



Dodnash Fruit Farm, Bentley, Suffolk

Preliminary Ecological Appraisal

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Appendix 1: Proposed Site Layout

Figure 1A: Site Location Plan

Figure 1B: Survey Boundary and Site Boundary

Figure 2: Hedgerow Creation Location



1.0 SUMMARY

- 1.1 The site (located at central grid ref: TM 11819 35433) was found to comprise a medium sized, single storey brick agricultural building surrounded by tracks and disturbed ground with low ruderal vegetation, patches of neutral grassland and occasional low bramble growth. Planning permission is being sought to remove the existing building due to structural issues, and construct a replacement agricultural building suitable to house rare breed sheep.
- 1.2 The building provides suitable habitat for nesting birds, with a number of old nests observed at the time of survey. Ideally works to demolish the building would commence during October to February inclusive to avoid the bird nesting season; however where this is not possible, immediately prior to commencement of works a check for nesting birds should be undertaken by a suitably experienced ecologist. Any active nests will need to be left in situ until the young have left the nest.
- 1.3 The site is not deemed suitable for any other protected species.
- 1.4 The proposals will result in a very minor loss (36m²) of neutral grassland habitat, but will allow for the long term retention of rare breed sheep for conservation grazing across the wider traditional orchard and grassland habitats of Dodnash Farm, as well as the creation of 50m of species rich native hedging. Further details are provided in Section 6.0.



2.0 INTRODUCTION

Instruction

- 2.1 This report has been prepared by Liz Lord following instruction by Ms A Cox of Stanfords to carry out an ecological appraisal of the agricultural building and immediately surrounding land at Dodnash Fruit Farm, Hazel Shrub, Bentley, Suffolk IP9 2DF.

Site Proposals

- 2.2 Planning permission is being sought for the replacement of an existing agricultural dwelling with a new agricultural dwelling, accessed via an existing track.

Site Description

- 2.3 The site lies between the villages of Bentley and Brantham, approximately 6km south west of Ipswich. It is surrounded by closely grazed horse paddocks, with a small copse of fir trees offsite to the west. A corridor of woodland and marshy floodplain habitat runs c.250m to the south west of the site, and a railway line runs north-south less than 400m to the east. The immediate surroundings consist of a mosaic of grazed horse paddocks, traditional orchards and small groups of farm buildings.
- 2.4 The wider landscape is mixed, with small arable fields, grazed paddocks, orchards and woodlands, many of which are associated with brooks and streams. There is a relatively large area of well-connected woodland cover within 2-3km of the site. Aerial site location plans are provided below and overleaf.



Fig 1A: Site location, as indicated by red arrow. Aerial photograph sourced from Google Earth Pro

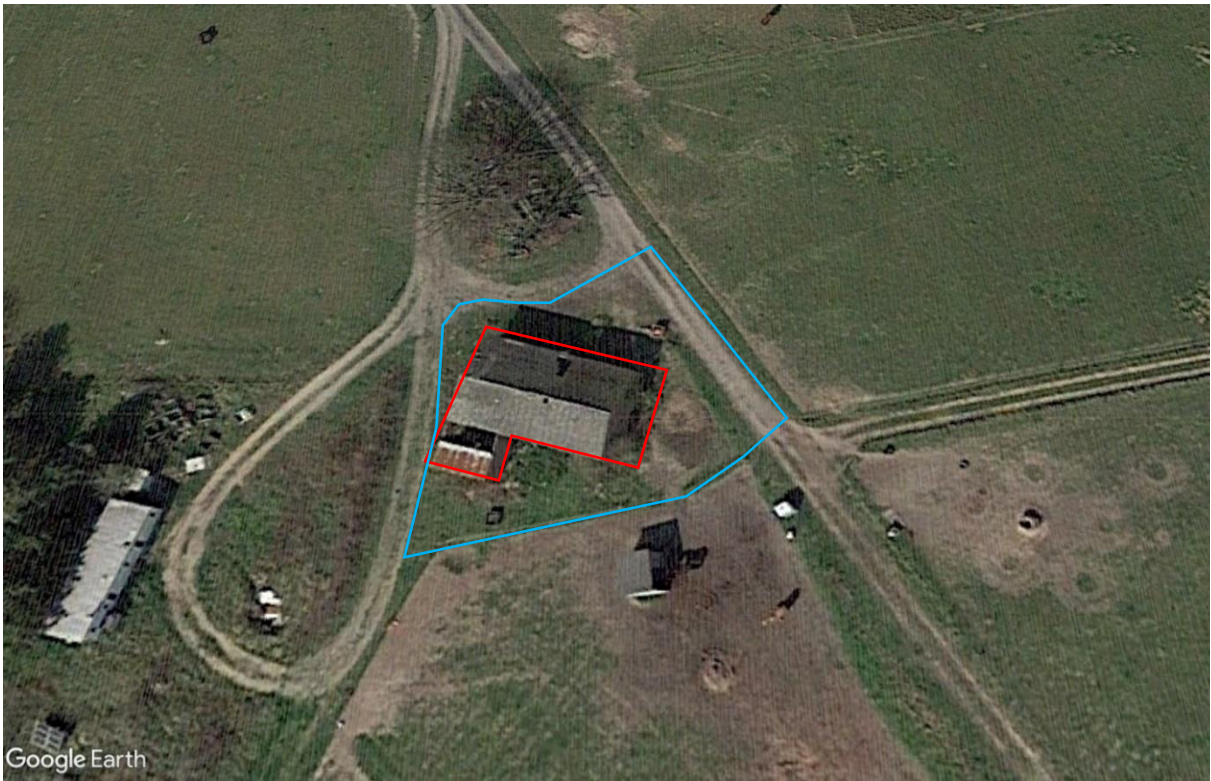


Fig 1B: Proposed development zone highlighted red. Survey boundary highlighted blue. Aerial photograph sourced from Google Earth Pro

Objectives

- 2.5 This report has been written broadly in accordance with the report writing guidelines produced by the Chartered Institute of Ecology and Environmental Management (CIEEM) (CIEEM 2018, 2017a, 2017b). In accordance with the client brief, this survey and report aims to:
- 2.5.1 Where possible, identify and describe all potentially significant ecological effects on protected and notable species / sites associated with the proposals;
 - 2.5.2 Where possible, set out the mitigation measures required to ensure compliance with nature conservation legislation and address any potentially significant ecological effects;
 - 2.5.3 Identify how mitigation measures will / could be secured;
 - 2.5.4 Provide an assessment of the significance of any residual effects;
 - 2.5.5 Identify appropriate enhancement measures; and
 - 2.5.6 Where deemed necessary, set out the requirements for post construction monitoring.
- 2.6 This survey and report is intended to inform, as necessary, the layout and design of the proposals, future landscape design and management on site, and where required the methodology and timing of development works.



