



Ecology
Arboriculture
GIS and mapping
Landscape Architecture

Preliminary Roost Assessment

Site: The Lodge, Worlingworth

Client: Mr J. Taylor

Date: March 2024



Document Control Sheet

Project Scope: Preliminary Roost Assessment

Project Title: The Lodge, Worlingworth

Our Reference: J240252

Client: Mr J. Taylor

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1. Summary

Ground Control (Professional Services division) was commissioned by Mr J Taylor to undertake a Preliminary Roost Assessment at The Lodge, New Road, Worlingworth, Suffolk IP13 7PA. The purpose of this assessment was to provide an evaluation of the ecological value of the site, and to identify key ecological constraints to the proposed works in relation to bats and birds. The survey was undertaken on 12th March 2024.

The current proposals for the site include the demolition of the existing garage to be replaced with a new single storey brick-built extension with pitched tiled roof, the construction of a new extension to the south-eastern elevation and the replacement of the existing flat roof on the extension to the north of the roundel with a new pitched roof.

Ecological constraints relating bats and birds within the building and surrounding environment were considered during the survey. A full description of the recommendations can be found within Section 5, however, provided below is a summary of the ecological issues recommended for further consideration as a result of our initial investigations:

| Ecological Consideration | Recommendations (further surveys & mitigation) | Timing |
|-----------------------------|--|---|
| Breeding Birds | Habitat considered suitable for breeding birds – sensitive working practices necessary. See Section 5 for details. | Breeding bird season typically runs from March to September, inclusive. |
| Roosting Bats | The building holds negligible suitability for roosting bats and therefore no further surveys are required. Suitable enhancements have been proposed in Section 5. | N/A |
| Foraging and Commuting Bats | Sensitive lighting scheme employed during and post construction. | During and post construction |

2. Introduction

2.1 Background to the Scheme

Ground Control (Professional Services division) was instructed by Mr J Taylor, 'the Client', to undertake a Preliminary Bat Roost Assessment (PBRA) at The Lodge, New Road, Worlingworth, Suffolk IP13 7PA. The survey is required to provide guidance on the likelihood of the works having an impact upon bats and/or birds.

The PBRA is to support a planning application to Babergh and Mid-Suffolk District Council for the erection of extensions to an existing property; this report details the findings of the survey work undertaken in March 2024.

2.2 Site Overview

The site is located just north of the village of Worlingworth, Suffolk, centred on approximate Ordnance Survey (OS) National Grid Reference: TM 22789 69763 (Figure 1).

The site comprises a detached residential property set in a modest plot, with frequently mown lawn and gravel for parking. The property comprises a mix of roof types, including a thatched roundel, pitched tiles and flat roofing.

The location is rural, immediately surrounded by arable, residential and farms.

2.3 Proposals & Impact

A full set of architect's drawings are presented in Appendix 1.

The property currently comprises a thatched roundel with various brick-built extensions and an adjoining garage to the north-western elevation.

In summary, the following is proposed (see also Figure 2):

- Demolition of the existing garage to be replaced with a new single storey brick-built extension with pitched tiled roof. This will require tying in the roof to the adjacent existing roof along the end tiles only.
- Build a new extension to the south-eastern elevation onto lawn with a new pitched roof onto an existing flat roof. This will require cutting into the thatch on the roundel.
- Build a new pitched roof onto the existing flat roofed extension to the north of the roundel. This will require cutting into the thatch.

