



**Proposed Class Q Conversion of Existing Barn
Bell House, Humble Green,
Little Waldingfield, Suffolk, CO10 0TB**

Preliminary Ecological Appraisal Report

April 2024



Client	Oliphant & Miller
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	Name	Position	Date
Surveyor / Author	Hayley Farnell	Ecologist	26/03/24
Author / Reviewer	Dr Matthew Denny	Director	17/04/24

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1. Introduction

1.1 Aims of Study

Denny Ecology was commissioned to undertake a Preliminary Ecological Appraisal of the proposed development Site (from hereon referred to as 'the Site') in March 2024. This report details the methods and results of this study and assesses these results in relation to the potential ecological effects of the proposed development.

1.2 Site Location

The Site is located to the north-east of the village of Little Waldingfield, in the hamlet of Hamble Green in Suffolk. The Site sits to the south of the B115 road and is located at OS grid reference TL 93113 45857 (w3w address: ///humans.promote.eliminate), within the jurisdiction of Babergh District Council. The approximate Site location and extent are shown in the aerial image in Figure 1, below.

Figure 1. Site location to the south of the B115 road



1.3 Site Description

The Site is approximately 0.35 ha in size and comprises several attached outbuildings with surrounding hardstanding and an area of woodland to the east and wooded grassland to the west.

Most of the buildings are disused, with one used for storage / garaging.

Adjacent to the Site, to the south of the road, are other rural properties with wooded gardens and paddocks. Beyond these properties, and to the north of the road, are large arable fields with hedgerow boundaries and scattered blocks of woodland.

1.4 Proposed Works

The current proposal is to convert the existing barns into three residential dwellings, with associated parking, access and landscaping of small garden areas. The development will be a self-build dwelling as defined in section 1(A1) of the Self-build and Custom Housebuilding Act 2015. Proposed layout plans are shown in Appendix 1.

2. Methods

2.1 Desktop Survey

A web-based search for existing ecological information within 1km of the Site was undertaken. Key information, such as designated sites, priority habitats, and European protected species licences, were searched for. In particular, Natural England's MAGIC website (www.magic.gov.uk) was used. We also searched for nearby planning applications within the last five years up to 1km distance and reviewed any associated ecological information. The only relevant information found was a Preliminary Ecological Appraisal report written by Southern Ecological Solutions (SES 2020) for a 14-unit development proposal submitted in 2020 and subsequently withdrawn. This was for a site 750m south-west of the Site.

Given the small scale of the proposed development and the lack of semi-natural habitats on or surrounding the Site, a formal data search request from the Suffolk Biodiversity Information Service was considered unnecessary.

2.2 Field Survey

The survey was undertaken on 26th March 2024. The weather conditions were suitable for the survey: 50% high-level cloud resulting in hazy sunshine, 14°C, calm and dry. All areas of the Site were accessible enough to facilitate this level of survey, including the exterior and interior of all interlinked buildings. The survey was undertaken by Hayley Farnell, a suitably qualified ecologist who is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and holds Natural England survey licences for bats (Level 2) and great crested newts.

The Site was walked to assess habitats according to standard UK Hab habitat survey methods (UK Hab Ltd. 2023). In addition, evidence of, and potential for habitats to support protected species and other species of importance, was recorded, and general potential ecological constraints for the proposed development were assessed following PEA survey methodology (CIEEM 2017). In particular, the interlinked buildings on the Site was assessed for potential to support roosting bats (following methods recommended by the Bat Conservation Trust (Collins 2023)), and habitats were assessed for their potential to support nesting birds, amphibians, reptiles and terrestrial mammals.

3. Results and Assessment

3.1 Desktop Survey

Statutory Designated Sites

There is a single statutory designated sites within 1km of the Site: Brent Eleigh Woods Site of Special Scientific Interest (SSSI), which comprises a group of ancient lowland broadleaved woodlands designated for their woodland at associated botanical interest. The closest section is called Camps Wood and is located approximately 500m north-east of the Site. This is considered too far to be impacted by the proposed development, corresponding to the Site location being outside Natural England's Impact Risk Zone (IRZ) for residential development.