Timescales

- 2.7 The construction period is expected to be around 1-2 months following the granting of relevant permissions.
- 2.8 This report is valid for a period of 18 months from the date of survey. Beyond this time, changes to the building and vegetation may have occurred which could require re-assessment and potentially further survey to re-determine the presence / likely absence of protected species.

Relevant Documents

- 2.9 The site assessment was based upon drawing number AJC-01, as shown in Appendix 1.
- 2.10 Recommendations included within this report are the professional opinion of an experienced ecologist based on the client's proposals for the site, the site surveys, the results of the desk study, and features present in the surrounding environment.



3.0 METHODOLOGY

Desk Study

- 3.1 The Multi Agency Geographic Information for the Countryside (MAGIC) website was consulted on 5th March 2024 to determine the presence of any nationally and internationally designated sites such as Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites within influencing distance of the proposals.
- 3.2 The MAGIC website was also used to search for any records of European Protected Species Mitigation (EPSM) licences that have been approved by Natural England within a 5km radius of the application site since late 2008 (last updated January 2022). The website was checked for any data from Natural England's great crested newt eDNA Habitat Suitability Index pond surveys for District Level Licensing 2017-2019 (last updated December 2023); and data from Natural England great crested newt Class Survey Licence returns within a 5km radius of the site (last updated December 2023).
- 3.3 Due to the very small size of the proposals, past recent works with Natural England to restore nearby ponds and two years of eDNA sampling of these ponds since 2021, the authors existing knowledge of protected species in the immediate surroundings, the very limited potential for protected species to be present onsite, and the very limited potential for the site or immediately surrounding land to form part of a County Wildlife Site, a records search with the Suffolk Biodiversity Information Service (SBIS) was not undertaken. This is not considered to be a limitation to the conclusions and recommendations of this report.

Site Survey

- 3.4 A daytime site survey was carried out on 7th February 2024. The survey was based upon the standard methodology for Extended Phase 1 Habitat Surveys (JNCC 2010) and the UK Habitat Classification system (UKHab Ltd 2023). The relative abundance of individual plant species was recorded, and habitats were classified according to the abundance of plant species present. Any evidence of invasive species such as Japanese knotweed was noted.
- 3.5 The survey area was limited to the site and immediately surrounding land as highlighted in Figure 1B and Appendix 1, plus land within the potential Zone of Influence.
- 3.6 The survey also included an assessment of the site's potential to support any legally protected species; or Species and Habitats of Principal Importance, as identified by Section 41 of the Natural Environment and Rural Communities Act 2006. Where best practice guidelines exist, these have been used to assess the likelihood that individual species will be present, for example Bat Surveys: Good Practice Guidelines (Collins, J. 2023) and Habitat Suitability Index for Great Crested Newt (Oldham *et al*, 2000).



- 3.7 Using criteria provided in best practice guidelines, habitats have been assessed for their potential to support protected species; notably bats, barn owls *Tyto alba*, badgers *Meles meles*, great crested newts *Triturus cristatus*, reptiles, water voles *Arvicola amphibius*, dormice *Muscardinus avellanarius* and otters *Lutra lutra*.
- 3.8 Where methodologies, classification or recommendations deviate from best practice guidelines, this report provides ecological justification for such changes.

Building Inspection

- 3.9 The building was surveyed and assessed in accordance with criteria outlined in Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, J. 2023).
- 3.10 The internal and external inspection of the building was carried out using – as necessary – a powerful torch, a ladder, a pair of Nikon 12 x 50 binoculars and an Easyview 8mm digital recording endoscope to inspect gaps and crevices for bats and evidence of bats.
- 3.11 Floors, walls and storage surfaces beneath all possible access points or crevices which may be used for roosting were checked for droppings, scratching and urine or fur staining, and particular attention was paid to the areas beneath any features from which bats may hang or rest.
- 3.12 The soffits, barge boards and door / window frames of the building were specifically checked for crevices, scratching and staining, and roosting bats. Particular attention was paid to any gaps in and around timbers, tiles, roofs and walls; and the walls, ledges and ground area below.
- 3.13 The building was fully accessible at the time of survey, and did not appear to have been recently swept or disturbed. Numerous undisturbed surfaces were present on which to check for evidence of bats.

Surveyors

- 3.14 The survey was carried out by Liz Lord. Liz has been a professional ecologist since 2005, and holds current Natural England licences to survey bats - Class Licence Reg. No. 2015-13305-CLS-CLS; great crested newts - Class Licence Reg. No. 2020-44816-CLS-CLS; and barn owls - Class Licence Reg. No. CL29/00160. Liz is a full member of CIEEM.
- 3.15 The weather at the time of the survey was sunny, with a light wind (BF2-3) and a temperature of 5°C.



Zone of Influence

- 3.16 The potential impacts of a development are not always limited to the boundaries of the site concerned, such as where there are ecological or hydrological links beyond the site boundaries. In order for the proposed works to have an impact on habitats and species outside of the site boundaries, there needs to be a source of impact, a pathway and a receptor for that impact.
- 3.17 The Zone of Influence will vary for different habitats and species depending on their sensitivity to predicted impacts, the distribution and status of the relevant species, whether a species is mobile, migratory, and whether its presence and activity varies according to the seasons.
- 3.18 An assessment of the Zone of Influence has been made based on the site boundaries shown in Figure 1, and where necessary recommendations to avoid any significant adverse impacts beyond the site boundaries have been provided in section 5.0.