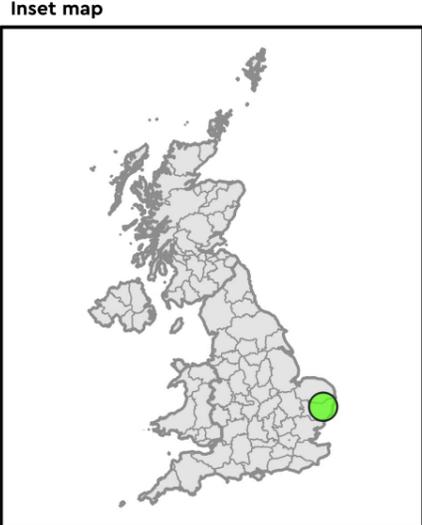


Figure Number:
Figure 1

Client:
Mr J Taylor

Site:
The Lodge, Woodbridge

Title:
Site Location and Indicative Boundary

Drawing No.
J240252-GGC-ZZ-ZZ-D-ECO-0100

Legend:
Site Boundary (Indicative)

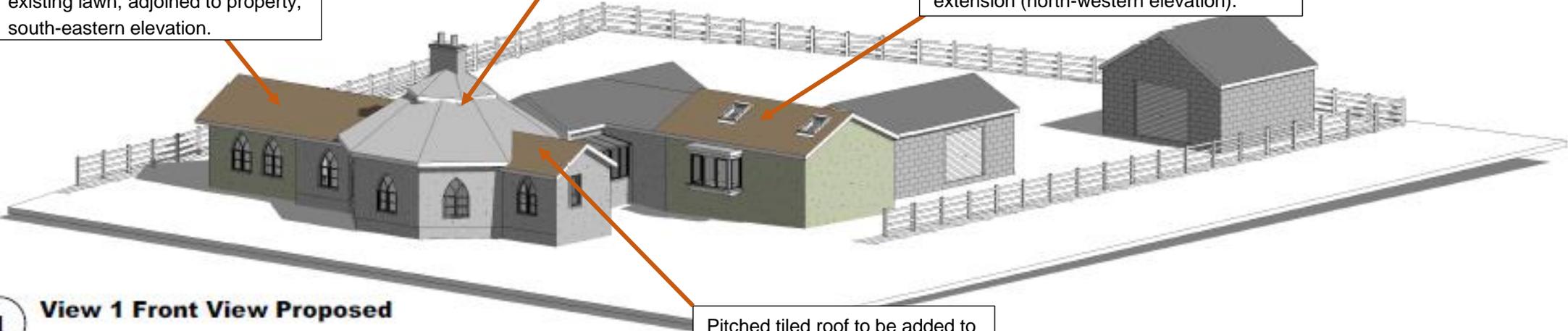
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| Mar. 2024 | IH | PS |

Notes:
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New extension to be built onto existing lawn, adjoined to property, south-eastern elevation.

Thatched roundel.

Demolition of garage to replace with new extension (north-western elevation).



Pitched tiled roof to be added to existing flat-roofed extension.

1 View 1 Front View Proposed

3. Legislation

3.1 Relevant Wildlife Legislation

Certain habitats and species are protected under legislation. The principal legislation relevant to the proposed development is as follows:

- The Conservation of Habitats and Species Regulations 2017 (as amended)¹ [‘The Habitats Regulations’]. The Habitats Regulations implement The Habitats Directive 1992 [92/43/EEC] into English Law.
- European Union (Withdrawal Agreement) Act 2018 (as amended).
- Wildlife & Countryside Act 1981 (as amended)² (WCA).
- The Natural Environment & Rural Communities Act 2006 (NERC).

Bats

With respect to bats, under The Habitats Regulations it is an offence to:

- Deliberately capture, injure or kill a bat.
- Deliberately disturb a bat in a way that would affect its ability to survive, breed or rear young (or hibernate or migrate) or significantly affect the local distribution or abundance of the species.
- Damage or destroy a roost. This is an ‘absolute’ offence and need not be deliberate or intentional.
- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat.

With respect to bats under the WCA, it is an offence to:

- Intentionally or recklessly disturb a bat at a roost.
- Intentionally or recklessly obstruct access to a roost.
- Sell and advertise.

Birds

All wild birds whilst actively nesting are afforded legal protection under the Wildlife & Countryside Act 1981 (as amended)³ (WCA). Special protection is also afforded to birds listed on Schedule 1 of the WCA which makes it an offence to disturb these species at nest or the dependent young.

