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PRELIMINARY ROOST ASSESSMENT

Park Cottage, Radbourne
Ashbourne

DE6 4LY

Report Reference: BG22.171

August 2022



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www.brindlegreen.co.uk



Sheffield Office

Brindle & Green Limited
Horizon House
Whiting Street
Sheffield S8 9QR

Barnsley Office

Brindle & Green Limited
Sergeants House
36 Edderthorpe Lane
Barnsley S73 9AT

Head Office

Brindle & Green Limited
Unit 3 Silverhill Court
Radbourne
Derby DE6 4LY
Tel: 0800 222 9105

London Office

Brindle & Green Limited
Nutter Lane
Wanstead
London E11 2HZ

Kent Office

Brindle & Green Limited
Sandy Lane
Sevenoaks
Kent TN13 3TP



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Report	Name	Signature	Date
Prepared by	Laura Saunders		14/07/2022
1 st Check by	Kerry Baker Consultant Ecologist		28/07/2022
2 nd Check by	Ellen Marshall Head of Ecology		03/08/2022
Issued by (PDF)	Nikki Scott		10/08/2022
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Project Details

Project carried out by:

Brindle and Green

Unit 3, Silverhill Court

Radbourne

Derby

DE6 4LY

Head Office: 01332 825771

Email: info@brindlegreen.co.uk

Website: www.brindlegreen.co.uk

Project carried out for:

Trustees of the Radbourne Settlement

c/o Bidwells

Seacourt Tower

West Way

Oxford

Oxfordshire

OX2 0JJ

Park Cottage

Radbourne

Ashbourne

DE6 4LY

Grid reference: SK 28386 36062

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1 Summary

- 1.1 Brindle & Green Ltd were commissioned by the Trustees of the Radbourne Settlement to undertake a Preliminary Roost Assessment at Park Cottage, Radbourne, Ashbourne. 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 development in relation to bats and birds. The survey was undertaken on 8th June 2022.
- 1.2 The site is the subject of a full application for the demolition of the existing dwelling (Building 1) and associated outbuilding (Building 2) to facilitate the construction of a new dwelling and garage. Design proposals for the site are presented in Appendix 5 of this report.
- 1.3 The building was assessed to have a confirmed roost due to the presence of bat droppings identified within the roof void. The eaves of the building were also assessed to be suitable for nesting birds.
- 1.4 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 Chapter 7 (Page 27), below is a summary of the ecological issues recommended for further consideration as a result of our initial investigations:

Ecological Consideration	Recommendations (e.g. further survey, mitigation)	Timing
Breeding Birds	Works should be sympathetic to this group of species, with building demolition undertaken following Reasonable Avoidance Measures (RAMS) outlined in chapter 7.	During Site Clearance (Optimal timing between October -March, outside of breeding bird season)
Roosting Bats	The building was assessed to have a confirmed roost due to the identification of droppings characteristic of <i>Pipistrellus</i> sp. within the roof void, and as such should be subjected to at least three roost characterisation surveys to ascertain the nature of this roost.	Three nocturnal surveys May-September. (At least two surveys between May – August) All survey work should be completed prior to the determination of the planning application.

Ecological Consideration	Recommendations (e.g. further survey, mitigation)	Timing
Foraging and Commuting Bats	Reasonable avoidance measures comprising sensitive lighting are recommended during and post construction.	During and post development.

2 Introduction

- 2.1 Brindle & Green Ltd were commissioned by the Trustees of the Radbourne Settlement to undertake a Preliminary Roost Assessment at Park Cottage, Radbourne, Ashbourne. The purpose of this assessment was to provide a preliminary appraisal of the ecological value of the site for bats and birds and to identify key ecological constraints to the proposed development. The survey provides detail on the need for any additional, more detailed protected species surveys, and will allow the development of likely mitigation, compensation and enhancement measures to be developed.
- 2.2 The site is located 500m to the Northwest of Radbourne Hall and 220m to the Northwest of St. Andrew's Church, Radbourne, situated within a predominantly rural area supporting arable fields and pockets of woodland. The project area consists of Park cottage (Building 1) and the associated outbuilding (Building 2). The site is the subject of a full application for the demolition of the existing dwelling and outbuilding and erection of a new dwelling and garage. Design proposals for the site are presented in Appendix 5 of this report.
- 2.3 The legislation relevant to protected species within the United Kingdom is summarised within Appendix 2.
- 2.4 Results and recommendations contained within this report have been prepared by an experienced ecologist and are therefore the view of Brindle & Green Limited. The survey is based on information provided by our client, the development proposals, and the results of the desk study and our survey of the site. This report pertains to this information only.

