



Crow Ecology
Creating a Nest for your Project & Nature

Barn Owl Survey - Report

Site: Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ

Client: The property owner

Date of Surveys: March and May - July 2024

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ACIEEM.

NE Bat License No: 2015-11015-CLS-CLS
NE Great Crested Newt License No: 2015-18094-CLS-CLS
NE Barn Owl License No: CL29/00149

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Validity of survey data and report. The findings of this report are valid for 24 months from the date of survey. If work has not commenced within this period, an updated survey by a suitably qualified ecologist will be required.

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1. Summary

Crow Ecology was commissioned by the property owner to undertake a Bat Preliminary Roost Assessment (PRA), a subsequent Bat Emergence Survey (BES), Great Crested Newt Habitat Suitability Index (HSI) and eDNA survey. The reports: Crow, C (2024) '*Preliminary Roost Assessment – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ*' Crow Ecology and Crow, C (2024) '*Bat Emergence Survey – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ*' Crow Ecology are referred to throughout this report. Results from the PRA survey triggered a Stage 3 Barn Owl *Tyto alba* survey of the buildings.

The aim of this survey is to identify features within the building that the Barn owl/s uses to roost and/or nest and potentially breed at the time of the surveys and the potential need for further survey and/or mitigation. The survey is required to inform a proposed planning application which is to be lodged with the local planning authority, in this case North Lincolnshire Council.

The project site is three outbuildings, within one block, with a single-storey section (building 1) and two double-storey sections (Buildings 2 and 3). Building 3 is missing a roof and Building 2 only has half a roof. The barn is within the property boundary of Mill Farm, Appleby, DN15 0BZ. Copies of the proposed development were provided by: Ettridge Architecture, 52 Prestongate, Hessle HU13 0RE.

The proposal is:

- Conversion of barn into a dwelling with associated landscaping

The Stage 2 survey was undertaken during the PRA survey (19/03/24). The Stage 3 surveys were undertaken during the Bat Emergence surveys: 15/05/2024 (Dusk), 12/06/2024 (Dusk) and 08/07/24 (Dusk) and 18/09/24 (Daytime). The observational surveys were carried out at these times to co-inside with the Barn owl breeding cycle.

The Stage 3 surveys concluded that Barn owl/s were no longer Actively roosting in Building 2 and the building had now become a Temporary Rest Sites (TRS). It is possible that the ever-decaying roof has led them to favouring the boxes instead as these will protect them from the prevailing weather conditions and the decaying roof. The Potential Nest Site (PNS) identified during the PRA survey did not become an Occupied breeding site (OBS). Within the development boundary there are three Barn owl boxes; approximately 15m East, 40m South and 90m SW of the project site. Barn owls were seen and heard in the boxes 15m East and 90 SW of the project site. The box 15m East was the most active box.

In the absence of mitigation, the proposed developments would result in the loss of a Temporary Rest Site and a Potential Nest Site.

Barn owls are protected under by UK law under the following act:

Wildlife & Countryside Act (as Amended) 1981: Schedules 1-4 and in some cases 9.

To summarise, you would be breaking the law by;

- intentionally kill, injure or take birds
- intentionally take, damage or destroy a nest while it is being used or built
- intentionally take or destroy a bird's egg/s
- possess, control or transport live or dead bird, or parts of them, or their eggs
- sell birds or put them on display for sale
- use prohibited methods to kill or take birds

Barn Owls are listed as a schedule 1 bird and are provided further protection. Additionally, it is an offence to:

- disturb them while they are nesting, building a nest, in or near a nest that contains their young



- disturb their dependent young

The current boxes are now degrading as they are made from Timber. They no longer have a perch shelf which is needed for Owlets to learn how to fly.

To mitigate and compensate for this loss of the TRS and PNS in the building, the following Methodology in the form of a Method Statement will be adhered to:

- A temporary barn owl box (that will remain) will be erected on the next Black poplar tree along from the existing box that is 15m East of the site. The box will be in place at least 30 days before the development commences.
- A pre-development Barn owl survey will take place within 48 hours of the proposed works to the building
- External works such as removing the roof, will take place outside of the breeding season; therefore, works will take place between 1st September – 28th February
- 2 New Barn owl boxes will be erected next to the trees that a box is present as the existing boxes have a successful uptake.



2. Introduction

Crow Ecology was commissioned by the property owner to undertake a Bat Preliminary Roost Assessment (PRA), a subsequent Bat Emergence Survey (BES), Great Crested Newt Habitat Suitability Index (HSI) and eDNA survey. The reports: Crow, C (2024) '*Preliminary Roost Assessment – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ*' Crow Ecology¹ and Crow, C (2024) '*Bat Emergence Survey – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ*' Crow Ecology² are referred to throughout this report. Results from the PRA survey triggered a Stage 3 Barn Owl *Tyto alba* survey of the buildings³.

The aim of this survey is to identify features within the building that the Barn owls uses to roost and/or nest and potentially breed at the time of the surveys and the potential need for further survey and/or mitigation. The survey involves inspecting all the building and surrounding habitat for Potential Nest Sites (PNS) that may become Occupied Breeding Sites (OBS) and Active Roost Sites (ARS)³.

Recommendations for mitigation and/or further survey work can be made to reduce the impact on the Barn owls found and thereby also reducing potential constraints to any development which might take place.

2.1 - Site Location

Please refer to: Crow, C (2024) '*Preliminary Roost Assessment – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ*' Crow Ecology¹.

2.2 - Site Description

Please refer to: Crow, C (2024) '*Preliminary Roost Assessment – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ*' Crow Ecology¹.

Please see appendix 1 for existing site layout.

2.3 Site Proposals

The planning applications are:

- Conversion of barn with associated landscaping

Please see appendix 2 for proposed site layout.



3. Methods

This report has been written in accordance with the following guidelines:

- Sawyer, C. R. (2011). *Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting*. IEEM, Winchester.³
- Barn Owl Trust (2015) *Barn Owls and Rural Planning Applications, a Guide*. The Barn Owl Trust⁴.
- Unknown (No date) *Barn Owl Pellet age* [JPG] The Barn Owl Trust⁵
- The Code of Professional Conduct and guidelines as laid down by the Chartered Institute of Ecology & Environmental Management (CIEEM).
- Reference to: Crow, C (2024) 'Preliminary Roost Assessment – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ' Crow Ecology¹.
- Reference to: Crow, C (2024) 'Bat Emergence Survey – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ' Crow Ecology²

3.1 - Desktop Study

Please refer to: Crow, C (2024) 'Preliminary Roost Assessment – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ' Crow Ecology¹.

3.2 - Stage 2 Survey

The report: Crow, C (2024) 'Preliminary Roost Assessment – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ' Crow Ecology¹ identified that building 2 was being actively used by Barn owl/s due to the Faecal streaking and pellets found in the building.