In England and Wales, all birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to:

- a) intentionally kill, injure or take any wild bird;
- b) intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- c) intentionally take or destroy the egg of any wild bird;
- d) have in one’s possession or control any wild bird (dead or alive), part of a wild bird or egg of a wild bird;

¹ Amended by the Conservation of Habitats and Species (Amendment) Regulations 2012 S.I. 2012/1927.

² Amended by the Countryside & Rights of Way Act (2000).

³ Amended by the Countryside & Rights of Way Act (2000).

- e) intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird; and
- f) have in one's possession or control any birds of a species listed on Schedule 4 of the Act unless registered in accordance with the Secretary of State's regulations.

3.2 Planning Context

The National Planning Policy Framework

The National Planning Policy Framework (NPPF) 2019 (amended 2021) – which applies only to England – was first published in 2012. It provides the framework for producing local plans for housing and other development, which in turn provide the background against which applications for planning permission are decided.

The NPPF must be taken into account in preparing the development plan and is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements.

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

- 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;
- Development on land within or outside a Site of Special Scientific Interest (SSSI), 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 SSSIs;
- 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
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity. 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.

Of particular significance in the 2021 amendments, the NPPF now requires opportunities to incorporate biodiversity improvements in and around development; this demonstrates further steps taken by the government towards achieving the 25 Year Environment Plan (2018).

4. Methodology

The survey was undertaken in the following stages.

- **Stage 1** – A desk study of the site, the online resource MAGIC was undertaken to identify statutory designated sites and granted European Protected Species (EPS) licences within 2km of the site.
- **Stage 2** - Walkover survey: an assessment was made of the target building and its suitability to support any bat roosts within the proposed work location, and
- **Stage 3** – A report of the survey findings and any recommendations was drafted, for submission to the client.

4.1 Desk Study

The online Multi-Agency Geographic Information for the Countryside (MAGIC)⁴ resource was consulted to collate records of designated sites and conservation areas within a 2km radius of the site. This area was considered to be sufficient to cover the likely zone of influence for the nature of the works due to take place on site.

Records from the local biological records centre were not requested due to the small-scale nature of the proposals and more accurate information gained from an actual site visit.

4.2 Preliminary Bat Roost Assessment

The site was assessed on 12th March 2024 by Dru Hall BSc (Hons) MCIEEM, CEnv in accordance with Good Practice Guidelines, Collins (2023)⁵. Dru is a Level II Bat Licensed surveyor [2015-10742-CLS-CLS]. Buildings and trees are categorised in terms of their 'suitability' to support a roost or provide suitable habitat, as per 'Table 4.1' from the Guidelines (see below).

The assessment entails a detailed inspection of a structure to look for features which bats could use for entry/exit and roosting and to search for bats and any signs of use by bats. A high-powered torch and binoculars were used to aid the observations. An internal loft inspection was undertaken on the day of the assessment.

A nesting bird check was also undertaken at the property.

⁴ MAGIC maps. <https://magic.defra.gov.uk/>

⁵ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London.

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

| Potential suitability | Description | |
|-------------------------|--|---|
| | Roosting habitats in structures | Potential flight-paths and foraging habitats |
| None | No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels). | No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats). |
| Negligible ^a | No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. | No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour. |
| Low | A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ^c). | Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub. |
| Moderate | A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed). | Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water. |
| High | A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^b and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site. | Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts. |

a Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).

b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

c Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al.*, 2016 and Jansen *et al.*, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

5. Results

5.1 Desk Study

Designated Sites

For statutory and non-statutory designated wildlife areas, none were identified within 1km of the site. The nearest statutory designated areas are over 8km away.

Protected Species Licencing

Within 2km of the site, there were no EPSML or returns identified for bats. The closest licence was identified at 2.3km south-west of the site for soprano pipistrelle *Pipistrellus pygmaeus* (2016 – 2021) – non-breeding.