Non-statutory Designated Sites

There are no statutory designated sites within 1km (SES 2020).

Priority habitats

There are two Priority Habitat parcel within 1km of the Site: the ancient woodland of Camps Wood, mentioned above, and interconnected small patches of woodland on and immediately to the east and south of the Site. The later woodland is shown in Figure 2. Below.

Figure 2. Priority deciduous woodland shown on Defra's Magic mapping website (shaded green, with approximate Site boundary shown as red line)



Water bodies

Great crested newts (GCNs) have potential to disperse up to 500m from breeding ponds, although dispersal beyond 250m is uncommon. Using the OS map, the only water body located within 250m of the Site was a short section of ditch crossing the south-west Site boundary.

Protected and notable species

There are no records of badgers from the Site, but seven from within 1km. There are no records of hedgehog from the Site, but nine from within 1km. There are no records of grass snake from the Site, but five from within 1km. No other records of legally protected or priority species, including bats and GCNs, were found within 1km of the Site.

3.2 Extended Habitat Survey

Please refer to Figure 3 below for a plan annotated with photographs of the habitats identified within the survey area, and Table 1 for further photos.

Most of the site is the interlinked barn complex, surrounded by concrete hardstanding. Beyond the concrete are areas of bare ground, of which only small portions along the east side of the existing entrance driveway, and to the north-west of the barn complex, will be within the development footprint.

The hatched area to the north and west of the barn complex indicates where some trees have been recently felled, outside the development footprint. The arisings from the felling operation covered much of this area at the time of survey, making it difficult to assess the habitats beneath. However, generally the white areas in Figure 1 were concrete hardstanding, as were the grey shaded areas to the south and east, with bare ground and scattered trees in the green areas to the north and west, plus some modified grassland closer to the Bell House driveway to the west of the Site. Note that some (approximately six) of the scattered trees to the north and west outside the development footprint have now been felled.

Therefore, beyond the development footprint are the following additional habitats:


- a defunct native (hawthorn) hedgerow and line of young hornbeam trees forming the northern boundary
- small patches of poor modified grassland forming the entrance road verge
- two ditches, which were partially wet at the time of survey (after recent heavy rain), but had no associated aquatic vegetation, with modified grassland and bare ground forming the banks
- deciduous woodland to the east of the barn complex
- areas of bare ground to the north and west of the barn complex with scattered trees (some recently felled)
- poor modified grassland with scattered trees (some recently felled) in the western section of the survey area, to the west of the bare ground

Figure 3. Plan and photos of buildings and habitats within the Site. The barn has been split into four parts and labelled for the purpose of the survey results reporting



Table 1. Photos of habitats within the survey area

<p>The southern edge of the Site showing concrete south of the barn and woodchip arisings from recent tree felling covering bare ground in the foreground</p>	<p>Tree felling arisings on concrete pad southeast of the barn</p>
<p>Concrete pad and bare ground surrounding the barn to the northeast</p>	<p>Barn complex as seen from the west, with woodchip arisings from recent tree felling covering bare ground in the foreground</p>
<p>Area immediately west of the barn complex looking north-west. The concrete pad surrounding the barn is visible to the right, with bare ground covered in woodchip to the left and modified grassland beyond.</p>	<p>Defunct hawthorn hedgerow with a line of young hornbeam trees forms the north-west boundary of the survey area. These are outside the development footprint and will not be impacted</p>

	
<p>North-west corner of the Site looking west, showing the concrete pad surrounding the barn, bare ground to the north, and the hedgerow and hornbeam treeline forming the northern boundary (right)</p>	

Barn complex and surrounding concrete pad

A full description of the barn complex and its potential to support roosting bats is given in the next section. Overall, the barn complex was found to have no or negligible bat roost potential. However, there were two swallow nests and a disused nest of another bird species, possibly blackbird. The concrete pad is bare (no vegetated growth) and has no ecological value. The conversion of the barn and re-purposing/replacement of the concrete pad is unlikely to impact any species other than the nesting birds.

Bare ground

The bare ground surrounding the concrete pad has negligible ecological value. Small sections to the north-east and north-west will be directly impacted by the proposed work, to form the new driveway and to create a garden to the northern-most dwelling. This will have no ecological impact.

