

# BAT RISK ASSESSMENT AND BAT SURVEY REPORT

# RUSHFORD HALL THETFORD

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### BAT RISK ASSESSMENT AND BAT SURVEY REPORT

## RUSHFORD HALL THETFORD NORFOLK IP24 2SF

### GRID REF TL 92624 81205

## REPORT FOR SAKER ESTATES LTD

**Quality Assurance** 

Version	Prepared by	Date	Checked by	Date	Approved by	Date
R1	Tim Asplin	10/06/2022	Hannah Currie	13/06/22	Graeme Skinner	20/06/2022

This assessment is intended to provide an accurate description of findings from the desktop study and from survey work undertaken on the dates shown; however, all ecological data has a shelf life, which is dependent on the discretion of the governing body overseeing licencing or condition application. This is usually one survey season. This assessment cannot fully account for the reliability of third-party data provided or for any changes to site conditions following the completion of the survey work due to activities carried out on site or the dynamic nature of the natural environment. All work carried out by Naturally Wild Consultants Ltd is subject to our Terms and Conditions.

The report has been produced in accordance with current best practice guidelines.



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#### **EXECUTIVE SUMMARY**

Naturally Wild were instructed to undertake a bat risk assessment and bat activity surveys, at Rushford Hall, Thetford. The survey area was the roof space of a country house undergoing renovation. The proposals are to remove the existing roof and replace it with a new, watertight one.

The assessment comprised two parts: a desktop study and three survey visits. The desktop study collated available public information regarding the biodiversity of the area, including the habitat structure of the site and surrounding area and the presence of any statutory or non-statutory designated sites.

The initial survey visit consisted of an assessment of all habitats on site and in the surrounding area to determine their value for bats (as well as other protected/notable species) and to carryout a dusk bat activity survey this was conducted on 12/05/2022 by Ecologists Edward Simpson MSc, Timothy Asplin BSc (Hons) ACIEEM, David Massey BSc MSc and Eve Cavey BSc MSc.

The surveyed area was found to be of moderate ecological value. Containing a Common Pipistrelle day roost and Brown Long Eared day roost both roosts contain approximately two individuals.

A bat mitigation licence will be required from Natural England prior to the roof replacement taking place with mitigation used to protect bats during the construction phase of the development. This will include a soft strip of roof tiles supervised by a licenced bat ecologist along with bat boxes placed on site during development accompanied with a bat roof ridge access tile and a bat roof access tile being included within the roof once constructed.

Providing the recommendations of this report are implemented in full, Naturally Wild would conclude that there will not be a significant impact to bats or any other protected species as a result of the proposed works.



#### BAT RISK ASSESSMENT AND BAT SURVEY REPORT: RUSHFORD HALL, THETFORD

#### 1 INTRODUCTION

Naturally Wild were instructed to undertake a bat risk assessment and bat activity surveys at Rushford Hall, Thetford (Figure 1). The survey area comprised of a large country house, this being the surveyed structure, and the surrounding area of managed garden/amenity grassland along with a sizeable amount of mixed deciduous woodland running along the eastern flank of the site. The main objective of the assessment was to determine the suitability of the site to support bats (and other protected species) and to check for any evidence of their presence, as well as the presence of any protected or notable habitats.

The proposals are to replace the roof on the surveyed structure as it is in a state of disrepair leading to leaking and damage to the structure. An ecological assessment is required to determine if any protected or notable species/habitats are likely to be affected by the proposed works, and to show how any negative ecological impacts would be mitigated and compensated.



Figure 1. Site location plan. Red line shows the footprint of surveyed structure. (© Crown Copyright and MAGIC database rights 2020. Ordnance Survey 100022861).



#### 2 RELEVANT LEGISLATION

British wildlife is protected by a range of legislation, the most important being the Wildlife and Countryside Act 1981, the Countryside Rights of Way Act 2000 and The Conservation of Habitats and Species Regulations 2017 (as amended).

