



ARBOR VITAE

ECOLOGY • FORESTRY • LAND USE



PRELIMINARY BAT ROOST ASSESSMENT

DEERHURST DAY NURSERY

Project name: Deerhurst Day Nursery, 182 Franche Road, Kidderminster

Grid Reference: SO82307721

Date: 27/02/2024

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Checked by: William Prestwood BSc Director

Requested by: Central Building Design Ltd

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1 INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT

Planning permission will be sought for the extension of an existing building used as a day nursery, off Franche Road in Kidderminster.

1.2 SCOPE OF SURVEY

Arbor Vitae were commissioned by Central Building Design Ltd to undertake a Preliminary Bat Roost Assessment (PBRA) to establish the potential of the buildings to be used by roosting bats.

- Bats and their roosting sites are legally protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981.

The survey was also designed to assess the presence of any breeding birds using the buildings.

- All wild nesting birds, their nests and eggs are legally protected under The Wildlife and Countryside Act 1981.

1.3 KEY PRINCIPLES

All ecological surveys conducted by Arbor Vitae Environment Ltd are underpinned by the following key principles, as outlined by CIEEM (2018):

Avoidance - Seek options that avoid harm to ecological features (for example, by locating on an alternative site).

Mitigation - Adverse effects should be avoided or minimized through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

Compensation - Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.

Enhancements - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

2 SITE DESCRIPTION

2.1 LOCATION, LANDSCAPE, AND BACKGROUND

The building subject to survey is located along Franche Road in Kidderminster, to the north west quadrant. The property is surrounded by residential development in all directions. Mature trees are dotted throughout the immediate local landscape, including along the boundaries of the site itself.

The proposals will include a double height extension at the east elevation and the creation of a parking area at the west. All areas surrounding the house are either astro turf or tarmac.

2.2 BUILDING DESCRIPTION

The property is a detached building with fully rendered elevations in a mock Georgian style. The roof is set at a shallow pitch, with hipped ridges at each corner. Slate covers the roof, and lead flashing seals the verges/ridges/chimneys.

The eaves of the building overhang the facades by around 30cm and are sealed with timber soffits. PVC gutters, down pipes, and double-glazed windows and doors are all in place.

The loft space is large and roughly follows a square shape. Internal brick walls extend up into the space and can be clearly seen. The roof is supported by planed timber rafters and purlins, with a central ridge beam at the apex. The roof is fully lined throughout with a bituminous felt and there is thick rockwool insulation on the floor. The eaves are sealed internally by the timber soffits, visible externally.

There is a canopy cover at the north elevation of the building which is constructed from timber and transparent sheets. There is also a temporary cabin on site, adjacent to the east elevation.

The ground surrounding the property is tarmac (to the east and south) and astro turf to the west and north.

Mature broadleaved trees line the south, west, and part of the north boundary including: lime, beech, *Leylandii*, and sweet chestnut. A separate arboricultural survey has been completed for these features, although all adjacent trees were assessed from ground level for their suitability as a bat roost.

3 SURVEY METHODOLOGY

3.1 DESKTOP STUDY

An initial desk study was composed to gain background information regarding any protected species or designations within the area. The main sources of information were MagicMap, My Local Maps Worcestershire and NBN Atlas.

3.2 PRELIMINARY BAT ROOST ASSESSMENT

One visit was made to survey the property on 20/02/2024. The objective of the survey was to find and record any signs of use by bats, for example:

- Droppings, sometimes in concentrations below roost sites,
- Feeding signs such as butterfly and moth wings,
- Staining of timber, brickwork around access points.

The general structure of the building was assessed for its potential to provide bats with roosting opportunities. The surrounding landscape and links to other nearby habitats were also taken into consideration during the assessment.

3.3 BREEDING BIRDS

The building was assessed for its potential to provide birds with nest sites, and to record any existing evidence of previous nesting.

3.4 PERSONNEL

The survey was carried out by Phillipa Stirling MSc ACIEEM: Ecologist.

Natural England bat licence number: 2021-52205-CLS-CLS.

3.5 CONSTRAINTS

There were no constraints to the survey being carried out successfully.