The Stage 2 survey is used to determine the buildings Potential Nest Sites (PNS), Actual Roost sites (ARS), Temporary Rest Site (TRS) and if necessary, the Potential Foraging Habitat (PFH)³.

A PNS is defined as Trees or Structures that would provide a suitable opportunity for Barn owls to breed. Access has to be a certain size (over 80mm) and the floor surface area also has to be above a certain size (minimum of 25cm x 25cm). PNS sites include the following structures or trees³:

- Agricultural or old industrial buildings with suitable access and possessing an upper floor, loft, roof void, blocked chimney, wide wall plate, bale stack, empty water tank, ducting or large nest box.
- Disused or derelict cottages or industrial buildings such as aircraft hangers, which possess an open joist, broken ceiling panel, water tank, disused chimney or large nest box.
- Mature trees, isolated or in clusters in open fields, hedgerow or on the woodland edge, containing a hole >80 mm backed by a large, dark cavity, including those which have rotted-out to ground level but which offer no obvious access to ground predators through an open root structure.
- Outdoor nest boxes on poles, trees, buildings or owl towers, which offer a dark chamber.
- Outdoor bale ricks.
- Cliffs and quarries with caves or fissures.
- River, rail or road bridges containing suitable cavities within their structure.
- Rural churches and the chimneys of intermittently used holiday homes.

An ARS is defined as defined as a place where breeding does do occur but Barn owls are seen frequently at these roosts. Other field signs include: Chalky, streaky dropping marks on the structure or tree, number of pellets and moulted feathers. Again, ARS can be found in the places listed above but they can also be

found at lower elevations, in open spaces that are not profoundly dark³. A TRS are similar to an ARS but the frequency of use is greatly reduced.

3.3 - Stage 3 Survey

A Stage 3 survey is a Nest verification survey to access the PNS and ARS identified during the Stage 2 survey¹ to determine whether a site is an Occupied Breeding Site (OBS).

This involves a more detailed inspection of the PNS, ARS identified. A stage 3 survey requires a Barn owl license holder only, who keeps disturbance to a minimum in order to obtain the survey information. Close observation is usually avoided during the months March-Mid May as this is usually when Barn owls are laying their eggs.

Verification Surveys are optimally carried out from June to Mid-August³. This is when Barn owl nests are at their least vulnerable and chicks can be heard calling for food.

Barn owls may lay a second clutch with eggs hatching around late August. These broods can remain in the nest until October-early December³.

Field signs surrounding the PNS and if possible, an internal inspection of the PNS will determine whether the site is or was (within 12 months) an OBS³.

3.3.1 - Survey Justification

The Building has evidence of Barn owl presence in the forms of faecal streaking and pellets (please refer to section 4.5 of: Crow, C (2024) 'Preliminary Roost Assessment – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ' Crow Ecology¹. During the PRA, a stage 2 survey was performed, therefore a Stage 3 survey is required to evaluate the use of the project site by Barn owl/s.

3.3.2 - Areas Surveyed and Justification



Figure 2.2 - Aerial view of the buildings under the proposed development (not to scale or accuracy) with buildings numbered and scoping area (blue) (not to scale or accuracy). Source – Google maps 2024⁶.



The buildings were inspected during the 2024 bat surveys^{1,2} but limited fresh evidence was identified from the initial findings of the PRA survey.

3.3.3 - Survey Personnel

Chris Crow BSc (Hons), ACIEEM of Crow Ecology. Chris Crow has over 13 years surveying experience and holds the following Natural England (NE) licences;

Bat Licence No: 2015-11015-CLS-CLS (Class 2)

Great Crested Newt Licence No: 2015-18094-CLS-CLS (Level 2)

Barn Owl Licence No: CL29/00149

3.3.4 - Limitations

There were no limitations. The building could be accessed and assessed. Therefore, the data collated at the times of the surveys is concise and accurate confidently report on the use of the project site by Barn owls.



4. Survey Results

4.1 Desktop Study

Please refer to: Crow, C (2024) 'Preliminary Roost Assessment – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ' Crow Ecology¹. There are 4 records of Barn owl present within the 1km Search radius. However, due to the limited grid reference, it is not possible to know the location of these recordings.

4.2 Stages 2 & 3 Survey Results

4.2.1 - Summary of Stage 2 Survey Information

Date	Weather	Structure (Numbered if more than 1 structure)	Equipment used
19/03/24	11°C 40% Cloud Wind – 1 (Beaufort Scale) No Rain	<ul style="list-style-type: none"> • Building 	<ul style="list-style-type: none"> • Explorer Premium 8803AL Endoscope • Headtorch • 3.8 metre telescopic ladder • Camera • CAT S62 Pro Thermal imaging phone. • RSPB Binoculars
Comments	Barn owl evidence in the building in the form of pellets and Faecal streaking		
15/05/24	Temp – 14°C Wind (Beaufort Scale) – 0 Rain - Dry Cloud – 20%	<ul style="list-style-type: none"> • Building 	<ul style="list-style-type: none"> • Explorer Premium 8803AL Endoscope • Headtorch • 3.8 metre telescopic ladder • Camera • CAT S62 Pro Thermal imaging phone. • RSPB Binoculars
Comments	Very small number (circa 3) of fresh pellets		
12/06/24	Start temp – 13°C End temp - 11°C Wind (Beaufort Scale) – 0 Rain - Dry Cloud – 100%	<ul style="list-style-type: none"> • Building 	<ul style="list-style-type: none"> • Explorer Premium 8803AL Endoscope • Headtorch • 3.8 metre telescopic ladder • Camera



			<ul style="list-style-type: none"> • CAT S62 Pro Thermal imaging phone. • RSPB Binoculars
Comments	2 fresh pellets		
08/07/24	Temp – 16°C Wind (Beaufort Scale) – 0 Rain - Dry Cloud – 100%	<ul style="list-style-type: none"> • Building 	<ul style="list-style-type: none"> • Explorer Premium 8803AL Endoscope • Headtorch • 3.8 metre telescopic ladder • Camera • CAT S62 Pro Thermal imaging phone. • RSPB Binoculars
Comments	No fresh pellets		
18/09/24	16°C Wind (Beaufort Scale) – 0 Rain - Dry Cloud – 0%	<ul style="list-style-type: none"> • Building 	<ul style="list-style-type: none"> • Explorer Premium 8803AL Endoscope • Headtorch • 3.8 metre telescopic ladder • Camera • CAT S62 Pro Thermal imaging phone. • RSPB Binoculars
Comments	No fresh pellets		

4.2.2 – Stage 2 analysis

Barn owl evidence was identified in the building during the PRA survey on the 19/03/24, 15/05/24 and 12/06/24. Please see below where this evidence was identified:



19/03/24 Key -

- Potential Nest Site (PNS) ● Active Roost Site (ARS) ●
- Occupied Breeding Site (OBS) ● Temporary Rest Site (TRS) ●

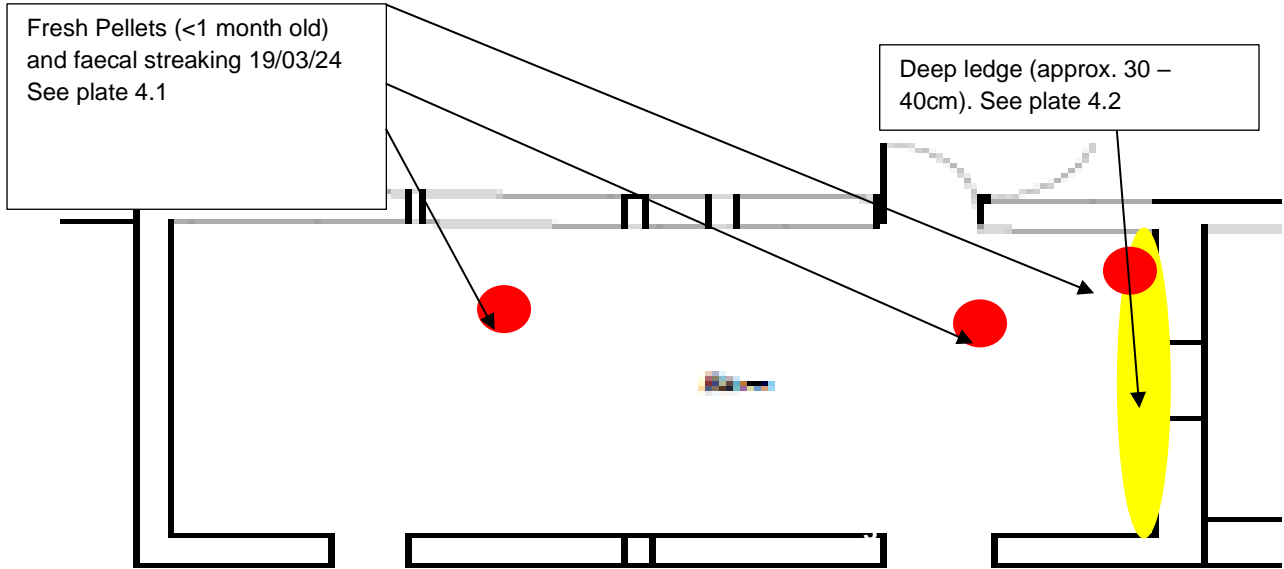


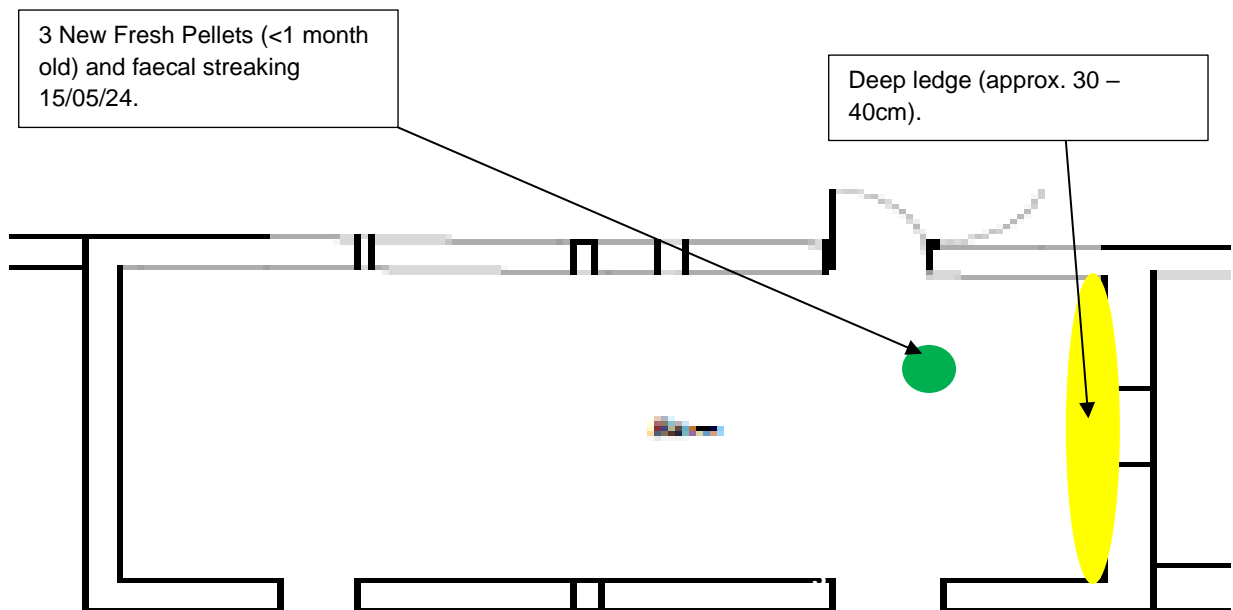
Plate 4.1 (L) – Large number of Pellets and faecal streaking underneath a truss (ARS) (R) - Pellets and faecal streaking underneath a truss (ARS)



Plate 4.2 Highlighted (PNS) and areas of faecal streaking.

15/05/24 Key -

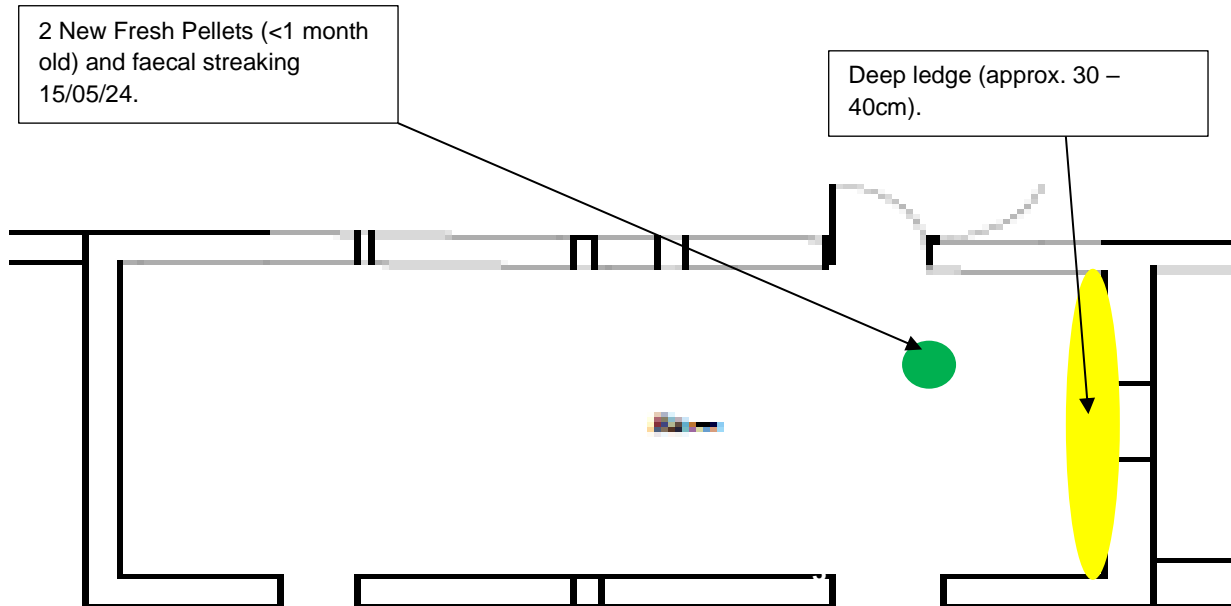
- Potential Nest Site (PNS) ●
- Active Roost Site (ARS) ●
- Occupied Breeding Site (OBS) ●
- Temporary Rest Site (TRS) ●