5.2 Field Survey

Designated Sites

The property is a relatively small single-storey structure; it comprises a thatched roundel at the centre, with a series of brick-built rooms leading off the roundel with a mixture of flat and pitched tiled roofs. A garage extension is adjoined at the north-western elevation.

5.3 Protected Species

Bats

The existing garage is brick built with a pitched, red-tiled roof over breathable roofing membrane with ridge tiles, likewise the adjoining building of the main property. There are wooden fascia boards all around this area of the property. The two roofs were newly replaced less than two years' previous. There were no gaps under the tiles, except for end tiles which have plastic grilles fitted to prevent ingress of mammals. There were no gaps under the fascia boards. Inside the building there was no evidence of current or of previous use by bats; none of the surfaces had been cleaned recently.

With respect to the thatched roundel, the thatch itself was in good condition and re-roofed within the last ten years. There were no gaps in the thatch itself or under the areas where it adjoins to the walls of the roundel. The loft space of the roundel comprises thatch underlain with roofing felt and lathe and plaster. There was no evidence of current or of previous use by bats inside the loft space. None of the flat roofed areas had any suitable bat roosting features.

The property is assessed as having 'Negligible' bat roost potential due to the lack of conducive bat roosting features and evidence of current or previous use by bats and, therefore, no further surveys recommended.

Photographs are shown in Table 1 below.

Table 1: Preliminary Bat Roost Assessment Photographs.



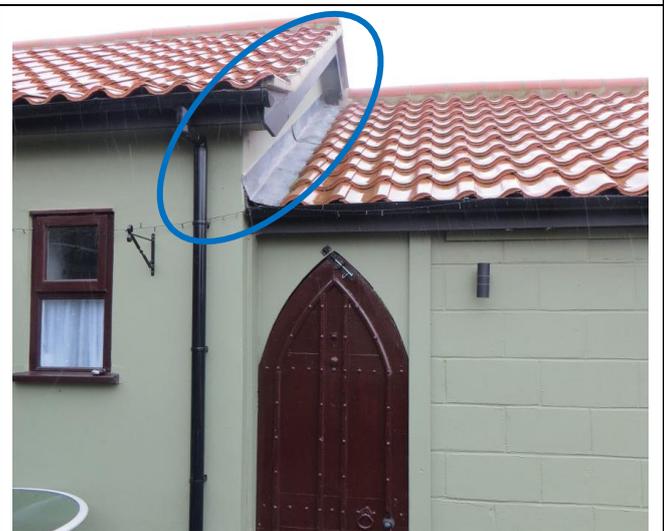
Front of property showing the thatched roundel and existing garage (to be demolished) and parking.



Extension to be added onto the south-eastern elevation (onto lawn). Flat roofed area will be replaced with a pitched roof and cut into thatch.



Existing garage. Re-roofed in the last two years. No gaps under tiles. All end tiles have plastic grilles to prevent ingress of mammals.



Roof tie-in area of proposed new extension to replace garage. Re-roofed in the last two years. No gaps under tiles or fascias. All end tiles have plastic grilles to prevent ingress of mammals.



Inside existing garage. New roofing membrane under tiles. No evidence of current or of previous use by bats.



Loft space of thatched roundel.

Recommendations & Mitigation Measures

The extent of disturbance should be reduced where possible; employing a sensitive lighting scheme during the construction works; and avoiding installation of artificial security lighting post construction, particularly along the southern, eastern and western elevations, preventing obstruction to the commuting lines.

The provision of two bat boxes, as part of the project, would provide additional roosting habitat for local bats. These boxes could include the Schwegler 1FD bat box or Schwegler 2F general purpose bat box for example. Alternatively, 2 x Schwegler 1WI (Summer and Winter Bat Box) could be installed on the southern elevation of the building.

The boxes should be located with appropriate connectivity to the wider landscape and situated at a minimum height of 3m above ground level.