4 SURVEY RESULTS

4.1 DESKTOP STUDY

| Name | Designation | Distance |
|-------------|-----------------------|----------|
| River Stour | Special Wildlife Site | 160m |

| | | |
|---|------|-------|
| Puxton Marshes | SSSI | 320m |
| Stourvale Marsh | SSSI | 1000m |
| Blakemarsh | LNR | 460m |
| Search included: SSSI, SAC, SPA, Ramsar, AONB, LNR and NNR. | | |

| Species | Protection | Distance |
|--|--|----------|
| Common pipistrelle Soprano pipistrelle Lesser horseshoe Noctule | The Conservation of Habitats and Species 2017 Wildlife and Countryside Act 1981 | 0.3-1km |

4.2 PRELIMINARY BAT ROOST ASSESSMENT

The building was assessed both internally and externally. No evidence of bats was found during the survey, and no potential roosting features were identified. The large loft space above the property is well-sealed and in good condition. The slate roof does not provide any crevices or access points, and the verges/ridge of the roof are well-sealed with lead flashing. The elevations are rendered and there are no cavities, crevices or other features which bats might be able to use for roosting. Overall, the property has 'negligible' potential as a bat roost.

The mature trees at the south and west boundary were assessed from ground level and no potential roosting features were identified for any of them.

4.3 BREEDING BIRDS

No evidence of nesting birds was found in the loft of the property, or in association with external features.

5 EVALUATION OF RESULTS AND IMPACT

5.1 BATS

The structure on site provides 'negligible' potential as a bat roost and there is no evidence to suggest that bats have ever used the property. The proposed extension work will have no impact upon bat species or their roosting sites nor any indirect impacts.

The proposals will have no direct impact on nearby habitat features nor will it result in any inadvertent consequences for bats in the landscape.

Four bat species have been recorded within 1km of the site, three of which are recorded near to the River Stour SWS 160m from the site. Bats may use the mature canopy cover in the local area in order to commute/forage. Light pollution is not expected to be an issue for this particular site due to the hours of work. However, in order to maintain 'dark movement' corridors around the edges of the site, a Wildlife Sensitive Lighting Plan will be adopted.

No further survey work is needed and therefore a European Protected Species Mitigation Licence will **not** be needed for works to proceed.

5.2 BREEDING BIRDS

There is no evidence to suggest that the structure is, or ever has been, in use by breeding birds. The proposals will therefore have no impact upon nesting birds.

6 MITIGATION AND ENHANCEMENT

6.1 BATS

There are a number of mature trees along the boundaries of the site and it will be necessary to ensure that they remain within 'dark movement' corridors. The following measures will be included in plans for the site:

- Hedgerows and key habitat features including mature trees on the site will not be illuminated in order to retain dark movement corridors for nocturnal wildlife.
- Any exterior security or decorative lights to be installed on the development site will be less than 3 m from the ground and fitted with hoods to direct the light below the horizontal plane, at an angle of less than seventy degrees from vertical, and shall not be fixed to, or directed at, bat boxes or gables or eaves.
- Security lighting will be set on motion sensors with short timers (<1 minute) and will be LED with a passive infrared trigger.
- External lights will be hooded and directed toward the ground to reduce upward light spill.
- A warm white spectrum will be adopted throughout the scheme to reduce blue light component (<2700Kelvin).

- Internal luminaires will be recessed where installed in proximity to windows to reduce glare and light spill. LED luminaires will be used internally where possible due to their sharp cut-off, lower intensity, and dimming capability.
- Luminaires will always be mounted horizontally with an upward light ratio of 0%.

6.2 BREEDING BIRDS

The proposals will have no impact upon active or historic nesting sites and mitigation for breeding birds will not be required.

6.3 ENHANCEMENT

In order to provide opportunities for protected species on site, the following is recommended:

- Two general purpose Woodcrete bat boxes will be installed into a nearby mature tree. These should be positioned at least 3m from the ground and face south west.

7 SUMMARY

Planning permission will be sought for the extension of an existing building used as a day nursery, off Franche Road in Kidderminster.

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in the local area in order to commute/forage. In order to maintain 'dark movement' corridors around the edges of the site, a Wildlife Sensitive Lighting Plan will be adopted.

There is no evidence to suggest that the structure is, or ever has been, in use by breeding birds. The proposals will therefore have no impact upon nesting birds.

It is recommended that two Woodcrete bat boxes are installed into nearby mature trees to provide opportunities for roosting bats at the site.

8 REFERENCES

Bat Conservation Trust (2018) Bats and artificial lighting in the UK. *Bats and the Built Environment series*, Guidance Note 08/18. Institution of Lighting Professionals.

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

Hundt L (2012) Bat Surveys: Good Practice Guidelines, 2nd edition, Bat Conservation Trust.