The Wildlife and Countryside Act, as amended mainly by the Countryside Rights of Way Act, protects species listed in Schedules 5 and 8 of the Act (animals and plants respectively) from being killed, injured, and used for trade. For some species, such as great crested newts and all bat species, the provisions of this act go further to protect animals from being disturbed or taken from the wild and protects aspects of their habitats. The Act also stipulates that offences occur regardless of whether they were committed intentionally or recklessly. The parts of this legislation that apply to most reptile species are in regard to killing, injury and trade only and do not protect their habitat, nor are they protected from disturbance or from being taken from their habitat.

The Conservation of Habitats and Species Regulations ('the Habitats Regulations') is the English enactment of European legislation and provides similar but subtly different protection for species listed on Schedules 2 and 4 of those regulations. Species to which these provisions apply are known as European Protected Species. Activities that might cause offences to be committed can be legitimised by obtaining a licence from the relevant statutory body.

All British bat species are listed on Schedule 5 of the Wildlife and Countryside Act 1981 and are afforded protection under Section 9 of this Act. In addition, all British bat species are listed on Schedule 2 of The Conservation of Habitats and Species Regulations and are protected under Regulation 39 of these Regulations. The Act and Regulations makes it an offence to:

Intentionally kill, injure, take (handle) or capture a bat;

Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not) – under the Habitats Regulations it is an offence to damage or destroy a breeding site or resting place of any bat; or

Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection – under the Habitats Regulations it is an offence to deliberately disturb a bat (this applies anywhere, not just at its roost) in such a way as to be likely to affect its ability to survive, breed, reproduce, rear or nurture its young, or hibernate.

Further details of the above legislation, and of the roles and responsibilities of developers and planners in relation to bats, can be found in Natural England's (formerly English Nature) Bat Mitigation Guidelines (Mitchell-Jones, 2004), and further details on the legislation protecting other species of British wildlife relevant to this assessment can be found in section 8.1 of this report.



#### 3 METHODOLOGY

#### 3.1 Overview

The assessment comprised two parts: a desktop study and three visits. All survey and assessment work has been completed in line with official guidelines produced by Natural England and the Chartered Institute for Ecology and Environmental Management, and British Standard document BS 42020: 2013 *Biodiversity – Code of practice for planning and development.* 

The desktop study collated available public information regarding the biodiversity of the area, including the habitat structure of the site and surrounding area and the presence of any statutory or non-statutory designated sites, and any records of previously granted European Protected Species (EPS) mitigation licences in relation to certain species, using the Multi-Agency Geographic Information for the Countryside (MAGIC) resource.

The objective of the surveys was to determine the suitability of the site for roosting bats and check for any evidence of their presence. This took the form of an initial bat risk assessment of the site, which was followed by three bat activity surveys. In accordance with good practice, the assessment would also ascertain if any other protected species may be using the site, document the habitats present and determine any potential ecological impacts during and following the completion of the works. The findings of the assessment would identify the need for any additional survey effort, mitigation measures and/or compensation to be incorporated into the proposed works. The bat activity surveys would be used to confirm the presence of roosting bats on site and determine the numbers and species of bats present, or to confirm likely absence, along with any further mitigation and/or compensation measures that may be required. All survey work would be completed under suitable weather conditions and by experienced ecologists.

The survey work and the preparation of this report has been conducted by ecologists Tim Asplin BSc (Hons) ACIEEM, Ed Simpson BSc MSc and Patrick Howard? who are experienced in carrying out ecological assessments, with assistance on survey work provided where necessary.

#### 3.2 Survey Area

The application site is located at Grid Reference TL 92624 81205 and can be accessed via Spalding Chair Hill Road. The assessment focused on the application site as shown in Figure 2, as well as all habitats in the immediate surrounding area (where access was available).





Figure 2. Location of the surveyed area. The footprint of the surveyed structure is shown by the red line. (Image taken from Google Earth Pro: ©2020 Google)

#### 3.3 Survey Constraints

There were no constraints with regards to site access or completion of the survey objectives across the site.