Nesting Birds

The assessment took place during the bird nesting season and the start of a bird's nest was observed at the roundel. The Client was advised that no works could commence in this area until the chicks had fledged.

There were no other signs of nesting birds at the property during the site visit or evidence of use by barn owl *Tyto alba*.

Recommendations & Mitigation Measures

The breeding bird season is between March and August, and therefore appropriate seasonal timing is the most effective way to avoid legislative issues relating to nesting birds. The following approach should be adopted during the proposed works:

- Undertake the construction works between the months of September and February where possible (outside of the breeding season);
- Any activities proposed between the months of March and August should be subject to a nesting bird check undertaken by the client/contractor; a maximum of 48 hours prior to commencement of works.

In order to enhance the site for birds, a nest box scheme is encouraged through the installation of the following boxes (or similar boxes):

- Three small hole (1 x 26mm, 1 x 28mm and 1 x 32mm) bird boxes placed throughout the site on suitable trees and buildings. This will provide nesting opportunities for small passerines such as blue tit and great tit (*Parus major*).
- Two small, open fronted bird nest boxes should be placed on trees with dense cover to offer shelter from predators. These boxes typically attract robin, blackbird (*Turdus merula*) and wren (*Troglodytes troglodytes*).

6. Discussion & Recommendations

Ground Control undertook a PBRA on 12th March 2024 at The Lodge, New Road, Worlingworth, Suffolk IP13 7PA to support a planning application to Babergh and Mid-Suffolk District Council for small-scale householder development of extension and roof work.

The desk study did not indicate that the proposals would impact any nearby designated wildlife areas and there were no bat EPMSL within 2km of the site.

None of the areas to be impacted by the proposals were conducive for roosting bats and no evidence of current or of previous use by bats was observed. As such roost suitability was assessed as being 'Negligible' and no further bat surveys are currently recommended.

The start of a bird's nest was observed at the roundel and the Client was advised that no works could commence in this area until the chicks had fledged. There were no other signs of nesting birds at the property or evidence of use by barn owl.

Appropriate recommendations to safeguard both foraging and commuting bats and nesting birds including a sensitive lighting scheme and pre-works check for nesting birds have been proposed. Further nature positive enhancements including bat box and bird box schemes are recommended.

If in the unlikely event that bats are discovered during works, all works should cease until advice has been sought from a suitably qualified Ecologist.

The survey results are typically valid for approximately 18 months, after which time the status of the site may require re-assessment.