Mitchell-Jones, T., 2004. Bat mitigation guidelines. External Relations Team, English Nature.

Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

FIGURE 1 LOCATION. 1:50,000

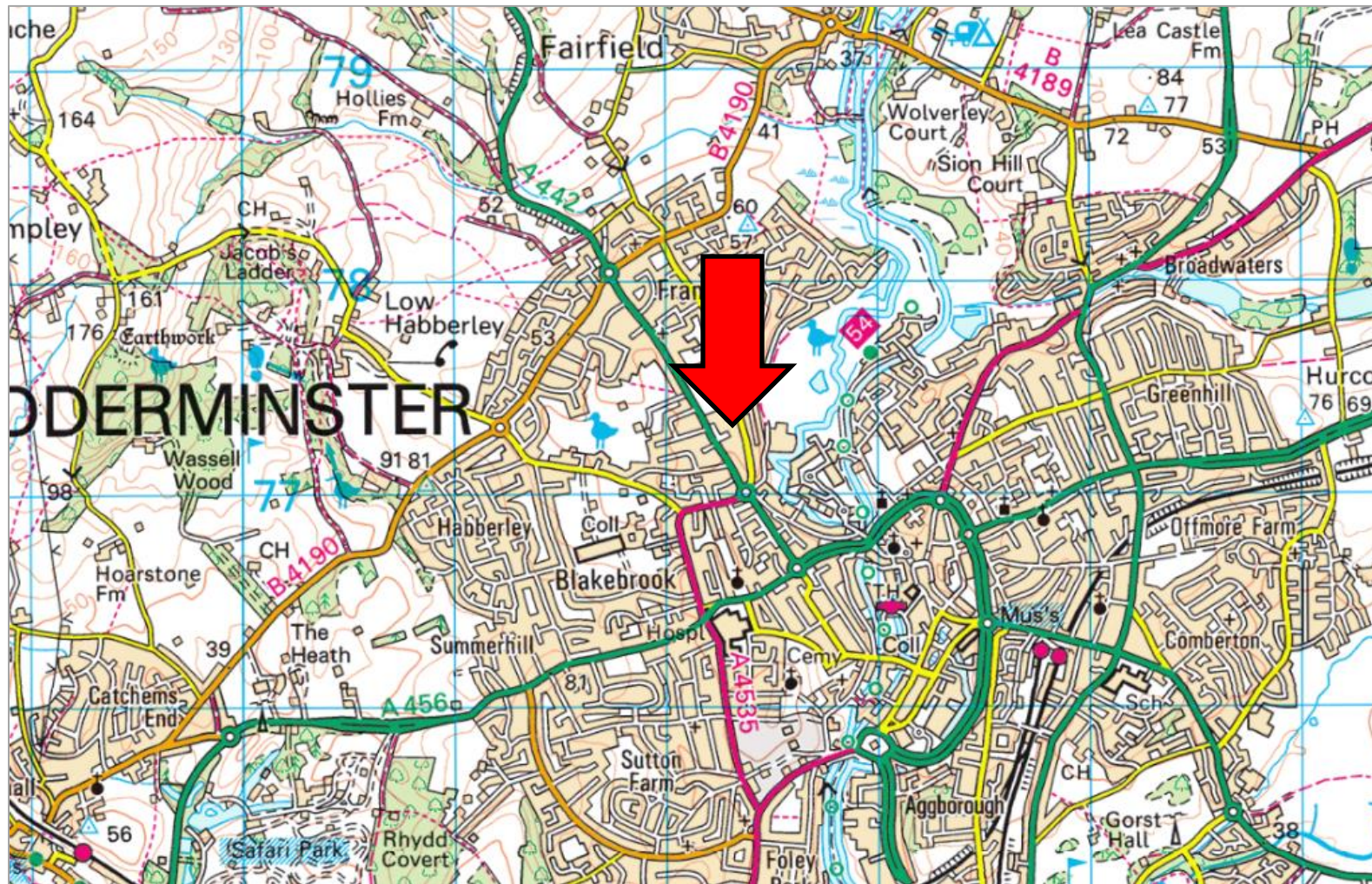


FIGURE 2 AERIAL PHOTOGRAPH



APPENDIX 1 PHOTOGRAPHS



East elevation & car park



Eaves of the property



Slate roof and chimney



West elevation



Loft above



Roof lining



Roof structure



Tree line along west boundary



Astro turf to be replaced with car park



Beech tree at south boundary



Chesnut tree at south boundary



Temporary cabin on site