3 Methodology

3.1 Desk Study

Table 1 below lists the resource used as part of the desk study process. Data regarding any known statutory or non-statutory sites in addition to any records for protected species were requested from the following source:

Table 1. Ecological Data Resources

Consultee	Requested Data	Search Radius	Date Requested
MAGIC Maps	National and International Site Designations Granted EPS Development Licences	2km	25/07/2022

3.2 Surveyors

The survey was carried out by Tom Hough MSc, QualCIEEM, Natural England Bat Licence Class 1 (2020-50050-CLS-CLS), NE Class 1 GCN (2022-10455-CL08-GCN), Consultant Ecologist and Laura Saunders MSci (Hons.), Graduate Ecologist. The survey was overseen by Lucinda Sweet PhD, MCIEEM, Natural England Bat Licence Class 2 (2019-39122-CLS-CLS), Great Crested Newt licence (2016-22852-CLS-CLS), Director.

3.3 Survey Conditions

The survey was undertaken at 11:00am on the 8th June 2022.

The outside temperature was recorded as 15°C, with dry conditions and 5/8 cloud cover.

3.4 Field Survey

The habitats on site were assessed for their suitability to support protected species following standard survey guidance (Appendix 3). It is important to assess the surrounding habitat, as in some cases the legal protection of a protected species extends to the habitat in which it occupies. Any incidental sightings of field signs were noted at the time of survey. Where evidence of, or the confirmed presence of a Protected Species is identified, further, species specific surveys may be recommended to establish with certainty the presence

and extent, or absence of a legally protected species prior to the determination of any planning approval.

3.5 Protected Species

3.5.1 Breeding Birds

The building and immediate vegetation to be impacted from the proposed development have been the subject of a search for active or previously used bird nests, and identification of features considered conducive to breeding birds, alongside noting the activity and behaviour of birds on site during the survey. Following standard techniques, as recommended by Gilbert G, Gibbons DW, Evans J. (1998) *Bird Monitoring Methods: Breeding Bird Survey* (pages 389-393). RSPB.

3.5.2 Roosting Bats

3.5.2.1 Structures on site were assessed for their suitability to support roosting bats following Collins, J (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, (3rd edition), Bat Conservation Trust, London. The potential suitability of each structure and the resulting survey effort to establish confidence in a result is summarised within Table 2.

During the external and internal assessment of the structure, potential roosting features (PRF's) such as slipped or missing roof tiles, gaps in brickwork, points in roof timbers and the presence of suitable soffits and fascia boards were recorded to evaluate the potential suitability of the structure to support roosting bats. Evidence of bat presence was also searched for including feeding remains, bat droppings and staining around potential access points. Bats often use different roosting sites at different times of the year, and the absence of evidence does not always equate to the absence/ or lower suitability of a structure to support a bat roost.

3.5.2.2 If bats are discovered emerging or re-entering any structure, the survey schedule should be appropriately adjusted to increase the survey effort so that sufficient information for roost characterisation can be collected to advise the planning application or EPS development licence.

Table 2. Classification of roosting habitat within structures (Buildings and trees), to be applied to each structure using professional judgement. Adapted from Collins J (2016)

Category	Description of roosting habitat	Number of presence / absence surveys required
Negligible Suitability	Suitable cavities may exist, but these are less than ideal.	None
Low Suitability	A structure with one or more potential roost sites that could be used by individual bats opportunistically. The feature and surrounding habitat do not provide enough shelter, conditions* or space for larger roost types such as a maternity or hibernation roost. A tree of sufficient size and age to support roosting bats, but with no features observed from the ground, or the features only have a limited potential to support roosting bats.	One survey between May and August Trees – No further surveys required
Moderate Suitability	A structure or tree considered to have one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions* and surrounding habitat but are unlikely to support a roost of high conservation status (With regard to roost type only – assessments are made irrespective of species conservation status, which is established after presence is confirmed).	Two surveys between May and September (with at least one survey undertaken between May and August) One Dusk emergence and One Dawn re-entry survey to ideally be undertaken at least two weeks apart.
High Suitability	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 surveys between May and September (with at least two surveys undertaken between May and August) One Dusk emergence and One Dawn re-entry survey to be undertaken. The third survey can be either Dusk or Dawn, undertaken at least two weeks apart.
Confirmed	This category is where positive evidence of bats has been recorded. For example, bats are found; bat droppings may be present at a suitable location for roosting bats; existing bat records may be associated with the structure.	