Modified grassland

The only other habitat directly impacted by the proposals are the small sections of grass road verge, which will be removed to facilitate the widening of the existing vehicle entrance. This habitat is species-poor and is a very common habitat locally. Its removal will have a negligible ecological impact.

No other habitats will be directly impacted by the proposed development.

Protected and notable species

The ephemeral wet ditches on the southern edge of the Site are not suitable for GCN. The small ponds in woodland to the east of the Site are very heavily shaded but could provide some low GCN potential. However, the development footprint supports no terrestrial habitat suitable for GCN and they do not need to be considered further. Similarly, the development footprint supports no habitat currently suitable for other protected or notable species, and no evidence of badgers was found within the Site. However, there is a risk of species being impacted during the construction and/or operational phase of the development, as described in Section 4 below.

3.3 Bat Roost Assessment

A numbered plan of the barn complex, including the surrounding habitats with annotated photographs is presented in Figure 3, below. Descriptions of each building and accompanying photos are presented in Table 2.

Table 2. Description, bat roost assessment and photographs of each of the four building sections / parts. Refer to Figure 3 for location of each building part.

Building section and description	Photographs
<p>Part A</p> <p>Timber and brick with an asbestos roof. Timber-clad front walls are lined with plastic. Made up of 4 sections. Ivy overgrowing the western end of the building.</p> <p>The brick walls are in relatively good condition, with no deep gaps formed from missing mortar.</p> <p>Whilst there are gaps in the external wooden weather boarding, formed from dislodged or missing sections, they do not create overlapping crevices suitable for roosting bats, and are internally lined with plastic, so unsuitable for roosting bats on the interior.</p> <p>No potential bat roost features were identified, and no evidence of bat presence was found. We consider this building has negligible bat roosting potential.</p> <p>1x swallow nest inside.</p>	

Part B

Cement framed. Walls of various materials, including breeze block, brick and tin. Has an asbestos roof.

The brick and breeze block walls are in relatively good condition, with no deep gaps formed from missing mortar.

No potential bat roost features were identified, and no evidence of bat presence was found. We consider this building has negligible bat roosting potential.

1 x swallow nest inside.



Part C

Asbestos roof, with rendered breeze block walls. The interior of two sections is completely sealed with expanding foam.

This section has no external or internal bat roosting potential, and no evidence of bat presence was found. We consider this building has no bat roosting potential.



To the rear (west) is a rendered breeze block room attached to the end of part C with an asbestos roof. No door.

This section is light and drafty with no potential bat roost features identified. We consider it to have negligible bat roosting potential.



Part D

Timber frame with an asbestos roof. The external timber-clad walls are tight fitting with no apparent gaps and are lined internally with plastic sheeting.

No potential bat roost features were identified, and no evidence of bat presence was found. We consider this building has negligible bat roosting potential.

1X disused bird nest, possibly a blackbird nest.



4 Impact assessment and recommendations

Habitats

The existing habitats within the proposed development footprint (proposed buildings, hardstanding and garden areas) are all of negligible or very low intrinsic ecological value, comprising buildings, surrounding hard standing and areas of bare ground. There is also a small (c.5m²) patch of poor modified grassland on the road verge either side of the existing entrance, which is likely to be lost to facilitate a wider vehicle visibility splay.

No other habitats will be directly impacted.

The deciduous woodland to the east is outside the proposed development footprint and will not be directly impacted by the development. However, there is a risk the development could disturb this woodland patch and other surrounding vegetated habitats, through inappropriate external lighting, as detailed in the bat section below.

There is an opportunity for the new development to provide enhancement specifically for birds in compliance with the NPPF (2023). We recommend planting of wildlife-friendly plant species within any formal planting schemes and supplementary planting of the northern hawthorn hedgerow with a native species mix, in existing gaps. We also recommend sowing of the existing unshaded bare ground with wildflower grassland.

Potential bat habitat

No evidence of bat presence was found on the Site and the barn complex has no or negligible potential to support bat roosts. Therefore, it can be demolished without the risk of impacting bats.