12/06/24 Key -

- Potential Nest Site (PNS) ● Active Roost Site (ARS) ●
- Occupied Breeding Site (OBS) ● Temporary Rest Site (TRS) ●



The evidence present on the 19/03/24 was the site had ARS's and a PNS. By the 18/09/24 the building had a TRS and PNS. The ARS's are either no longer used or have been reclassified to a TRS due to the numbers of pellets and streaking frequency³. By the 08/07/24 BES survey there was no fresh evidence.

4.3 – Barn owl boxes



Plate 4.3 (L) Barn owl box 1 (C) - Barn owl box 2 (R) - Barn owl box 3

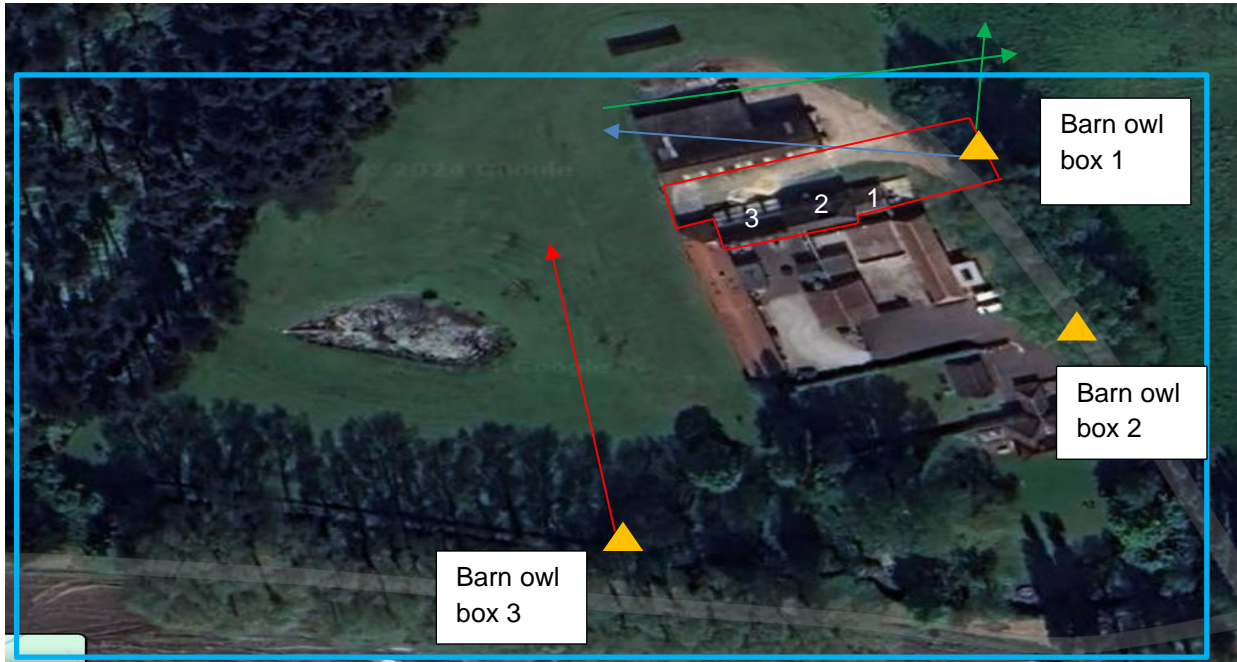
4.4 – Stage 3 Survey

Before each BES, the building was inspected internally. The PNS was inspected from ladders. The PNS remained a PNS throughout and did not become an OBS. As the client has already acknowledged that Barn owl/s are present, observational surveys only took place during the BES.



4.5 – Observational Survey

During the Bat surveys on the: 15/05/2024 (Dusk), 12/06/2024 (Dusk) and 08/07/24 (Dusk) (please refer to: Crow, C (2024) 'Bat Emergence Survey – Barn Conversion at Mill Farm, Appleby, Scunthorpe, DN15 0BZ' Crow Ecology²) a single Male Barn owl was only seen, a small number of times. During these surveys, on the 08/07/24 owlets were heard hissing; suggesting they are breeding in Barn owl box 1. The Barn owls were not seen emerging or returning to the building during these surveys.



Key

- 15/05/24 →
- 12/06/24 →
- 08/07/24 →



5. Evaluation

For the purpose of this assessment please refer to section 4.2.2. The stage 2 survey results conclude that the project site was used by Barn owls more frequently in the earlier months and less frequent in the latter months. The building went from a ARS to TRS.

5.1 – Barn Owl Field Signs and Roost/Nest Classification

Location	Field Signs	Classification
Building 2 19/03/24	Number of pellets (ranging from <1month old to approx. <1year old) and faecal streaking below trusses Deep ledge	TRS PNS
Building 2 15/05/24	Pellets from previous survey still present with 3 fresh pellets only in one location <1month old to approx. <1year old) Deep ledge	TRS PNS – No OBS
Building 2 12/06/24	Pellets from previous survey still present with 2 fresh pellets only in one location <1month old to approx. <1year old) Deep ledge	TRS PNS – No OBS
Building 2 08/07/24	Pellets from previous survey still present with no fresh pellets only in one location <1month old to approx. <1year old) Deep ledge	TRS PNS – No OBS
Building 2 18/09/24	Pellets from previous survey still present with no fresh pellets only in one location <1month old to approx. <1year old) Deep ledge	TRS PNS – No OBS

Table 5.1 – Nest/Roost classification table. Key – ARS – Active Roost Site, TRS – Temporary Rest Site, PNS – Potential Nest Site, OBS – Occupied breeding site

5.2 - ARS

Within building 2 there were 3 ARS's on the 19/03/24. By the 15/05/24, there were no ARS's with only one TRS present. The Barn owls where not seen emerging or returning to the building during these surveys. However, Barn owls were seen and/or heard more frequently from Barn owl boxes 1 and 3.