Limitations

- 3.19 The conclusions in this report are based on the best information available during the reported period of survey.
- 3.20 The survey was undertaken at a time of year when some plant species are not present above ground, or are simply not easily recorded; however an overall assessment of the flora communities present at the time of survey has been used to assess the likelihood of the unrecorded presence of any plant species of conservation importance. Due to the species recorded to be present at the time of survey, the UKHab categories assigned to the various habitats present are very unlikely to change following survey later in the spring / summer.
- 3.21 Ecological surveys provide only a 'snapshot' of the site in time, and many species, such as bats and badgers, are capable of colonising a site in a very short space of time. Lack of evidence of a species at the time of survey can only allow conclusion of the *likely* absence of this species, since no level of survey effort is capable of proving absence beyond doubt.
- 3.22 Whilst best efforts have been made to identify all water bodies within 250m of the site, it is not always possible to record all garden ponds using Ordnance Survey maps and aerial photography. Additional search effort with respect to garden ponds is likely to be disproportionate, as many garden ponds have limited suitability for great crested newts, and it is a common constraint associated with all Ecological Assessments.

Geographic Context

- 3.23 Where applicable, the importance of each ecological feature has been considered in a geographic context as follows:



- International and European
- National
- Regional
- Metropolitan, County, vice-county or other local authority-wide area
- River Basin District
- Estuarine system/Coastal cell
- Local (further categorized into District, Borough or Parish)
- Site

Assessment of Impacts and Effects

3.24 The following definitions are used for the terms 'impact' and 'effect' in accordance with CIEEM (2018) guidelines:

- Impact – actions resulting in changes to an ecological feature
- Effect – outcome to an ecological feature from an impact

3.25 The importance of any ecological feature has been determined via the site surveys detailed in this report. Note that species and habitats afforded legal protection are, by default, always considered within the EclA assessment process to be 'important'.

3.26 Potential impacts of the proposals on any such features have been assessed based on the client proposals for the site, and following a review of all phases of the project. Impacts are assessed through consideration of the extent, magnitude, duration, reversibility, timing and frequency of works which may result in likely 'significant' impacts to any ecological features present. The route through which impacts may occur (direct, indirect, secondary or cumulative) has also been considered. Positive impacts are assessed as well as negative ones.

3.27 The results of the surveys have been used to identify any potentially significant impacts in the absence of any avoidance, mitigation or compensation measures. Any such appropriate measures have then been proposed where necessary.

Characterisation of Ecological Impacts

3.28 When considering ecological impacts and effects, the following characteristics have been considered:

- positive or negative
- extent
- magnitude
- duration



- frequency and timing
- reversibility

3.29 Where various characteristics have not been specifically referred to in this report, they have been considered insignificant or irrelevant to that specific feature.

3.30 A 'significant effect' is defined within the current CIEEM guidelines (2018) as: *"an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local."*

3.31 Where a significant effect is predicted, this requires assessment and reporting in order to provide the decision maker with sufficient information to determine the environmental consequences of a project. A significant effect can be either positive or negative, and its extent will determine the requirement of conditions, restrictions or monitoring works.

3.32 The current CIEEM guidelines (2018) also state that: *"After assessing the impacts of the proposal, all attempts should be made to avoid and mitigate ecological impacts. Once measures to avoid and mitigate ecological impacts have been finalised, assessment of the residual impacts should be undertaken to determine the significance of their effects on ecological features. Any residual impacts that will result in effects that are significant, and the proposed compensatory measures, will be the factors considered against ecological objectives (legislation and policy) in determining the outcome of the application."*

3.33 This report has taken into account the factors detailed above for each important ecological feature in the absence of mitigation. Recommendations have then been made with respect to avoidance / mitigation / compensation / enhancement as necessary, and an assessment of the residual impacts after such measures has been made.

Mitigation Hierarchy

3.34 In order to minimise the likelihood of any significant negative residual effects on environmental features, this assessment has followed the mitigation hierarchy (listed below in order of preference):

- Avoidance – measures that avoid harm to ecological features, both spatially and temporally;
- Mitigation – avoidance or minimisation of negative effects through appropriate timing of works, or the provision of mitigation measures within the scheme design which can be guaranteed by condition or similar;



- Compensation – measures taken to offset residual effects which result in the loss of, or permanent damage to, ecological features despite mitigation;
- Enhancement – measures to provide net benefits for biodiversity, either by improved management of existing features, or the provision of new features, and over and above that which is required to mitigate / compensate for an impact. Delivery should be secured via planning condition or similar.

Legislation and Policy

- 3.35 Specific reference has been made to the individual legal protection of the species detailed within this report, however additional information with respect to other relevant legislation and planning policy is provided in section 8.0.
- 3.36 The legislation of particular relevance within the body of this report is the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). The former confers legal protection to 'European' Protected Species against both disturbance and harm, and extends to the full protection of their habitats. This legislation also provides legal protection for a number of internationally designated sites within the UK, and remains in place following Brexit.
- 3.37 The Wildlife and Countryside Act 1981 (as amended) is UK specific, and generally only provides protection against direct harm to individuals of a species.



4.0 RESULTS (Baseline Conditions)

Site Summary

- 4.1 The site comprises a medium sized, single storey brick agricultural building surrounded by tracks and disturbed ground with low ruderal vegetation, patchy grass and occasional low bramble growth.

Desk Study: Statutory Designated Sites

- 4.2 The MAGIC website indicates that there is one UK statutory designated site of both national and international importance within a 5km radius of the site, and two sites of national importance. The Stour and Orwell Estuaries SPA and Ramsar site (encompassing the Stour Estuary SSSI) is located around 1.5km to the south, south east and south west of the site. Cattwade Marshes SSSI is located 3km to the south west, and Freston and Cutler's Woods with Holbrook Park SSSI lies c.4km to the north east of the site. None of the sites are within direct influential distance of the site.