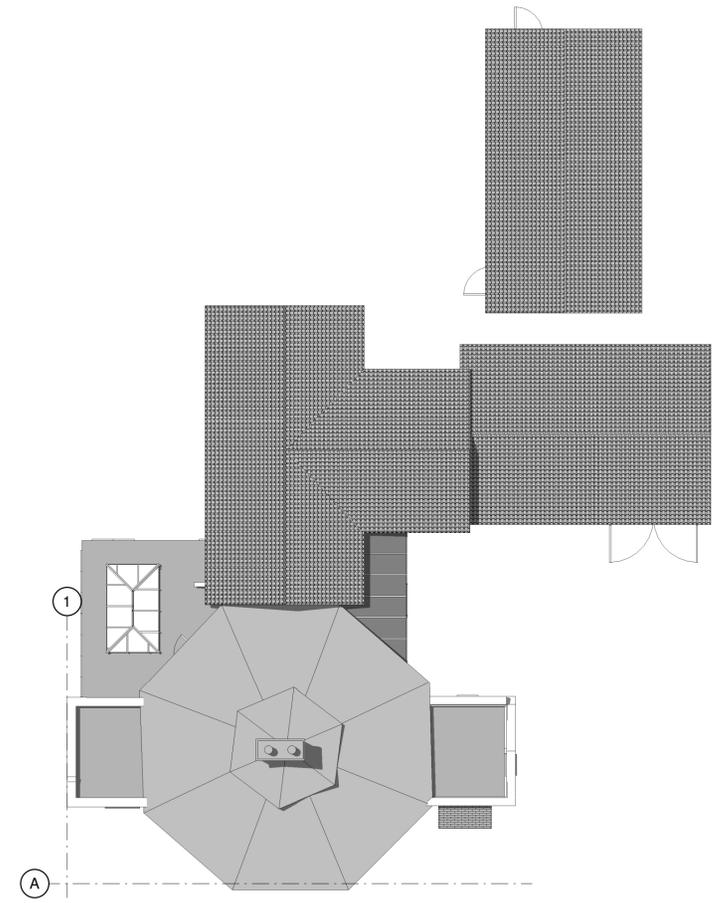
Appendix 1: Existing & Proposed Plans



By Room Name Legend

- bathroom
- bedroom 1
- bedroom 2
- bedroom 3
- conservatory
- corridor
- garage 2
- hall
- kitchen
- lounge
- office
- storage
- store
- utility
- wc

**1 Existing Ground Floor Plan
1 : 100**



**2 Existing Roof Plan
1 : 100**



NEW ROAD

| Rev | Description | Date |
|-----|---|----------|
| A | Issued for Householder Planning Application | Jan 2024 |
| | | |
| | | |



| | |
|--------|-------------------------|
| CODE | SUITABILITY DESCRIPTION |
| STATUS | PURPOSE OF ISSUE |

LK DESIGN SERVICES
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CLACTON ON SEA
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PROJECT ADDRESS
THE LODGE NEW ROAD WORLINGWORTH
1P13 7PA

PROJECT TITLE
1. DEMOLISH THE EXISTING GARAGE AND REBUILD AS A HABITABLE ROOM.
2. EXTEND THE EXISTING BEDROOM 3.
3. SUPPLY AND FIT NEW SLIDING DOOR TO BEDROOM 2

Sheet Title
Existing Plans

| | | |
|--------------------------------|------------------------|------------------|
| DRAWN BY LK | CHECKED BY | DATE Jan 2024 |
| SCALE (@ A1) 1 : 100 | PROJECT NUMBER 1975 | |
| DRAWING NUMBER PL 10 | | A |