It is possible that the ever-decaying roof has led them to favouring the boxes instead as these will protect them from the prevailing weather conditions and the decaying roof.

5.3 – PNS

The Stage 2 identified 1 PNS. The PNS did not become an OBS

If breeding had of taken place, the internal inspection before each BES would have detected it. The surveys were spread out From May-July, in which time, if breeding Barn owls were present, it would have identified breeding behaviour.

Owlets were heard hissing in Barn owl box 1. This finding confirms that Barn owl box 1 is an OBS.



5.4 – Limitations

There were no limitations. The building could be accessed and assessed. Therefore, the data collated at the times of the surveys is concise and accurate on the use of the project site by Barn owls.

5.5 – Barn owl Evaluation Conclusion

- Barn owls were actively roosting in building 2 in March but by June, they were no longer roosting in Building 2.
- In March 2024, Building 2 had 3 ARS and 1 PNS
- By September 2024, Building 2 had 1 TRS and 1 PNS
- Barn owl field signs identified were: pellets and faecal streaking
- Observations of the Barn owl were from Barn owl boxes 1 and 3.
- Barn owls were not seen emerging or returning to the building during these surveys.
- The PNS did not become OBS.

As the project site only now has a single TRS, and Barn owls are now breeding in Barn owl box 1 a mitigation strategy is not needed for the building. However, to support this declining species, New Barn owl boxes will be erected. A Precautionary Working Method Statement will also be adhered to, to minimise disturbance.



6. Impact Assessment – In the Absence of Mitigation

The Building has a TRS and in-active PNS's. Under the proposed development, the building will be renovated; resulting in the loss of the TRS. If un-supervised work was to go ahead pre and during renovation, then it would result in the destruction of the TRS. This would have a Minor negative impact at site level and a Minor Negative impact to the species at a conservation level as Barn owls are roosting and breeding in Barn owl boxes within the property boundary.



7. Recommendations

7.1 – Legal protection of Barn Owls

Birds, their eggs and nest are protected under by UK law under the following act: Wildlife & Countryside Act (as Amended) 1981⁷: Schedules 1-4 and in some cases 9.

To summarise, you would be breaking the law by;

- intentionally kill, injure or take birds
- intentionally take, damage or destroy a nest while it is being used or built
- intentionally take or destroy a bird's egg/s
- possess, control or transport live or dead bird, or parts of them, or their eggs
- sell birds or put them on display for sale
- use prohibited methods to kill or take birds

Barn Owls are listed as a schedule 1 bird (are provided further protection. Additionally, it is an offence to:

- disturb them while they are nesting, building a nest, in or near a nest that contains their young
- disturb their dependent young

7.2 – Mitigation

Mitigation is compulsory in these situations and its aim is to avoid or reduce the impact of the proposed development to the roosting and/or breeding Barn owls. Mitigation is tailored to the species on the project site. The key principles of mitigation are⁸:

- Mitigation - which, in this strict sense, refers to practices which reduce or remove damage (e.g., by changing the layout of a scheme, or altering the timing of the work)
- Compensation – which refers to works which offset the damage caused by the development (e.g., by the creation of new roosts).

The Mitigation process requires the expertise of a suitably qualified Barn owl ecologist/consultant³. This includes:

- Additional Barn owl surveys prior to works commencing
- A Method Statement that will include a detailed work programme that the developers will follow.

The Method statement will include the following information:

- Work Timetable – This includes when works are to be undertaken and completed. Usually, this is when Barn owls are not breeding (typically 1st September – 28th February⁴).
- A mitigation plan for Barn owls to be able to nest in a 'like for like' replacement if necessary.
- Barn Owls will not be left without a suitable nest during the breeding season (typically 1st March – 31st August)⁴.

7.2.1 – Mitigation Strategy

Mitigation and compensation measures need to be appropriate to the scale of the impact and the importance of the population affected. This is performed by:

- There will be no net loss of nest sites and the compensative measures should enhance the status of Barn owls on site because Barn owls may not adopt/adapt to the new nest on the project site.
- The measures should aim to replace nests with a 'like for like' scenario where possible.



- Measures should ensure the Barn owls on the project site can function as they did pre-development.
- Measures should be appropriate to maintain a favourable conservation status of the Barn owls present on the project site.

7.3 – Method Statement Template

The following statement has been guided by: Shawyer, C. R. (2011). *Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting*. IEEM, Winchester³ and Barn Owl Trust (2015) *Barn Owls and Rural Planning Applications, a Guide*. The Barn Owl Trust⁴.

7.3.1 – Pre-Development Works

Before the proposed development works start the following actions will take place:

- A Barn Owl box will be provided for Barn Owls within 200 metres of the Building at least 30 days before the works start. This temporary provision (although will remain post-development) will be a Barn owl box erected on the next tree along from Barn owl box 1, approximately 15m East of the building (see figure 7.1). This provision must be kept free from disturbance and remain in place until at least 30 days after permanent provision has been made. Please see appendix 3 for an example of this box.



Figure 7.1 - Aerial view of project site (not to scale or accuracy), highlighting the location of the existing TRS (green) and the new Barn owl box (purple).

- This location, will be on the tree next to the Barn owl box where Barn owls were seen emerging from and owlets were heard hissing; making it the optimal location as there is a greater chance the new box will become at least a roost location and possibly an OBS. Any dense foliage will be removed to create an un-obstructed flightpath
- In addition, if successful, once breeding has taken place male Barn owls do not tend to enter the nest site³, however, they do maintain a presence close to the nest site³. The box will be cited with an NE-facing bearing which will allow the Male barn owl to have direct observation of the Barn owl boxes 1 and 2.



- The box will be at least 3m high⁴
- The site has a level of disturbance as there has been a number of developments over the recent years and it would suggest that these Barn owls are used to this level of disturbance; due to still being present and breeding. This location will still provide connectivity to the surrounding landscape and the PFH's surrounding the site.
- This box will be erected at least 30 days before the proposed works take place³ and at least 30 days before the 1st March.
- The box will remain post-development.

7.3.2 – Pre-Survey Works

A pre-Barn owl survey will be conducted within 48 hours before the proposed works⁴. This will ensure that no offence will occur under the Wildlife and Countryside Act 1981 as amended⁷. The ecologist will survey Building 2.