Desk Study: Non-Statutory Designated Sites

- 4.3 It is very unlikely that there are any County Wildlife Sites located within direct influencing distance of the proposals, which are limited to the removal and replacement of an existing agricultural building to accommodate the sheep which are already present across the wider site.

Habitats

Invasive species

- 4.4 No aerial evidence of Japanese knotweed *Fallopia japonica* was recorded within the site or the immediately adjacent areas at the time of survey.

Artificial unvegetated - unsealed surface (u1c)

- 4.5 The site is accessed via a bare earth / compacted hardcore track, which extends across the front (north) and two sides (east and west) of the building to allow access to both the building and the fields beyond.

Sparsely vegetated urban land - (u1f)

- 4.6 Immediately to the north of the building are small areas of low growing, patchy grasses such as Yorkshire fog *Holcus lanatus*, creeping bent *Agrostis stolonifera* and cocksfoot *Dactylis glomerata* which have colonised the bare earth / compacted hardcore where it is not regularly disturbed / trampled.



- 4.7 This vegetation cover extends around the base of the building, where it is extensively disturbed by burrowing rabbits, and also supports an abundance of nettles *Urtica dioica* and some sparse, low growing establishing bramble *Rubus fruticosus agg.*

Other Neutral Grassland (g3c)

- 4.8 Immediately to the east of the building is a small area of short other neutral grassland. The vegetation is dominated by grasses including Yorkshire fog, false oat grass *Arrhenatherum elatius*, fescue *Festuca sp.* and cocksfoot, with occasional to rare ribwort plantain *Plantago lanceolata*, black medick *Medicago lupulina*, cats ear *Hypochaeris radicata*, yarrow *Achillea millefolium*, ragwort *Senecio jacobaea*, spear thistle *Cirsium vulgare*, cow parsley *Anthriscus sylvestris* and nettles.

Building (u1b5)

- 4.9 The current building is single storey, and consists of three sections open to the north, and a small lean-to extension on the south western corner. All of the walls are single skinned brickwork. The lean-to roof is partially missing, with modern wooden beams supporting corrugated tin sheets across the remainder. The main roof consists of unlined corrugated fibreboard sheets, supported by modern wooden beams. The ridge covering consists of cement tiles, many of which are missing or dislodged across the relatively shallow pitched roof. Both the external and internal dividing brick walls are closely cemented to the roof sheets. No central ridge beam is present and the ridge tiles sit across an open void. Roof support / wall plate beams running across the tops of the southern and northern walls create a small gap between the brick wall and beam, however the resultant gap is filled with dense dirt and debris.
- 4.10 Metal window frames are present on the southern, eastern and western facades. Concrete lintels sit above the frames, and approximately half of the glass panes are missing. A small number of the windows are covered with wooden pallets to minimise rain ingress. Some gaps are present between the metal window frames and the surrounding brickwork, but are shallow and draughty due to the walls being single skinned.
- 4.11 Numerous cracks are present in the brickwork on the southern, eastern and western facades, where the building – which is located on a south facing slope – has subsided. Due to the nature of the walls i.e. single skinned, these cracks are shallow and run from the internal to external walls. Light can be seen through the cracks, and draught was felt on either side of the cracks.
- 4.12 Numerous old bird nests were recorded inside the building – old swallow *Hirundo rustica* nests with no accumulation of droppings beneath suggesting no recent use, and old robin *Erithacus rubecula* and wren *Troglodytes troglodytes* nests above beams and walls.



4.13 An old tea chest is present against the central northern wall, and is reported to be used by stock doves *Columba oenas* (Bond, S. pers.comm. 2024) with barn owls occasionally roosting adjacent to the box. This is supported by an accumulation of white wash beneath here, and very occasional old barn owl pellets. The tea chest does not provide ideal nesting conditions for barn owls, and a purpose built barn owl box is present in a mature tree immediately offsite to the north of the building. Barn owls were reported to use this box to breed, however since a second barn owl box has been installed c.400m to the north east of the site, it is reported that the owls now use this box to breed (Bond, S. pers.comm. 2024). Both external boxes will be unaffected by the proposals.

4.14 At the time of survey the building was used to store large wooden boxes of cut logs, accumulated farm materials, and horse fencing and feed set upon a concrete floor. It is understood that the concrete floor will be retained and extended to the east by 4m.



Photo 1: Northern façade of building



Photo 2: Eastern façade of building, with adjoining short grassland



Photo 3: Southern façade of building, with grassland extending away to south



Photo 4: Western façade of building, with adjacent track leading south





Photo 5: Gap between metal window frame and brick wall due to missing windowsill tiles



Photo 6: Typical crack in single skinned brickwork, running from inside to outside with no other cavity access



Photo 7: Central building bay, with tea chest owl box in corner



Photo 8: Internal view of western building bay

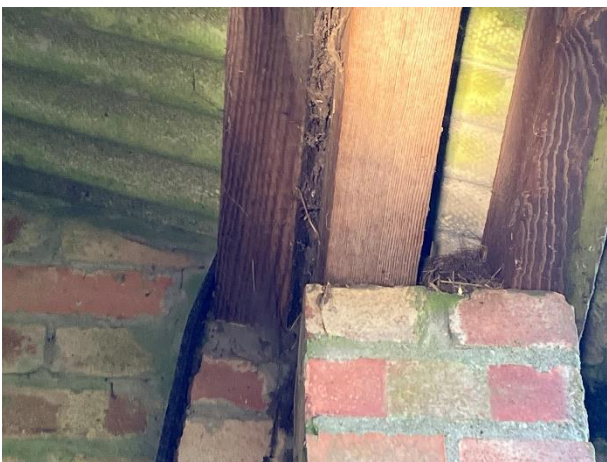


Photo 9: Bird nest on top of wall, and dirt / debris filling the gap between two adjacent wooden beams



Photo 10: Roof sheets well cemented to top of brick wall





Photo 11: Large void at ridge between ridge tiles and adjacent beams



Photo 12: Small area of neutral grassland immediately to east of building, to be lost as part of the proposals

Water bodies

- 4.15 No water bodies are present on site. Aerial photographs and Ordnance Survey maps at 1:10,000 scale highlighted the presence of one pond at c.120m south of the building. This pond is located in an area of dense, ruderal vegetation adjacent to a significant belt of woodland and long grass / reeds, and is separated from the site by an expanse of closely grazed grassland.
- 4.16 It is noted that three ponds located 390m to the north east of the site have been previously subject to eDNA surveys following improvement works (two since spring 2021 – Bond, S. pers.comm. 2024) in conjunction with the Suffolk Wildlife Trust, with negative results returned on both occasions.

