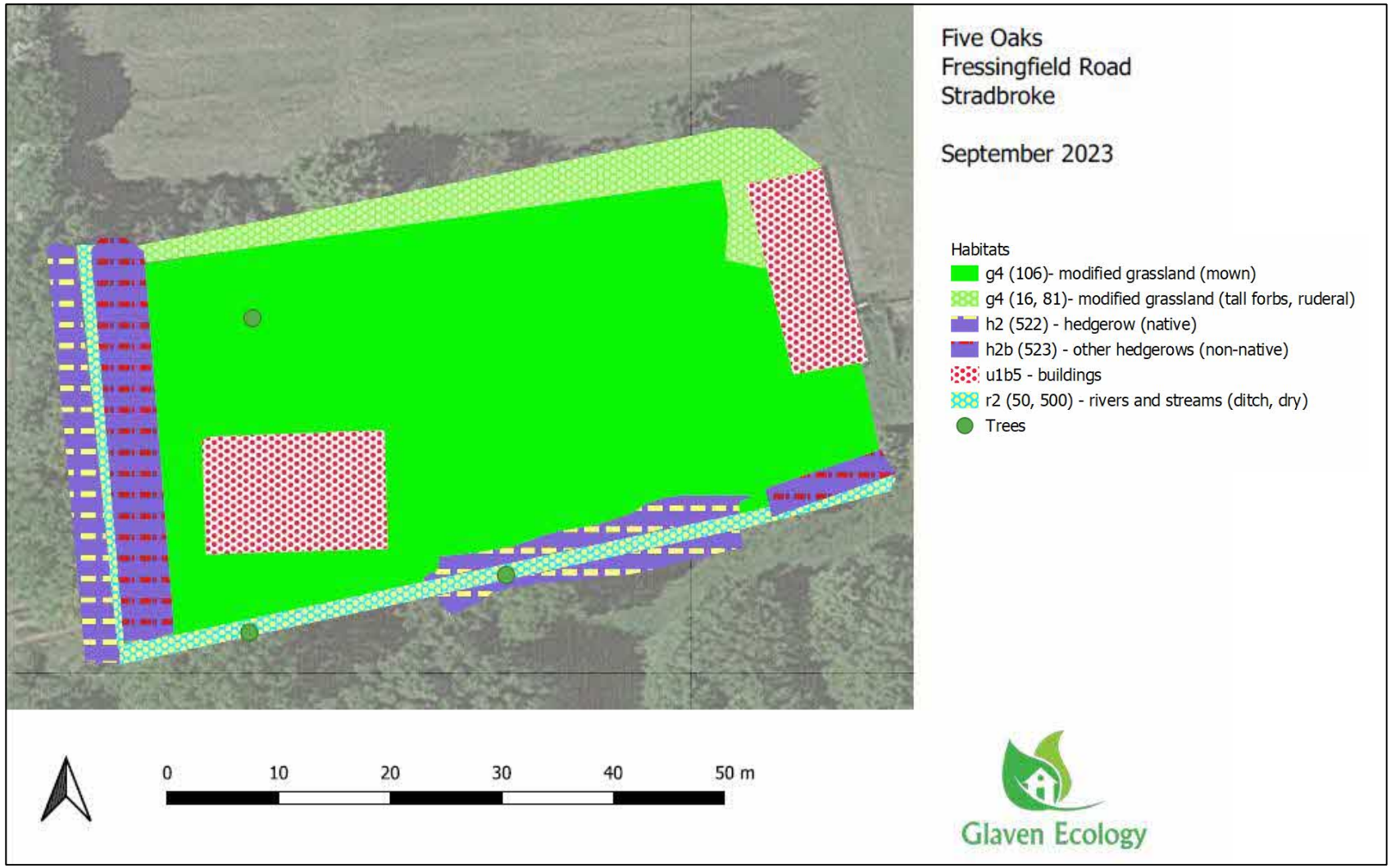
Source Google Earth Pro, 2023

Appendix 2 – SBIS Map



Glaven Ecology (Stradbroke TM25833 74238) 2km Data Enquiry

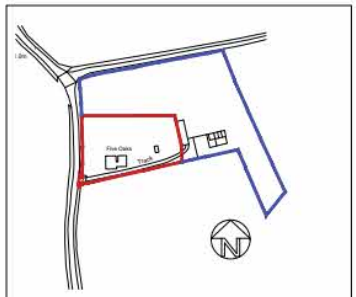
Appendix 3 – Habitat Map



Appendix 4 – Proposed Plans

North Elevation

South Elevation



Planning

Howe and Boosey

Project
Mr and Mrs Atkins
New replacement self build dwelling
Five Oakes, Stradbroke
Suffolk
Proposed Plans