#### 3.4 Site Assessment

The initial survey was carried out by Ecologists Ed Simpson and Tim Asplin on Wednesday 15<sup>th</sup> December 2021 and consisted of an assessment of the habitats on site to determine their suitability for roosting bats. An assessment of the on-site building was carried out in order to identify the presence of any potential roost features (PRFs) for bats, and/or evidence of roosting bats, in accordance with the current Bat Conservation Trust (BCT) survey guidelines (Collins, 2016). An external inspection of the building was carried out, focussing on features that may provide roosting opportunities or access points to roosting features internally, such as the roof and ridge tiles. An internal inspection was also carried out, with any roof spaces present checked for any evidence of bats. The building was then categorised based on its assessed value for roosting bats, in accordance with the BCT guidelines, detailed in Table 1.

Additionally, a preliminary ground level roost assessment of any trees on or directly adjacent to the site was carried out in order to identify the presence of any potential roost features (PRFs) for bats, such as split bark, woodpecker holes and other cavities for bats and/or evidence of roosting bats. All trees assessed were categorised in terms of their value in accordance with the current BCT guidelines, shown in Table 1.

In addition, an inspection was carried out on the exterior of the northern elevation of the on-site buildings' roof on Thursday 3<sup>rd</sup> February 2022 by Senior Ecologist Ben Willers (current Bat Class Licence Registration number 2021-50896-CLS-CLS) and Ecologist Tim Asplin to determine its suitability for roosting bats. Scaffolding was in place to allow a more detailed examination of the roof than was



previously possible during the initial survey. An endoscope and powerful torch were used during the inspection.

Suitability	Habitat description	Further action required?		
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further bat risk assessment effort or bat activity surveys are required.		
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs, but with none seen from the ground or	Structures: One bat activity survey is required to determine whether the structure is being utilised by roosting bats; this may be a dusk or dawn survey. This survey must occur between May and August. The discovery of a roosting bat during this single bat activity survey will require further survey effort.		
	features seen with only very limited roosting potential.			
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection conditions and surrounding habitat, but unlikely to support a roost of high conservation status.	Two bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey. One survey must occur between May and August.		
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Three bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey, with an additional survey (either dusk or dawn). Two surveys must occur between May and August.		

Table 1.	<b>Guidelines</b>	for assessing	bat roosting	potential of	structures and trees.
	Guiacinica	ioi assessing	bacroosting	potential of	Structures and trees.

Evidence of roosting bats includes: bat droppings in, around or below an entrance hole; staining around an entrance hole; audible squeaking at dusk or in warm weather; smoothening of surfaces around cavity or an entrance hole; distinctive smell of bats.

#### 3.5 Bat Activity Surveys

In addition to the above, as the building was determined to be of value for roosting bats during the initial assessment, in accordance with the above guidelines, three activity surveys were carried out. A dusk emergence survey was carried out on the evening of Thursday 12<sup>th</sup> May 2022, a pre-dawn return to roost survey was carried out on the morning of Thursday 26<sup>th</sup> May 2022 and lastly another dusk emergence survey was carried out on the evening of Thursday 09<sup>th</sup> June 2022. The surveys were carried out by four surveyors using bat detectors Echo Meter Touch 2 and Magenta 5 bat detectors along with a Bat Logger M2, an Infrared detector and direct visual observation. The surveyors took up suitable vantage points around the building in order to observe any bats emerging/returning to roost, with the detectors used to identify bat calls and confirm species present.



The dusk surveys commenced 20 minutes before sunset and ended two hours after sunset and the predawn survey commenced two hours before sunrise and concluded 20 minutes after sunrise. Naturally Wild staff who conducted the dawn surveys included Tim Asplin, Ed Simpson, Dave Massey and Patrick Howard. Naturally Wild staff who conducted the dusk surveys included Tim Asplin, Ed Simpson, Eve Cavey and Patrick Howard.