(* in this context conditions refers to the level of disturbance, light, height above ground, temperature, and humidity etc)

3.5.3 Foraging and Commuting Bats

Habitat features on site were assessed for their suitability to support foraging and commuting bat populations. This assessment was independent from the suitability of the site to support roosting bats, and provides information on the likeness of bat foraging activity within the local environment, and the

dependence of individuals on these features for commuting to alternative roosting sites, foraging and migration. The suitability of the sites commuting and foraging habitat was assessed and evaluated against the proposed impacts to the site and is summarised within Table 3 (below) to allow categorisation of the habitat.

Table 3. Potential suitability of foraging and commuting habitat within an application boundary. Features should be assessed following this guide and professional judgement. Adapted from Collins J (2016)

Category	Description of commuting and foraging habitat	Survey effort to establish the value of commuting and foraging habitat**
Negligible Suitability	Negligible habitat features on site likely to be used by commuting or foraging bats.	None
Low Suitability	Habitat which could be used by low numbers of commuting bats such as an isolated gappy hedgerow, or an unvegetated stream unconnected to suitable habitat in the wider environment. Suitable, yet isolated habitat that could be used by foraging bats such as individual trees, or a patch of scrub.	Transect /spot count/ timed search survey: One survey visit per active season AND Static automated surveys: One location per transect, over a five-night period, per season.
Moderate Suitability	Continuous habitat connected to the wider landscape that could be used by commuting bats, notably tree lines, hedgerows or linked back gardens. Habitat that is connected to the wider landscape which could be used by bats for foraging such as trees, open water, scrub or grassland.	Transect /spot count/ timed search survey One survey visit per month <i>At least one survey should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period.</i> AND Static automated surveys: Two locations per transect, over a five-night period, per month (April to October)
High Suitability	Continuous, High-quality habitat that is well connected to the wider landscape which is highly conducive to commuting bats. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats Site is close to and connected to known roosts.	Transect /spot count/ timed search survey Up to two survey visit per month <i>(As above)</i> AND Static automated surveys: Three locations per transect, over a five-night period, per month

(** This is only a guide for survey effort required, the complexity of the site and the proposed disturbance / loss of features will determine the extent of works required on a site by site basis).

3.6 Limitations

- 3.6.1 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. The protected species assessment provides a preliminary view of the likelihood of these species occurring on site, based upon the suitability of the habitats, known distribution of the species in the local area and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group.
- 3.6.2 Due to the small size of the loft hatch and the lack of loft boarding, it was not safe to access the entirety of the loft void space. Instead, the assessment was made from a vantage point at the loft hatch. Nonetheless, given the evidence identified, it is considered that a robust assessment of the potential use of the building by bats was made.

3.7 Report Lifespan

Given the transient nature of the subject we would consider the survey results contained to be accurate for 2 years.

4 Site Context

4.1 Site Description

The application site can be found at SK 28386 36062, positioned within a predominantly rural area. The site comprises two buildings, which are located approximately 500m to the Northwest of Radbourne Hall and 220m to the Northwest of St. Andrew's Church, Radbourne. The site was well connected to the surrounding environment by a network of arable fields and woodlands, supporting linear features including hedgerows, fences and mature tree lines. The closest woodland to the site is Dayclose Plantation Woodland, located approximately 40m SW of the site. These features provide connectivity to Dog Kennel Pond positioned approximately 180m South of the site, and the surrounding field network, woodland and grazing pasture within the local context.