Animals

Bats

- 4.17 The MAGIC data search identified four bat EPSM licences within 5km of the site, at 3.2km north west for a non-breeding roost of brown long-eared bat *Plecotus auritus*, common pipistrelle *Pipistrellus pipistrellus* and barbastelle *Barbastella barbastellus*; at 4.9km north for a non-breeding roost of common and soprano pipistrelle *P. pygmaeus*; at 4.3km south east for a non-breeding roost of common pipistrelle and brown long-eared bat; and at 2.2km west for a non-breeding roost of brown long-eared bat.
- 4.18 The author is also aware of the presence of common pipistrelle, soprano pipistrelle, daubenton's *Myotis daubentonii* and brown long-eared bats within the nearby village of Bentley.



Bats - roosting

- 4.19 The building is assessed as being of negligible potential for roosting bats, with all of the wall cracks and gaps around window frames being very shallow, draughty and providing very poor roosting opportunities. No evidence of the presence of roosting bats was recorded anywhere in the building.

Bats – commuting / foraging

- 4.20 The site provides negligible potential bat foraging and commuting habitat, however the immediate surroundings are likely to be used by a range of both foraging and commuting bat species.

Reptiles

- 4.21 The site does not provide suitable habitat for reptiles, since the grass margins and adjacent grassland are not sufficiently long or tussocky.

Amphibians

- 4.22 As part of the MAGIC search, two GCN class licence return records were identified at 4.7km to the south west of the site.
- 4.23 One pond was found to be located within potential influencing distance of the site, at 120m to the south. Due to the large area of moderate and high quality habitats i.e. long grassland, ruderal vegetation, reeds and woodland immediately adjacent to the pond, the likelihood of any GCN present in this pond also being present on site is very low. By contrast the site provides very little potential GCN habitat, and there are no significant areas of good quality GCN habitat beyond the site to the north to which GCN may commute. The site is also separated from the pond by a large, closely grazed grass field which provides low quality amphibian habitat.
- 4.24 The two recent years of negative eDNA test results from three ponds located <400m to the north east of the site may also indicate that GCN may not be present, or not widely present, in the surrounding landscape.
- 4.25 The likelihood of GCN being present on site and / or adversely affected by the proposals is therefore considered to be negligible.

Birds

- 4.26 The building has been used in the recent past by nesting birds, and continues to provide potential nesting opportunities for birds such as swallow, robin and wren.



4.27 The building contains an old tea chest originally installed to serve as a barn owl box, however there is a general lack of barn owl pellets in the building and a better, purpose built, barn owl box present in a large tree immediately offsite to the north. This box has been the preferred breeding location for a pair of barn owls, which have since moved to breed in a new box elsewhere within the immediately surrounding fields (Bond, S. pers.comm. 2024). The building is very unlikely to be of value to breeding barn owls, which are adequately catered for offsite.

Badger

4.28 No evidence of badger was recorded on or within 30m of the site. No setts, footprints, hairs, latrines, snuffle holes or scratching indicative of the presence of badgers was recorded.

Water Vole and Otter

4.29 There are no features on or immediately adjacent the site which provide suitable habitat for water vole or otter.

Dormice

4.30 Dormice are known to be present in various locations across the local area, however the site does not support any potential dormouse habitat.

Invertebrates

4.31 The site is considered likely to support common and widespread invertebrate species typical of the habitats present.

Other Legally Protected Species

4.32 Due to a lack of suitable habitats the site is not considered likely to support any other legally protected species.

Species of Principal Importance

4.33 The site provides a very small area of habitat for a small number of SPIE, limited to foraging hedgehog *Erinaceus europaeus*, toad *Bufo bufo* and starling *Sturnus vulgaris*.



5.0 CONCLUSIONS AND RECOMMENDATIONS

Designated Sites

- 5.1 There are two statutory designated sites of national importance within 5km of the site, however the small scale proposals are very unlikely to have any direct or indirect adverse impacts upon these sites. No further works are necessary.
- 5.2 No further works are necessary with respect to County Wildlife Sites.

Habitats

- 5.3 The site does not support, and is not located within potential influencing distance of, any Priority habitats.

Bats

- 5.4 All species of bat are protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and by the Wildlife and Countryside Act 1981 (as amended). In summary, this makes it an offence to harm or disturb a bat; damage or destroy a roost; and obstruct access to a roost (whether or not bats are present at the time).
- 5.5 Potential effects on roosting bats: there is negligible potential for bats to be using the building to roost, and the proposals are very unlikely to have an adverse impact upon roosting bats.
- 5.6 Mitigation measures for roosting bats: whilst no mitigation measures are necessary, it is recommended that as a precaution all of the cracks in the walls are inspected with a torch immediately prior to the commencement of works. Due to the thin nature of the walls, it is possible to view through the entirety of all such crevices to be certain than bats are not present. In the unlikely event that a bat, or any evidence of bats is found, all works must cease and an ecologist contacted for further advice.
- 5.7 Potential effects on commuting / foraging bats: in the absence of mitigation negligible impacts are predicted with respect to foraging and commuting bats due to the very small size of the site, lack of suitable habitats and the abundance of good quality foraging and commuting habitat within the immediate surroundings. No external lighting is currently present on the existing building, and no external lighting is proposed for the replacement building.
- 5.8 Mitigation measures for commuting / foraging bats: none required.
- 5.9 Residual effects: negligible.