#### 3.6 Other Wildlife

In accordance with good practice, the site and surrounding areas were assessed for their potential to support other protected and notable species and for the presence of any evidence of such. Based on the habitats present, the assessment was carried out with regard to badgers (*Meles meles*), great crested newts (GCNs) (*Triturus cristatus*), reptiles and nesting birds, as well as the presence of any invasive, non-native flora or fauna.



#### 4 RESULTS

4.1 Desktop Study

### 4.1.1 Designated Sites

#### Statutory Designated Sites:

No statutory designated sites were located either on the proposed works site, or within a 1km radius of it. The nearest designated site was the Breckland Farm SSSI, 1.24km to the west, which was contiguous with the wider Breckland SPA (Figure 3). This site is designated as such, because it supports an internationally important population of stone curlew (*Burhinus oedicnemus*). The arable farmland, undisturbed by recreational activities, provides ideal habitat for these birds to nest. It also is linked to and connects several nearby areas of heathland, which also support stone curlews.



Figure 3. Location of Rushford Hall (red rectangle), showing proximity to the Breckland Farmland (SSSI), part of the Breckland (SPA). (© Crown Copyright and MAGIC database rights 2020. Ordnance Survey 100022861).

Despite the sensitive nature of the designated site, the limited scale and the nature of the proposed works, means that any direct or indirect impacts they may have, on this site or any other designated sites in the wider landscape, are predicted to be negligible.

#### Non-statutory Designated Sites:

No non-statutory designated sites were located on site, however, there were three such sites within a 1km radius. In the area of Suffolk in the radius, there was the Rushford Heath County Wildlife Site and on the Norfolk side there were County Wildlife Sites 740 and 742, on the northern banks of the Little Ouse river.



The limited scale and nature of the proposed works means that any predicted impacts, either direct or indirect, that they may have on this site, are to be negligible.

#### Notable Habitats:

There were numerous, loosely connected areas of UK BAP priority habitat, within a 1km radius of the proposed works site. The river Little Ouse, running from the west to north-east of the site (167m away at closest point), is bordered along its length by broadleaved deciduous woodland and floodplain grazing marsh. To the south and east of the river, and site, are 11 loosely connected areas of broadleaved deciduous woodland. The closest two woodland patches were 21m east and 125m west of the building being renovated.

As with the designated sites, the limited scale of the works are likely to mean any direct or indirect impacts on local habitat, are likely to be negligible.

#### 4.1.2 Bat Records

Due to the split county nature of the area, biological records were obtained from both the Norfolk Biodiversity Information Service and Suffolk Biodiversity Information Service, for a 1km radius surrounding the application site.

The Norfolk and Suffolk Biodiversity Information Services returned three bat records, two of local roosts of common pipistrelle (*Pipistrellus pipistrellus*) and recorded sightings of barbastelle (*Barbastella barbastellus*). In addition to this, there was an EPS bat license issued in 2013-14, 3.13km east of the proposed works site. This license was granted for work that was to affect common pipistrelle, brown long eared and barbastelle bats. This further indicates the prevalence of bats in the wider area and reinforces the need for consideration of their activities during the proposed works.

#### 4.2 Bat Risk Assessment

#### 4.2.1 On-Site Assessment

The works site comprised solely the roof space of the residential building. The value of this habitat to bats for roosting, foraging and commuting activities are discussed below.

#### **Building:**

One building was surveyed for bat roosting suitability, being the building that will undergo the roof replacement. The front of the building had floodlighting out onto the lawn which could reduce the sites suitability for foraging bats in this area. The walls were entirely whole and had no indication of cracks, holes, or other cavity access. The same was observed with the eaves of the roof, which appeared to be bricked all around the extent of the building, with no access points to the roof space. The roof itself was clay tile and displayed a large number of potential bat access points into the roof void of the building due to many of the tiles being broken or lifted. In addition, these lifted and broken tiles provide PRFs for several species of crevice dwelling bats. Furthermore, the lead flashing along the ridge, hips, and close to the dormers was lifted in areas creating PRFs and potential bat access points into the roof void. In addition, two bat droppings that resembled those of the brown long eared bat (*Pleoctus auratus*) were found during



the external survey of the roof. One dropping was observed under a roof tile at the north-east corner of the roof and one dropping was observed under a roof tile near the centre of the roof on the north elevation.