7.3.2.1 – Toolbox talk

An ecological site induction in the form of a 'tool box talk' will be given to all contractors and associated workers prior to work commencing. The contractors and associated workers will be told about the Barn owls that are on the project site, where they were roosting and the PNS. If a Barn owl is found, work must cease immediately and the foreman (or equivalent) will promptly contact a licenced Barn owl ecologist (Crow Ecology 07813 900097 for example) for advice.

7.3.3 - Timings

Renovation works (dependent on Bat EPSP²) will take place between the 1st October 2024 to the 1st April 2025⁴; with Barn owl provisions in place by at least March 2025.

7.4 – Mitigation Provision to ensure Barn owls remain within the property boundary – New Tree-mounted Barn owl boxes

As stated, mitigation is not required for a TRS³. However, the client still wishes for Barn owls to be present within the property boundary. To ensure this, the client is going to add a total of three new Barn owl boxes (please see appendix 3 for an example of this box) as the existing boxes are decaying with age. These new boxes will allow the Barn owls to integrate and adapt into these new boxes from the old boxes. This action will allow the Barn owls to continue roosting/breeding within the property boundary for the foreseeable future. Please see figure 7.2.



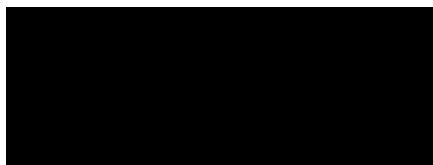
Figure 7.2 - Aerial view of project site (not to scale or accuracy), highlighting the location of the new Barn owl boxes (purple).

7.4.1 – Lighting

Although the foraging and commuter routes of Barn owls are not legally protected it would be good practice to follow lighting guidelines in relation to Barn owls as light illuminating their Nest/Roost site could be classed as disturbance under the WCA 1981 as amended⁷. External lighting has not been drafted into the proposed development scheme, however if this changes, the East elevation of the buildings will not be illuminated on the first floor.



This report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.



Chris Crow, BSc (Hons) ACIEEM.
September 2024

For and on behalf of Crow Ecology,
66 Belgrave Drive, Hull, HU4 6DN. [REDACTED]

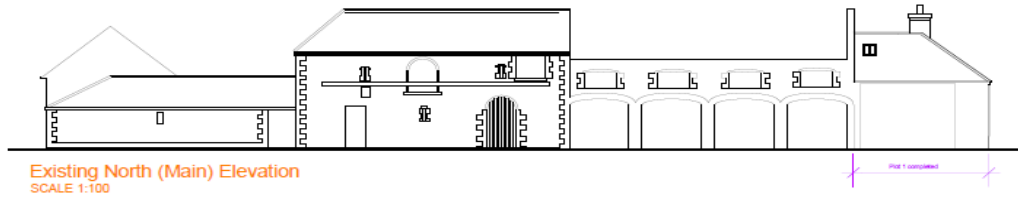
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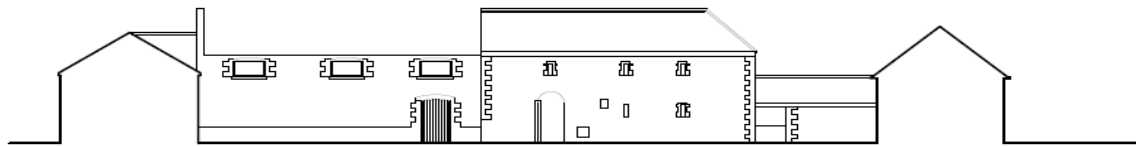
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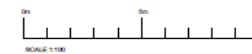
Existing Side Elevation
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Existing Section A-A
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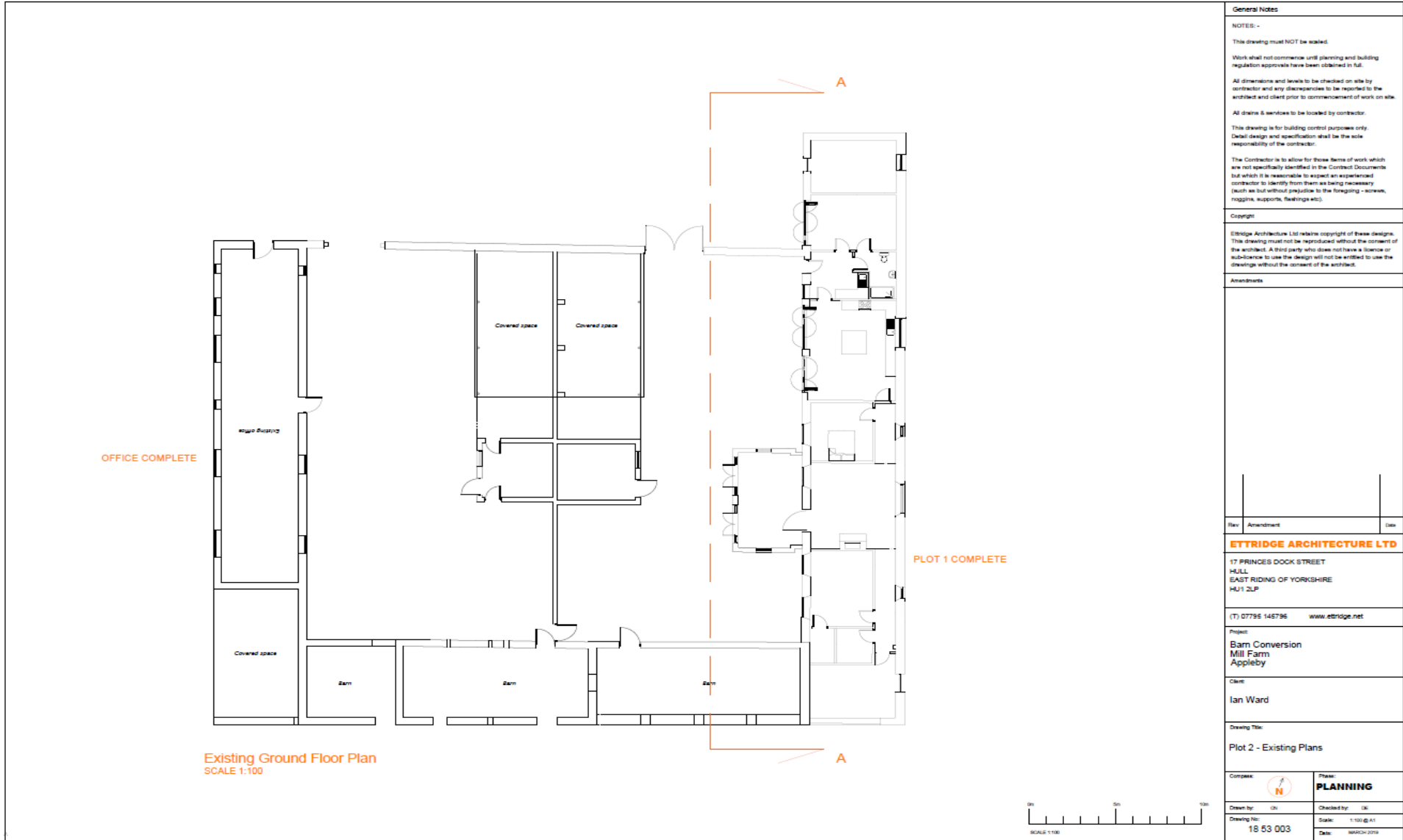