Amphibians

- 5.10 Great crested newts (GCNs) and their habitats are fully protected under the Conservation of Habitats and Species Regulations 2017 (as amended), and by the Wildlife and Countryside Act 1981 (as amended).
- 5.11 Potential effects: negligible.
- 5.12 Mitigation measures: none required. In the unlikely event that a GCN is discovered on site at any point, all works must cease and an ecologist contacted for further advice.
- 5.13 Residual effects: negligible.

Reptiles

- 5.14 All Suffolk reptile species are protected against harm under the Wildlife and Countryside Act 1981 (as amended).
- 5.15 Potential effects: negligible.
- 5.16 Mitigation measures: none required.
- 5.17 Residual effects: negligible.

Birds

- 5.18 Breeding birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended).
- 5.19 Potential effects: the building provides good potential nesting opportunities for a small number of bird species, and the disturbance and destruction of an active nest could have a negative effect on some bird species at the site level. The proposals will result in the loss of one building, and the construction of another, which will provide replacement nesting opportunities for species such as swallow and robin. Negligible impacts upon barn owl are predicted.
- 5.20 Mitigation measures: ideally building demolition would commence during October to February inclusive to avoid the bird nesting season. Where this is not possible, immediately prior to commencement of works a check for nesting birds should be undertaken by a suitably experienced ecologist. Any active nests will need to be left in situ until the young have left the nest.
- 5.21 Residual effects: negligible.



Badger

5.22 Badgers and their setts are afforded protection under the Protection of Badgers Act 1992 (as amended). This legislation includes protection against damage to badger setts and against interference and disturbance of badgers whilst they are occupying a sett. Badgers are, however, a common and widespread species not of conservation concern.

5.23 Potential effects: none. No evidence of badgers was found on site or immediately adjacent.

5.24 Mitigation measures: none.

5.25 Residual effects: none.

Otters & Water Voles

5.26 Otters and their habitats are fully protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and by the Wildlife and Countryside Act 1981 (as amended). Water voles and their habitats are fully protected by the Wildlife and Countryside Act 1981 (as amended).

5.27 Potential effects: negligible.

5.28 Mitigation measures: none.

5.29 Residual effects: negligible.

Dormice

5.30 Dormice and their habitats are fully protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and by the Wildlife and Countryside Act 1981 (as amended).

5.31 Potential effects: none.

5.32 Mitigation measures: none.

5.33 Residual effects: none.

Invertebrates

5.34 Potential effects: negligible.

5.35 Mitigation measures: none.

5.36 Residual effects: negligible.



Other Legally Protected or Notable Species

5.37 The proposed development is not anticipated to directly impact upon any other legally protected species, or any Species of Principal Importance, therefore no mitigation measures are recommended. There will be a very small loss of short grassland, which may be used by foraging hedgehog, toad and starling. The loss of this area, totalling less than 40m², will be have negligible impact upon these species when considered in the context of the surrounding landscape.



6.0 BIODIVERSITY NET GAIN

- 6.1 The proposals will result in the loss of 36m² of Other Neutral Grassland in moderate condition, due to the slightly larger footprint of the new building, which extends east for an additional 4m in length. When inputted into the Statutory Biodiversity Metric tool (version Feb 2024), this equates to a loss of 0.03 Area Habitat Units. To achieve a 10% net gain in Biodiversity Area Units, an equivalent unit area of moderately species rich grassland - e.g. 75m² of Other Neutral Grassland in moderate condition - will need to be created across an area of bare ground or similarly low value existing habitat. This will result in a 14.3% gain of 0.05 Area Habitat Units.
- 6.2 It is acknowledged that there will also be some disturbance around the base of the building which may result in the temporary loss of patchy ruderals and grass, however following completion of the new building these areas will re-establish, with full vegetation cover expected within 12-18 months. These areas are therefore temporary losses, do not need to be recorded as permanently lost habitat, and as they have no impact upon the overall results, are not included in the BNG assessment figures.
- 6.3 However, the proposed replacement building which forms part of this application is required to provide shelter and lambing cover for a flock of rare breed Castlemilk Moorit sheep which have been brought in to graze the organic traditional orchards and parcels of semi-improved grassland which are present across the wider Dodnash Farm. Castlemilk Moorit sheep are a lightweight breed which have been used for conservation grazing at the Essex Wildlife Trust's Blue House Farm nature reserve. The use of these sheep for grazing at Dodnash Farm will result in the enhancement of c.5ha of orchard grassland, but due to the nature of the BNG condition assessment for traditional orchards, this will not result in a change in the condition of these orchards where the grassland is already of medium distinctiveness despite the potential for such grazing to significantly enhance the botanical diversity of the grassland.
- 6.4 The landowner is also proposing to plant a new length of native, species rich hedging totalling 50m in length to provide shelter for the sheep. The hedge will run from the south western corner of the building in a south westerly direction, providing a linear enhancement to the eastern side of an existing small copse and area of scrub and long grass – as shown in Figure 2, overleaf. This planting alone will provide 0.3347 Linear Habitat Units, assuming that 'moderate' condition is achieved.