Internal assessment of the roof space in this building found bat droppings, primarily at the eastern end of the structure. Upon laboratory analysis it was discovered that they belonged to the brown long eared bat. This indicates that bats have been using the roof space, however, no bats were observed during the inspection.

Overall, the building was considered to be of high suitability for roosting bats, due to the large number of PRFs and potential access points within the roof. In addition, the presence of brown long-eared bat droppings inside the roof void and under the roof tiles means that the roof void and roof are a confirmed roost.

#### 4.2.2 Off-Site Assessment

Directly adjacent to the site were areas of lowland deciduous woodland, including examples of mature trees. These provide ideal habitat for bat roosting and feeding

#### 4.2.3 Bat Activity Surveys

Due to B1 being assessed to have some value for roosting bats, three bat activity surveys were carried out on these buildings. The weather conditions for both surveys were considered suitable for bats to be active and are summarised in Table 2.

Date	Survey start	Sunset/ sunrise	Survey end	Temp. (°C)	Precipitation	Wind (Beaufort)	Cloud (Oktas)
12/05/22	20:20	20:40	22:40	13 – 12	None	3	7
26/05/22	02:47	04:47	05:07	9 - 1	None	3	0
09/06/22	20:57	21:17	23:17	20 - 17	None	3	6

#### Table 2. Bat activity survey weather conditions.

Results of each of the bat activity surveys are provided in the paragraphs below, with notable findings summarised in Figure 4. It should be noted that only a summary of the key findings has been provided, although full results are available upon request.

During the first survey, a Brown Long-eared bat (*Plecotus auratus*); 'BLE' on Figure 4, was recorded flying out of loose tiles directly below the central chimney stack and above the 6<sup>th</sup> Dormer window on the northern elevation of B1 at 21:55 hrs. The overall level of activity was considered to be moderate, with foraging by small numbers of common pipistrelles, noctule (*Nyctalus noctule*) and brown long-eared bats throughout the survey.

During the second survey, two common pipistrelles (*Pipistrellus pipistrellus*); 'C.Pip' on Figure 4, were recorded re-entering the northern-eastern gable end of B1 at 04:14 hrs. Two common pipistrelle were also recorded emerging from the eastern gable end of B2 at 22:01 hrs. In addition, two brown long-eared bat re-entered from loose tiles below the central chimney stack of B1 at 04:04 hrs. The overall level of activity



was considered to be low, with foraging by small numbers of common pipistrelles and brown long-eared bats throughout the survey.

During the third survey, there was a significant reduction in bat activity with no emergence identified and with overall limited levels of bat activity with slight foraging by a small number of common pipistrelles.



Figure 4. Summary of bat survey results. Orange arrows indicate bat emergences, blue arrows indicate re-entries, and green markers indicate surveyor locations including infrared camera. (Image taken from Google Earth Pro: ©2019. Map Data Google 2019)

#### 4.2.4 Assessment Summary

The results of the building assessments and activity surveys carried out would indicate that the onsite building B1 is used on an occasional basis by small numbers of common pipistrelle and brown long-eared bats, but are not roosts of significant conservation value, such as maternity or hibernation roosts. Notwithstanding this, in the absence of suitable mitigation, any works carried out on these buildings are highly likely to result in the damage or destruction of the roosts present, with the proposed roof replacement works on the building resulting in the permanent loss of roosting habitat. This is considered likely to have a high negative impact at site level but, due to the low numbers of relatively common bats present, a low impact at a wider level.

Based on the results of the surveys carried out, it will be necessary to implement appropriate mitigation and compensation measures as part of the re-development works in order to ensure that the proposals do not have a significant negative impact on the roosting bats present on site.