The adjacent hedgerow, woodland and scattered trees have potential to provide suitable foraging and commuting habitat for bats. They will not be impacted directly but have the potential to be impacted indirectly through inappropriate external lighting casting light spill onto these habitats. Inappropriate lighting has potential to disrupt the behaviour of not just bats, but other nocturnal animals that may be present adjacent to the proposed development, such as owls, nocturnal invertebrates and hedgehogs. Therefore, we strongly recommend that external lighting should be subject to a strict ecologically sensitive lighting scheme, conforming to bat-sensitive lighting designs, as detailed in the Institute for Lighting Professionals guidelines (2023).

There is an opportunity for the new development to provide enhancement specifically for bats and hedgehogs in compliance with the NPPF (2023). We recommend installing at least three bat roosting boxes or features either integral to the converted building, or on trees within the Site. These should be positioned as high as possible, with an open aspect to facilitate bat access, and facing away from north.

Potential nesting birds

The loss of two swallow nests and other bird nesting habitat in the existing barn complex, will have a minor local impact on the nesting bird resource.

As birds and their active nests are protected from damage or destruction, building conversion work should commence in the period October-February, outside the bird nesting season. Once the site

is under active construction, birds are very unlikely to commence a nesting attempt within the barn complex. If work must commence during the period March-September, a nesting bird check needs to be undertaken by a qualified ecologist before work can commence. Should birds be nesting, work within that area of the Site will need to wait until the nesting attempt has ceased.

To compensate for the loss of habitats of established and potential bird nest sites in the barn complex, new nesting opportunities should be created. Ideally this would be in the form of installing artificial swallow nest-cups within a carport or open-fronted barn or shed. The proposed development does not include such structures, but the client may have suitable locations in the adjacent Bell House landholding. If this is not possible, nesting boxes for other species should be provided on the new buildings or surrounding trees. At least five nest boxes should be provided, including a tawny owl nest box within the woodland to the east.

Other protected species

Whilst species, such as badgers, are unlikely to make use of the existing site, there is a possibility that they and other species, such as hedgehogs, might disperse across the site. Therefore, to prevent any risk of such animals falling into excavations at night, during the works, we recommend that all excavations left overnight be covered with solid boarding, or boards be placed into the excavations to form escape ramps, in case of entrapment.

As hedgehogs have been recorded nearby, we recommend that hedgehog access holes, 15cmx15cm, should be provided every 10m at the base of new close board fencing, if proposed. This will allow hedgehogs and other small animals access to disperse onto and across the site, and to exploit new garden habitats created.

There are a some records of grass snake within 1km of the Site, and they may occur sporadically in the ditch and woodland habitats surrounding the Site, but these habitats will not be impacted by the proposed development.

Biodiversity Net Gain

In terms of Biodiversity Net Gain, as mentioned above, as this is a self-build proposal it is exempt. However, the above scheme of ecological enhancements is proposed to ensure no overall net loss in biodiversity.

We recommend an Ecology Mitigation and Enhancement Scheme be produced prior to development commencement to ensure the recommended mitigation and enhancements described above are delivered. This should include a wildlife-sensitive lighting scheme.

5. Conclusions

The Site is considered to be of very low ecological value in its current state, with no potential ecological impacts other than on common nesting bird species, for which appropriate mitigation and compensation is recommended. In line with the NPPF (2023) the new development should aim to enhance the ecological value of the Site through implementation of the enhancement measures suggested. Artificial lighting should be designed according to the bat-sensitive guidelines (ILP/BCT 2023). An Ecology Mitigation and Enhancement Scheme, to include the lighting scheme, should be produced before commencement of the development.