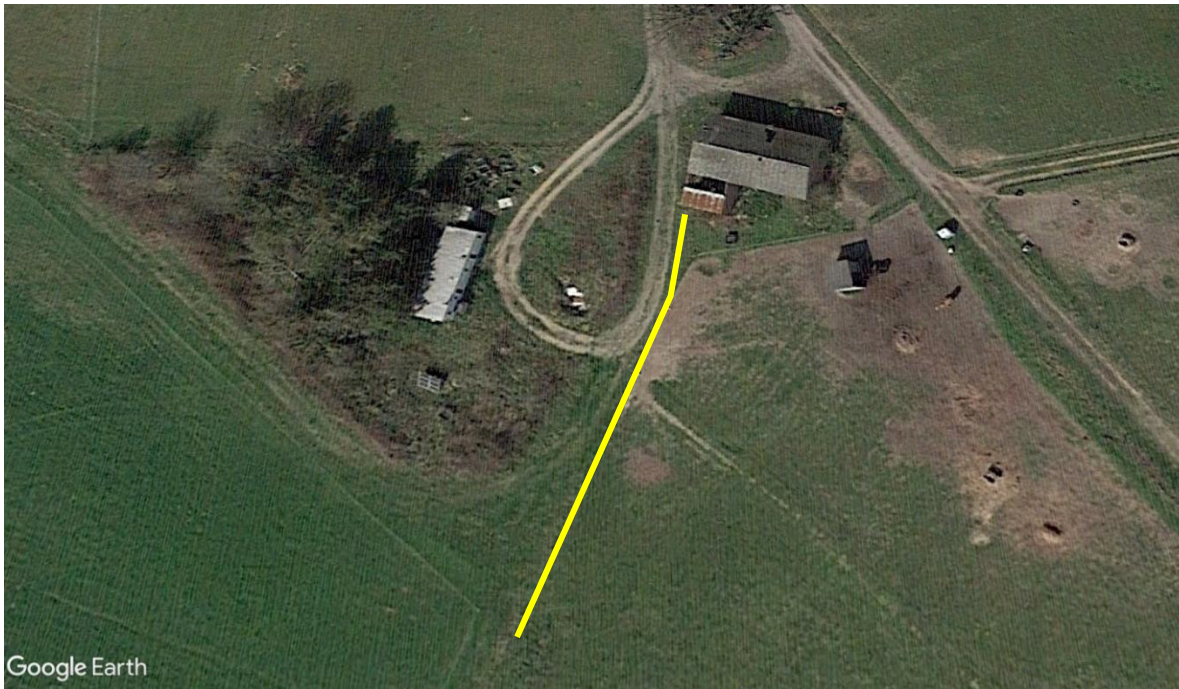


Fig 2: Proposed 50m of new species rich hedging highlighted yellow. Aerial photograph sourced from Google Earth Pro

6.5 Whilst it is acknowledged that Linear Habitat Units cannot be used to replace Area Habitat Units, the proposals will provide 1) a much needed functional building to house the rare breed sheep and allow for their long term retention and use for conservation grazing across Dodnash Farm; and 2) a species rich linear boundary feature to enhance the eastern edge of an existing area of trees, scrub and long grassland. The proposals are only 11m² of habitat above the threshold for Biodiversity Net Gain exemption, and in this case it is considered reasonable and proportionate to accept the above enhancements as measurable net gain.



7.0 REFERENCES

CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine Version 1.1*. Chartered Institute for Ecology and Environmental Management, Winchester.

CIEEM (2017a) *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute for Ecology and Environmental Management, Winchester.

CIEEM (2017b) *Guidelines for Ecological Report Writing*. Chartered Institute for Ecology and Environmental Management, Winchester.

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Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit*. Revised print, JNCC, Peterborough.

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8.0 LEGISLATION

The Conservation of Habitats and Species Regulations 2017 (as amended)

- 8.1 The Conservation of Habitats and Species Regulations 2017 (as amended) will soon become the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019). These regulations will continue to provide safeguards for European Protected Sites and Species as listed in the Habitats Directive. As a result, the same provisions remain in place for European protected species, licensing requirements and protected areas after Brexit.
- 8.2 Species protected by the former European legislation includes great crested newt, all UK bat species, dormice and otter. A number of other plant and animal species are also included such as sand lizard, smooth snake and natterjack toad, however these additional species are rare, with restricted geographical ranges and specific habitat types.
- 8.3 Under The Conservation of Habitats and Species Regulations 2017 (as amended) it is an offence to:
- Damage, destroy or obstruct access to an EPS breeding or resting place;
 - Deliberately capture, injure or kill an EPS (including their eggs);
 - Deliberately disturb an EPS, in particular any actions which may impair an animals ability to survive, breed or nurture their young; or their ability to hibernate or migrate; or which may significantly affect the local distribution or abundance of the species to which they belong.
- 8.4 The legislation applies to all stages of amphibian life cycles (eggs, larvae and adult), and to active bat roosts even when they are not occupied at that particular time of year.
- 8.5 Natural England can, under certain circumstances, grant a licence to permit actions which would otherwise be unlawful, subject to the species concerned being maintained at a Favourable Conservation Status and there being a true need for the proposed works to take place.
- 8.6 Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) are also afforded protection under the Conservation of Habitats and Species Regulations 2017 (as amended). Ramsar sites, which are designated under the Convention on Wetlands of International Importance (1971), are afforded the same level of protection as SPAs and SACs via national planning policy.

The Wildlife and Countryside Act 1981 (as amended)

- 8.7 The Wildlife and Countryside Act 1981 (as amended) provides varied levels of protection for a range of species including those already listed above.



- 8.8 Water voles are one of the species not listed under the Conservation of Habitats and Species Regulations 2017 (as amended), but are afforded the highest level of protection under the Wildlife and Countryside Act 1981 (as amended).
- 8.9 It is an offence to intentionally kill, injure or take a water vole, to intentionally or recklessly damage or destroy a structure or place used for shelter and/or protection, to disturb a water vole whilst occupying a structure and/or place used for shelter and protection, or to obstruct access to any structure and/or place used for shelter or protection.
- 8.10 Other species, such as common lizard, slow worm, adder and grass snake, are afforded less protection. For these species it is an offence to intentionally or recklessly kill or injure animals.
- 8.11 All active bird nests, eggs and young are protected against intentional destruction. Schedule 1 listed birds e.g. barn owls, kingfishers, are further protected from intentional and reckless disturbance whilst breeding.
- 8.12 Schedule 9 of The Wildlife and Countryside Act lists plant species for which it is an offence for a person to plant, or otherwise cause to grow in the wild. This includes Japanese Knotweed which, under the Environment Protection Act 1990 (as amended) is classed as 'controlled waste'. If any parts of the plant including stems, leaves and rhizomes are taken off-site they must be disposed of safely at a landfill site licensed to deal with such contaminated waste.
- 8.13 Sites of Species Scientific Interest (SSSI) are afforded protection by the Wildlife and Countryside Act 1981 (as amended).