#### 4.3 Other Wildlife

The site was considered to be of negligible value for badgers, GCNs and reptiles due to a lack of suitable sheltering habitat and potential for sett creation for badgers. Adjacent habitats were also considered to be of low to negligible value for these taxa for the same reasons. The surrounding grassland could provide suitable foraging habitat for badgers, but again was considered to be of limited value for sett creation. The works are expected to have a negligible impact on any of these species.



#### 5 CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Conclusions

Overall, the site is considered to be of moderate ecological value, with a general lack of suitable habitat for protected or notable species, however, two days roosts have been identified within the surveyed structure. These are two separate days roosts, one of a common pipistrelle day roost located in loose tiles behind the eastern most dormer window on the southern exposure of the property and the other being a brown long eared day roost which is located along the ridge tiles located directly between the two central chimney stacks. Following the site assessment and in review of the findings, Naturally Wild would recommend the following:

#### 5.2 Mitigation Measures

Although not considered to be a roost of significant conservation value, due to the confirmed presence of both a common pipistrelle day roost and a brown long eared day roost which will be lost during construction work to replace the existing roof it will be necessary to obtain an EPS mitigation licence from Natural England to legally permit the works that will result in the loss of the roost. Once a licence has been granted, works in the area of the roost would need to be carried out in a precautionary way, following the 'soft-strip' protocol. This involves removing the roof tiles and ridge tiles in the immediate area of the roosts under the supervision of a suitably qualified and licensed ecologist, with a thorough inspection carried out beforehand and any bats found prior to or during the works being carefully caught by the attending ecologist and moved to a suitable location elsewhere on site (see below). A specific methodology for the works, as well as suitable compensatory habitat to provide alternative roosting opportunities, would be provided within the EPS licence application documentation to be submitted to Natural England, but an indication of compensatory habitat to be provided is given in section 5.2, below.

If any artificial external lighting is to be installed, this should be done so in a sensitive manner to minimise any disturbance to bats or other nocturnal wildlife. This would comprise low-level, downward-facing lighting, ideally being triggered by a motion sensor rather than being operational constantly throughout the night.

#### 5.3 Compensation Measures

As mentioned above, due to the loss of a confirmed common pipistrelle day roost and brown long eared day roost, suitable alternative roosting habitat would need to be provided as part of the requirements of the EPS licence application. In accordance with the guidelines for proportionate mitigation in the Bat Mitigation Guidelines, the roost status would be classed as *"individual bats of common species,"* with the proportionate mitigation being *"flexibility over provision of bat boxes, access to new buildings, etc. No conditions about timing or monitoring"*. On this basis, it is considered that the loss of roosting habitat can be adequately compensated for via the provision of a dedicated ridge and roof access tiles installed on the roof during the replacement roof works, to allow bats to access the space between the roof lining and the tiles.

A destructive search will be carried out on the roof. The roof tiles and other features with bat roost potential (such as lead-flashing) will be removed carefully by hand under strict ecological supervision to ensure bats are not using these areas.



Retention of the existing roost or like-for-like replacement for any bat roosts lost. Like for like replacement includes access to a replacement roost in a roof void of similar dimensions and environmental conditions to that available in the current building.

Retention of the existing bat access points or like-for-like replacement of any lost (in similar locations and aspects).

Any roof lining installed **must** consist of traditional black bitumen roofing felt (**Not** a breathable membrane such as Tyvek<sup>™</sup> or other non-woven membrane). This is because bats may in time come to use this part of the roof as well as their existing roost and bats can become entangled in breathable membranes and die. Although breathable membranes appear smooth, crawling or hanging bats may become tangled in the fibres as a result of their claws catching on the membrane. A struggling bat may also puncture the membrane thus invalidating the guarantee of the material and causing water ingress. The building contractor or client may be liable for both damage of the property and killing or injuring bats.