Existing South Elevation
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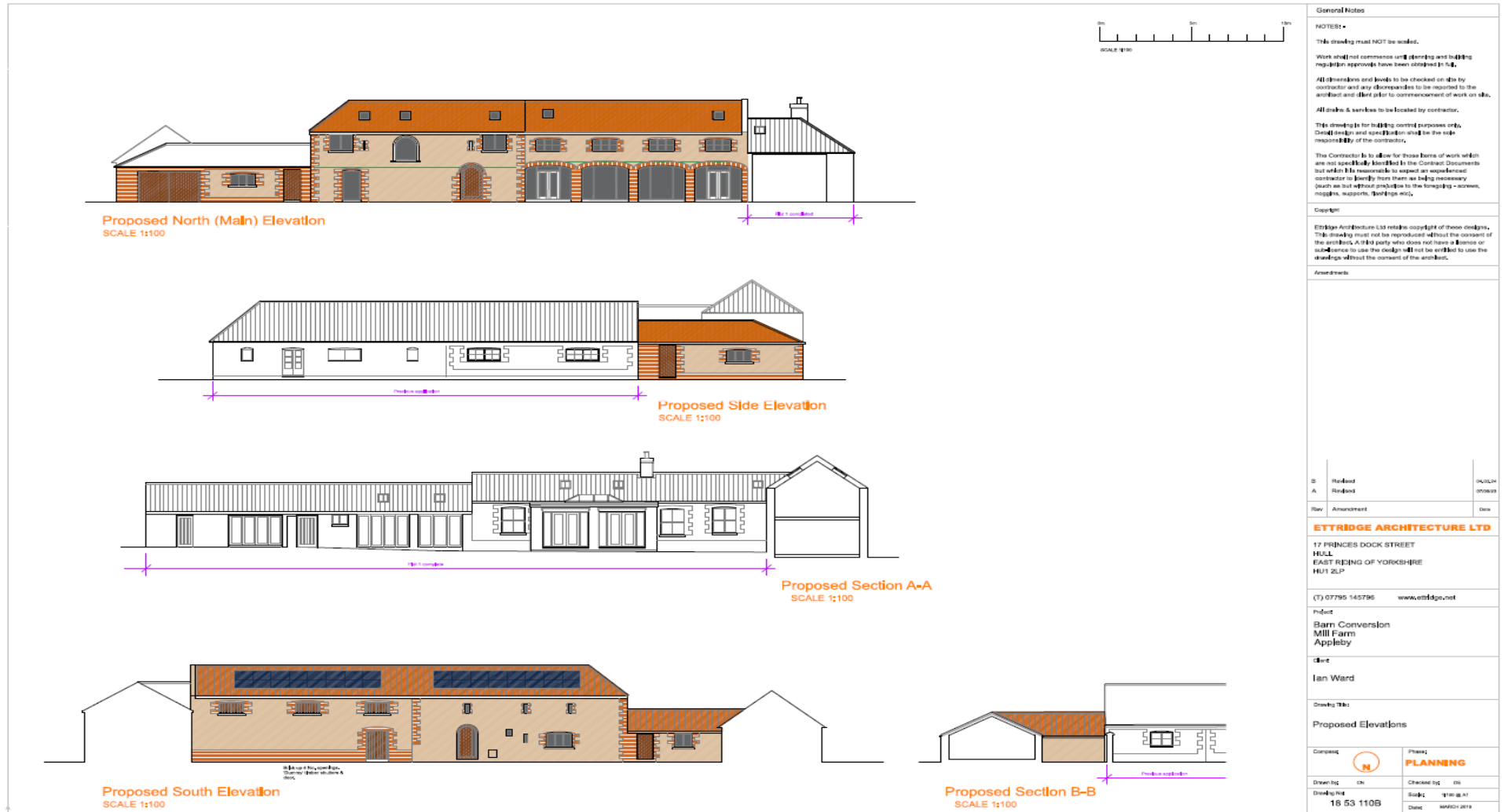
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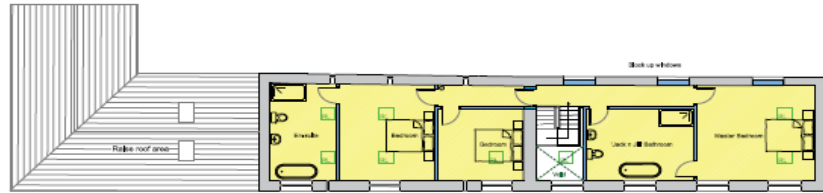
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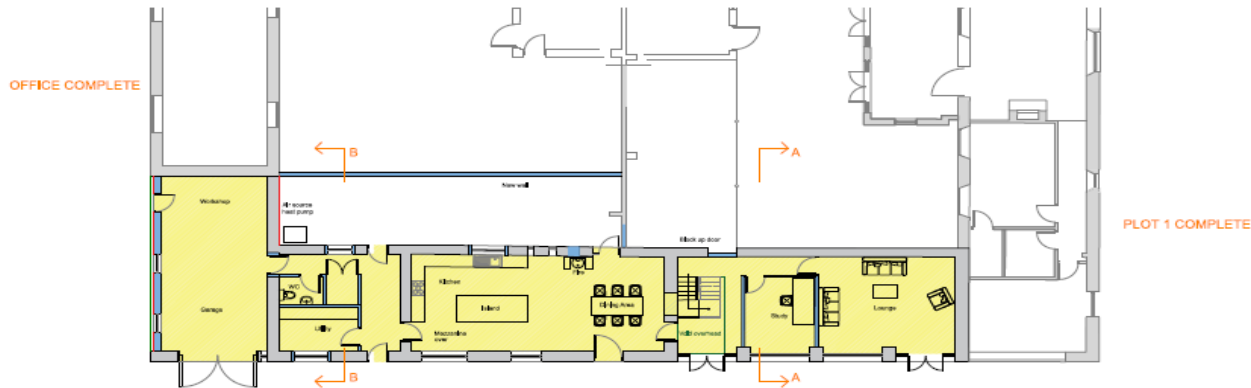
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Appendix 2 – Proposed site layout





Proposed First Floor Plan
SCALE 1:100



Proposed Ground Floor Plan
SCALE 1:100



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Appendix 3 – Tree mounted Barn owl Box

Eco Barn Owl Nest Box

- Provides much needed nesting space for barn owls
- Exercise platform for young owls
- Constructed from recycled plastic and FSC timber



• **Usually dispatched within 1-2months**

£161.99 inc VAT

#216867

About this product

If you are purchasing more than one of these boxes, please note that due to their size and weight, additional shipping costs will apply. We will be in contact once you have placed your order to confirm these costs with you, or if you wish to discuss this before your order, please contact us on 01803 865913 or by email at customer.services@nhbs.com.