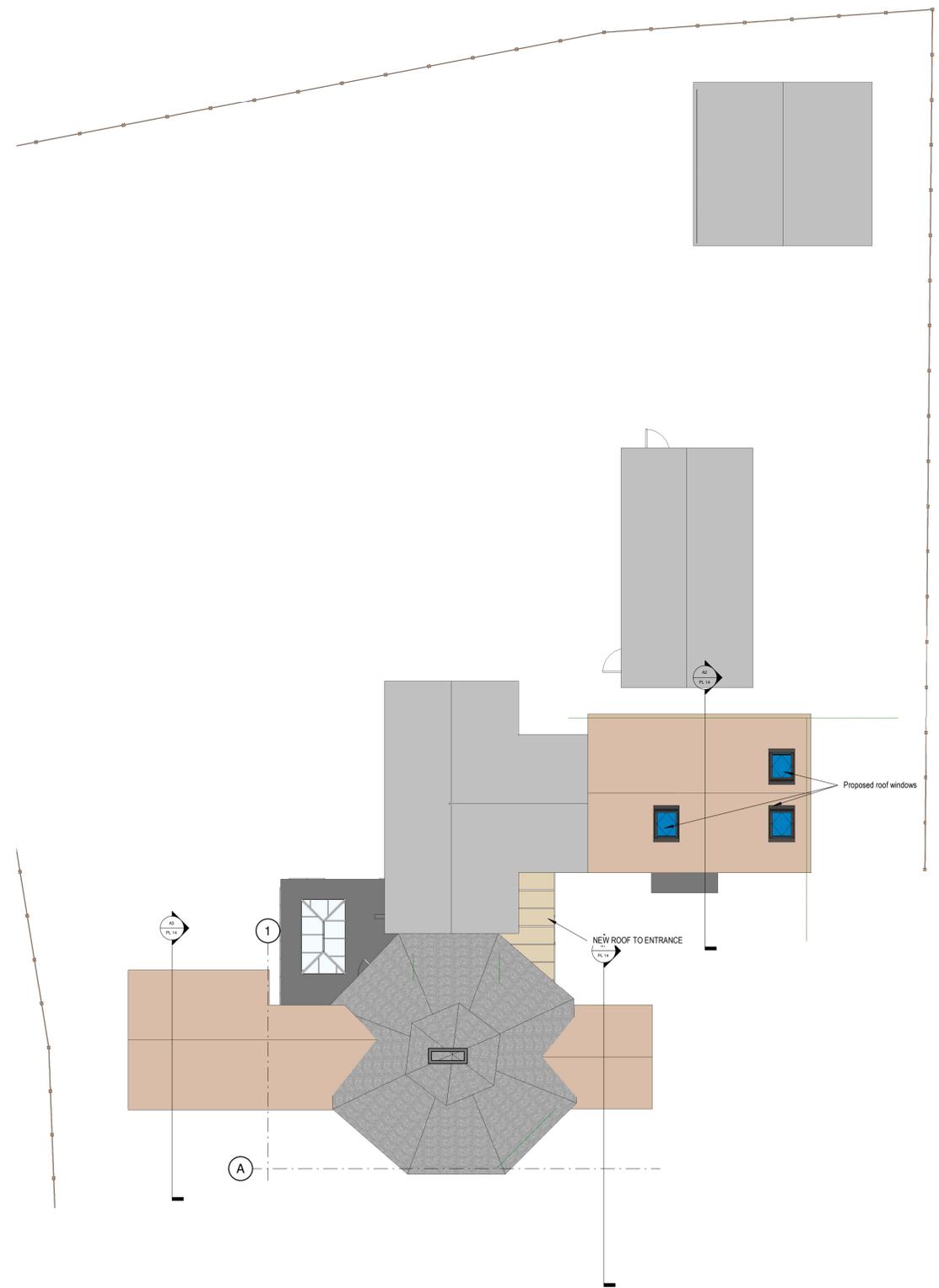


By Room Name Legend

- bedroom 1
- bedroom 2
- bedroom 3
- bedroom 4
- conservatory
- en-suite
- hall
- kitchen
- lounge
- storage
- utility room

- Schedule of materials.**
1. WALL TO BE RENDERED TO MATCH THE EXISTING
 2. WINDOWS ARE TO BE TIMBER TO MATCH THE EXISTING (DOUBLE GLAZED).
 3. ROOF TILES ARE TO MATCH EXISTING (PAN TILES)
 4. 3 NO. VELUX ROOF WINDOWS.
 5. NEW DOORS TO BE TIMBER.
 6. NEW ROOF TO ENTRANCE AREA.

1 Proposed Ground Floor Plan
1 : 100



2 Proposed Roof Plan
1 : 100

NEW ROAD

| Rev | Description | Date |
|-----|---|----------|
| A | Issued for Householder Planning Application | Jan 2024 |
| | | |
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| CODE | SUITABILITY DESCRIPTION |
|--------|-------------------------|
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| STATUS | PURPOSE OF ISSUE |
| | |

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PROJECT ADDRESS

THE LODGE NEW ROAD WORLINGWORTH
1P13 7PA

PROJECT TITLE

1. DEMOLISH THE EXISTING GARAGE AND REBUILD AS A HABITABLE ROOM.
2. EXTEND THE EXISTING BEDROOM 3.
3. SUPPLY AND FIT NEW SLIDING DOOR TO BEDROOM 2

Sheet Title

Proposed Plans

| | | |
|--------------------------------|------------------------|------------------|
| DRAWN BY LK | CHECKED BY | DATE Jan 2024 |
| SCALE (@ A1) 1 : 100 | PROJECT NUMBER 1975 | |
| DRAWING NUMBER PL 13 | A | |