The Protection of Badgers Act 1992 (as amended)

- 8.14 The Protection of Badgers Act (1992) makes it an offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so, and to intentionally or recklessly interfere with a sett.

The Protection of Mammals Act 1996 (as amended)

- 8.15 The Act protects all wild mammals against actions which have the intention of causing unnecessary suffering, including crushing and asphyxiation.

The Natural Environment and Rural Communities Act 2006 (as amended)

- 8.16 Under sections 40 and 41 of the Natural Environment and Rural Communities Act (NERC) 2006 local authorities have an obligation to have regard to the purpose of conserving biodiversity in carrying out their duties. The majority of UK legally protected species are listed under Section 41 the NERC Act.



8.17 Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act (2006) also requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity' in England (Species of Principal Importance in England – SPIE). The S41 list is used to guide decision-makers, including local and regional authorities, in implementing their duty under Section 40 of the act to have regard to the conservation of biodiversity in England when carrying out their normal functions.

The Environment Act 2021 & National Planning Policy Framework (NPPF)

8.18 The Environment Act 2021 makes provision for biodiversity gain to be a condition of planning permission in England, with a minimum 10% BNG mandatory from January 2024. The 25 Year Environment Plan (DEFRA, 2021) sets out goals for improving the environment and leaving it in a better state for the next generation, and is supported by the National Planning Policy Framework (NPPF) (Department for Levelling Up, Housing and Communities 2023), which makes general provisions for the delivery of BNG.

8.19 The NPPF states that plans should:

- a) *"Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity (as already detailed in Government Circular 06/200520); wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- b) *promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."*

8.20 Locally specific policies set out what strategies need to be taken into account when delivering BNG, and may include Green Infrastructure Strategies and Local Nature Recovery Strategies in order that BNG may contribute to wider nature recovery plans.

Statutory Designated Sites

8.21 Under the National Parks and Access to the Countryside Act 1949 (as amended), statutory conservation agencies were able to establish National Nature Reserves (NNRs), with provisions for these areas strengthened by the Wildlife and Countryside Act 1981 (as amended). They are managed to conserve their habitats or to provide special opportunities for scientific study of the habitats communities and species represented within them.



8.22 Local Nature Reserves (LNRs) can be declared by local authorities after consultation with the relevant statutory nature conservation agency under the National Parks and Access to the Countryside Act 1949 (as amended). LNRs are not subject to legal protection, but are afforded protection against damaging operations via byelaws, and against development via local planning policies.

Non-Statutory Designated Sites

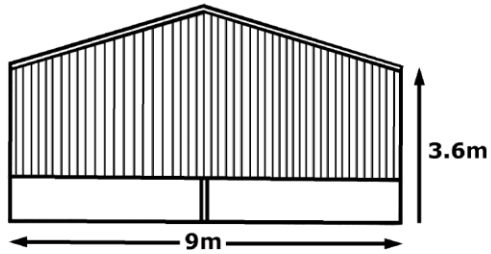
8.23 Local Wildlife Sites (LWS), Sites of Importance for Nature Conservation (SINCs), Sites of Nature Conservation Importance (SNCIs) and County Wildlife Sites (CWS) are often designated by the local Wildlife Trust. They are not usually afforded any legal protection, but are recognised in the planning system and given some protection through planning policy.



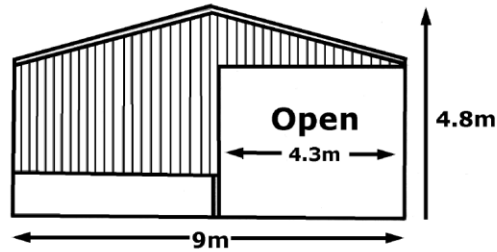
Appendix 1:
Proposed Site Layout



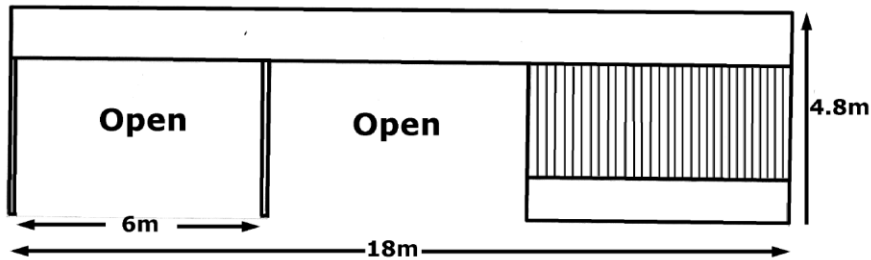
West Elevation



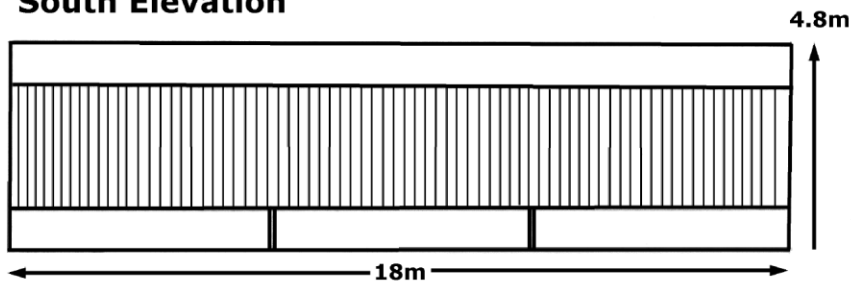
East Elevation



North Elevation



South Elevation



**Roof Cladding :-
box profile in Juniper Green**

**Side Cladding :-
Yorkshire Boarding down to 2.5m**

**Below Cladding :-
1m high concrete panels**

Drawing :- AJC01

Scale :- 1:00

**Dodnash Fruit Farm, Hazel Shrub,
Bentley, IP9 2DF**



Roof Plan





Liz Lord Ecology