The Eco Barn Owl Nest Box is constructed almost entirely out of recycled plastic with the exception of the wooden base. The recycled plastic means that this nest box is extremely robust, requires virtually no maintenance and has a long life expectancy. The wooden base, made from FSC certified chip-board, absorbs moisture from the nest and should be replaced every few years. The black and green colouration ensures the nest box blends into its surroundings. The curved roof integrates with the sides of the box and overlaps the back and the front of the box to ensure the inside of the box remains dry.

The box is secured using a separate fixing bracket that can be fitted to a tree or wall, with screws or straps. Once the bracket is fixed in place the nest box simply hooks onto the bracket.

Please note that Barn Owls are a Schedule 1 species and so an occupied box must only be disturbed or inspected by a licensed individual.

Features:

- * Exercise platform for young owls.
- * Integrated side access hatch for cleaning or monitoring.
- * Internal camera bracket.
- * Entrance hole at correct height to prevent young owls getting out before they have reached maturity.

Specification

Overall height: 67cm
Overall width: 66cm (including hatch closures)
Overall depth: 53cm (including rear bracket)
Interior floor area: 53cm x 33cm
Entrance hole: 13cm high x 12cm maximum width
Height of entrance hole above floor: 44cm
Hatch: 21cm high x 18cm wide
Fixing bracket: 19cm high x 20cm wide x 9cm deep (including hooks)
Stabilising bracket length: 14cm
Weight: approx. 9.5kg

Source - www.NHBS.com

Please Note – This is an example of a suitable box; other boxes are available.

Appendix 4 - Wildlife Legislation and Planning Policies

The Wildlife and Countryside Act (WCA) 1981 (as amended)⁷

The long title of the WCA 1981 as amended;

An Act to repeal and re-enact with amendments the Protection of Birds Acts 1954 to 1967 and the Conservation of Wild Creatures and Wild Plants Act 1975;

- to prohibit certain methods of killing or taking wild animals;
- to amend the law relating to protection of certain mammals;
- to restrict the introduction of certain animals and plants;
- to amend the Endangered Species (Import and Export) Act 1976;
- to amend the law relating to nature conservation, the countryside and National Parks and to make provision with respect to the Countryside Commission;
- to amend the law relating to public rights of way; and for connected purposes.

Bats are a Schedule 5 listed species. Section 9 of this makes it an offence to:

- deliberately capture, injure or kill bats
- damage or destroy a breeding or resting place
- obstruct access to their resting or sheltering places
- possess, sell, control or transport live or dead bats, or parts of them intentionally
- or recklessly disturb a bat while it is in a structure or place of shelter or protection

6.1.1 - Birds

Birds, their eggs and nest are protected under by UK law under the following act: Wildlife & Countryside Act (as Amended) 1981: Schedules 1-4 and in some cases 9.

To summarise, you would be breaking the law by;

- intentionally kill, injure or take birds
- intentionally take, damage or destroy a nest while it's being used or built
- intentionally take or destroy a bird's egg/s
- possess, control or transport live or dead bird, or parts of them, or their eggs
- sell birds or put them on display for sale
- use prohibited methods to kill or take birds

Birds that are listed as a schedule 1 bird are provided further protection. Additionally, it is an offence to:

- disturb them while they are nesting, building a nest, in or near a nest that contains their young
- disturb their dependent young

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Conservation of Habitats and Species Regulations 2010 is an EU directive and consolidates all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species. These sites form a network termed Natura 2000 and include Special Areas of Conservation and Special Protection Areas.

Regulation 55(2) (e-g) & 55(9) (a-b) of The Conservation of Habitats and Species Regulations 2019, Natural England, under powers conferred by the Secretary of State, has authority to issue licences for the following purposes:

- Preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;
- Preventing the spread of disease;
- Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber or any other forms of property or to fisheries; to allow people to carry out activities which would otherwise be illegal;

The Natural Environment and Rural Communities (NERC) Act (2006)

'An Act to make provision about bodies concerned with the natural environment and rural communities; to make provision in connection with wildlife, sites of special scientific interest, National Parks and the Broads; to amend the law relating to rights of way; to make provision as to the Inland Waterways Amenity Advisory Council; to provide for flexible administrative arrangements in connection with functions relating to the environment and rural affairs and certain other functions; and for connected purposes'.

In regards to the planning process sections 40 and 41 are of particular importance:

'Section 40 (1) Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.'

Section 41 lists habitats and species of primary importance to the conservation of biodiversity therefore making these habitats and species a consideration in the planning process.'

National Planning Policy Framework (NPPF) (July 2021)

This policy states under section 15 'Conserving and enhancing the natural environment' that;

174.

Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

175. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

176. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in

relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

177. When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

178. Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 176), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

Habitats and biodiversity

179. To protect and enhance biodiversity and geodiversity, 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; 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.

180. When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

181. The following should be given the same protection as habitats sites:

- a) potential Special Protection Areas and possible Special Areas of Conservation;
- b) listed or proposed Ramsar sites; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

182. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Department for Communities & Local Government Circular 06/2005 Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System

'This circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It complements the national planning policy in the National Planning Policy Framework and the Planning Practice Guidance' (Department for Communities and Local Government, 2005).

Local Planning Policy

The 'North Lincolnshire Local Development Framework – Core Strategy, 2011' outlines the council's planning policy targets. CS17 is the main policy regarding biodiversity:

CS17: BIODIVERSITY

The council will promote effective stewardship of North Lincolnshire's wildlife through:

1. Safeguarding national and international protected sites for nature conservation from inappropriate development.
2. Appropriate consideration being given to European and nationally important habitats and species.
3. Maintaining and promoting a North Lincolnshire network of local wildlife sites and corridors, links and stepping stones between areas of natural green space.
4. Ensuring development retains, protects and enhances features of biological and geological interest and provides for the appropriate management of these features.
5. Ensuring development seeks to produce a net gain in biodiversity by designing in wildlife, and ensuring any unavoidable impacts are appropriately mitigated for.
6. Supporting wildlife enhancements that contribute to the habitat restoration targets set out in the North Lincolnshire's Nature Map and in national, regional and local biodiversity action plans.
7. Improving access to and education/interpretation of biodiversity sites for tourism and the local population, providing their ecological integrity is not harmed.