To allow bats access to the roof voids, the roof felt should be cut near the proposed bat access points so that a gap of 50mm wide by 40mm high is present allowing bat access. Additionally, all sections of roofing felt should be overlapped to create gaps which bats can crawl through.

- The provision of a ridge access tile does not require any specialist equipment and can be achieved simply by placing a suitably sized piece of wood in the mortar gap during tiling works and removing it before the mortar around it has fully set.
- The provision of a roof access tile can be utilised but using an off the shelf specialist tile made to match the rest of the roof tiles.

In addition to the above, two bat boxes, such as a Schwegler 1FF (or suitable equivalent) would need to be installed in suitable locations on site during the works in order to provide any displaced bats with alternative roosting habitat while the works are being carried out. These should be placed at least four meters from the ground in trees surrounding the site, facing between south-east and south-west. This will ensure they are both of sufficient height to be appropriate for usage, as well as ensuring they are warmed by the sun during the day.

#### 5.4 Enhancement Measures

The works will be expected to provide enhanced bat roosting habitat over and above compensation to be provided as part of an EPS licence application. It is considered that the ridge and roof access tiles, combined with the Schwegler 1FF bat boxes being retained on site postworks, will provide an overall enhancement in available roosting habitat on site. If retention of the bat box on site is not feasible, the installation of a discrete bat brick and associated cavity chamber in the extension would ensure an enhancement in available roosting habitat on site in the long term.

Providing the recommendations of this report are implemented in full, Naturally Wild would conclude that there will not be a significant impact to bats or any other protected species as a result of the proposed works.



#### 6 SITE IMAGES



Image 1. The roof space area, in which the brown long-eared bat droppings were found.

Image 2. Examples of the bat droppings found in the roof space.





Image 3. The front face of the residential building, with the same features (eaves, walls and roofing) as the rest. Floodlights are highlighted.







Image 4. Bat Re-entry points 26/05/22







Image 6. Brown Long Eared emergence 26/05/22





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#### 8 APPENDICES

#### 8.1 Additional Information for the Legislation of Other Protected Species

**Badgers:** The badger is geographically widespread across the UK; however, they are still vulnerable to baiting, hunting and detrimental impacts of development to their habitat. Both the badger and its habitat are protected under The Protection of Badgers Act 1992, Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) an Appendix Three of the Bern Convention; therefore, badgers have legal protection against deliberate harm or injury and it is an offence to:

Interfere with a badger sett by damaging or destroying it Kill, injure, take or possess a badger Cruelly ill-treat a badger Obstruct access to a badger sett Disturb a badger whilst it is in a badger sett

**Nesting Birds:** Birds receive protection under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly kill, injure or take any wild bird; take, damage or destroy a nest of a wild bird whilst it is in use or being built; or to take, damage or destroy an egg of a wild bird. The bird-nesting season is defined as being from 1<sup>st</sup> March until 31<sup>st</sup> August with exceptions and alterations for some species.

**Great Crested Newts:** Great crested newts are protected under Schedule 2 of The Conservation of Habitats and Species Regulations. This species is also afforded full protection under the Schedule 5 of the Wildlife and Countryside Act 1981. Under such legislation it is an offence to:

Intentionally or recklessly\* kill, injure or capture a great crested newt;

- Possess or control any live or dead specimen or anything derived from a great crested newt; Intentionally or recklessly\* damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- Intentionally or recklessly\* disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.
- Damage or destroy a breeding site or resting place.
- Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.

\*Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales.

To undertake surveys for great crested newts it is necessary to hold an appropriate licence issued by Natural England.



**Reptiles:** All native British species of reptile (of which there are 6) are listed on Schedule 5 of the Wildlife and Countryside Act 1981 and, as such, are protected from deliberate killing, injury or trade; therefore, where development is permitted and there will be a significant change in land use, a reasonable effort must be undertaken to remove reptiles off site to avoid committing an offence. The same Act makes the trading of native reptile species a criminal offence without an appropriate licence.