6. References

The Institution of Lighting Professionals (2023). *Bats and Artificial Lighting in the UK*. Bats and the Built Environment Series, Guidance Note 8/23

Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition)

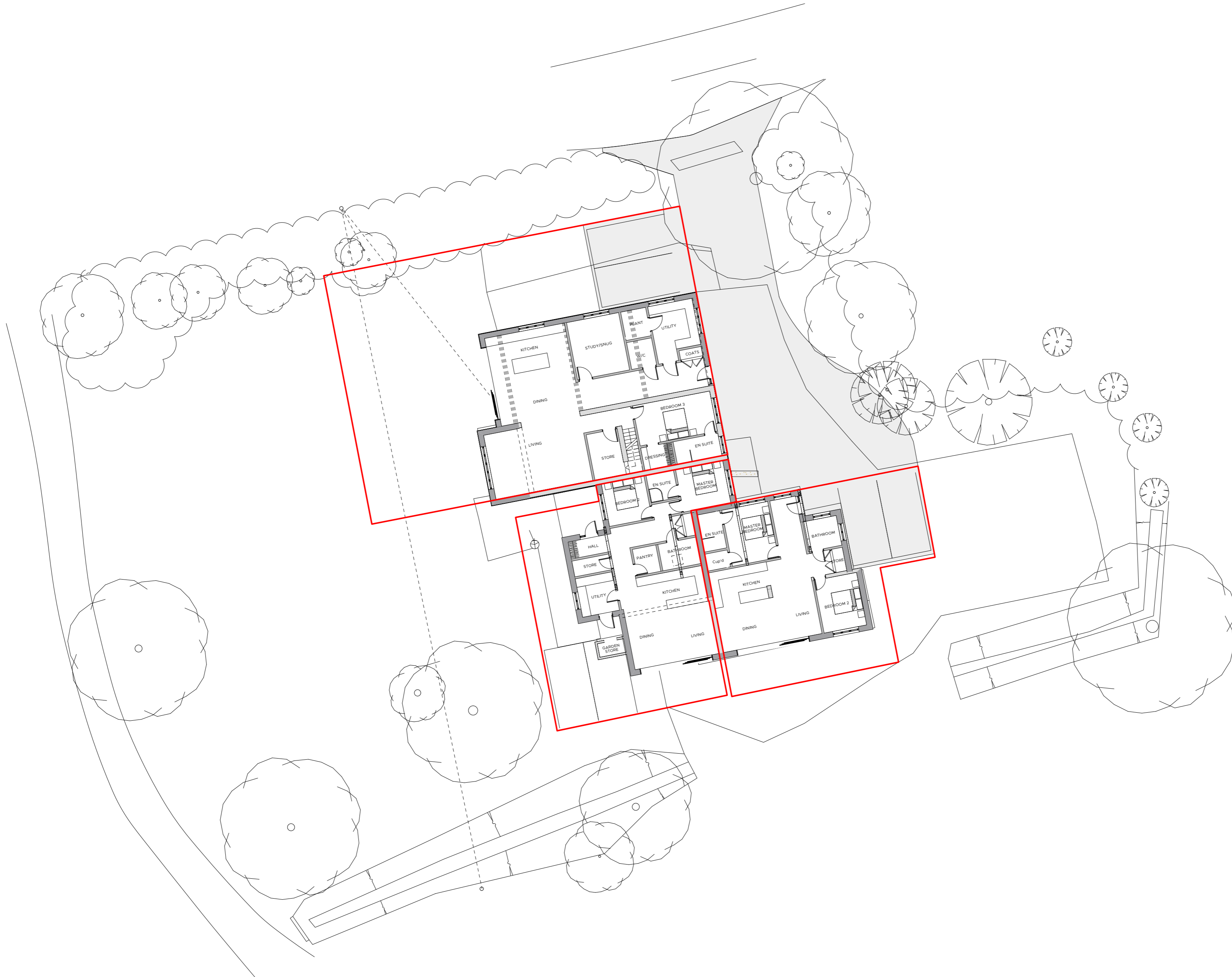
CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal*, Institute of Ecology and Environmental Management. www.cieem.net

Department for Communities and Local Government (2023). *National Planning Policy Framework*

UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

Southern Ecological Solutions (2020). *Preliminary Ecological Appraisal. The Street, Little Waldingfield, Suffolk*. Unpublished report to AF Machinery Ltd

Appendix 1: Site layout plans



REVISION	DESCRIPTION	DATE	DRAWN	CHECK
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JOB No.	5952	DRAWING No.	SK_02	REVISION
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Proposed Site Plan
Scale: 1:200