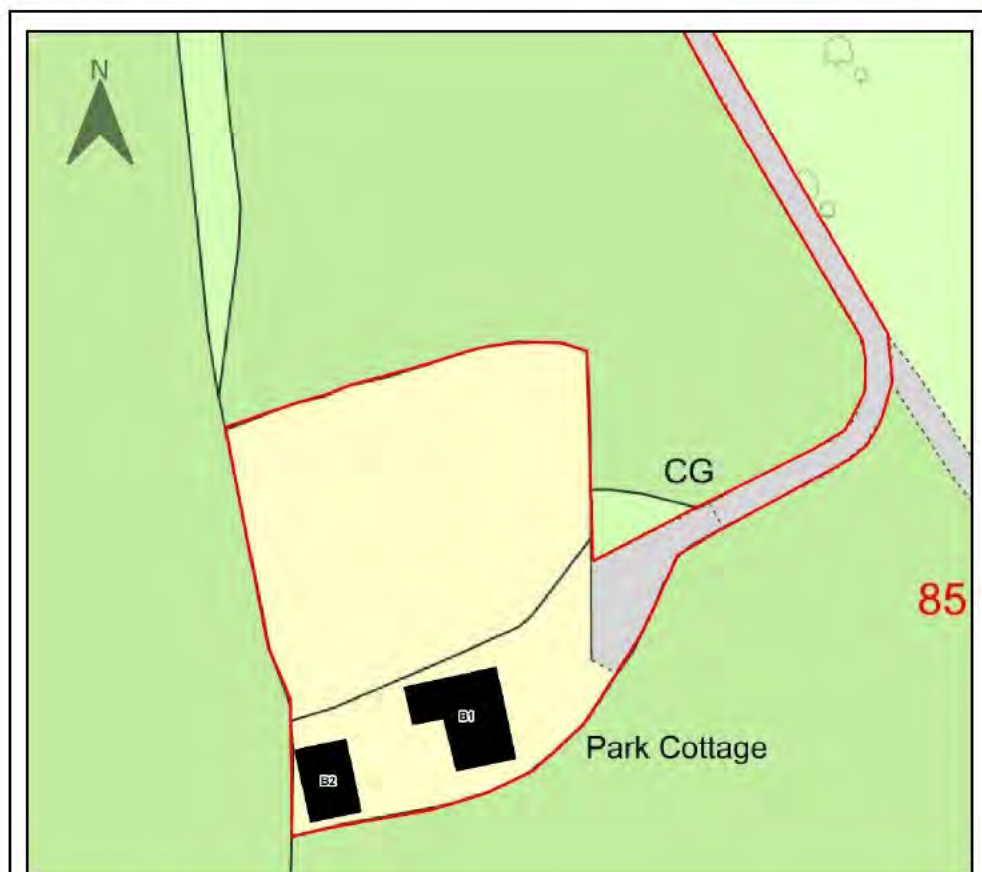


Figure 1. OS Map of the project site and surrounding area.

Red line boundary depicts site boundary. The survey buildings, Park Cottage (B1), and the associated outbuilding (B2) are depicted in black.

4.2 Zone of Influence

The zone of Influence is used to describe the geographic extent of potential impacts of a proposed development in relation to the target species, in this case bats and breeding birds. Due to the scale and nature of the proposals, it is not considered that the impacts of the proposed works would extend beyond the scheme footprint and its immediate surroundings.

5 Results

5.1 Desk Study

5.1.1 Designated Sites

The site was subjected to a search for designated sites within a 2km radius of the site using data supplied by the online desk-based resource MAGIC.

5.1.3 Magic Maps found no sites with statutory designations within 2km of the site.

5.1.4 The site was also subjected to a search for priority habitats within a 2km radius of the site. Magic Maps identified Birch Wood, pertaining to three sections of ancient and semi-natural woodland and three sections of ancient replanted woodland, summarised in table 4 below.

Table 4. Summary of priority habitats within a 2km radius of the application site

Site Name	Grid Ref	Status and reason for designation	Approx. distance from site
Birch Wood	SK27693552	Ancient and semi-natural woodland	900m SW of the site
Birch Wood	SK27553568	Ancient replanted woodland	900m SW of the site
Birch Wood	SK27623557	Ancient replanted woodland	900m SW of the site
Birch Wood	SK27463551	Ancient and semi-natural woodland	1km SW of the site
Birch Wood	SK27293573	Ancient and semi-natural woodland	1.1km west of the site
Birch Wood	SK27403560	Ancient replanted woodland	1.1km SW of the site

5.1.5 Protected Species

Magic maps also provides details of granted EPS licences within 2km from the application area. Magic maps revealed two granted EPS licences for the same location, within 2km of the site:

- 2018-33846-EPS-MIT and 2018-33846-EPS-MIT-1; both for the destruction of a resting place of non-breeding Common Pipistrelle (*Pipistrellus pipistrellus*) and non-breeding Whiskered bat (*Myotis mystacinus*), which will expire in 2023 - located 500m SE of the site.

5.2 Field Survey

The redline application boundary for the proposed plans was restricted to Building 1 and Building 2 (Appendix 5). No habitats, other than hard standing, will be impacted by the planning application, however, the impact of the development on protected species which may be present within associated habitats such as arable fields and hedgerows in close proximity of the works, have been considered.

5.3 Protected Species

5.3.1 Breeding Birds

5.3.1.1 There was no evidence to suggest that breeding birds had previously occupied the buildings during their external and internal inspection. However, the survey was undertaken during the active breeding bird season and the buildings were considered suitable to support breeding birds. The suitable bird nesting features on Building 1 pertained to lifted roof tiles, gaps under the roof eaves and the roof eaves themselves. These features provide nesting access and features for birds such as Swift (*Apus apus*), barn swallow (*Hirundo rustica*) and House martin (*Delichon urbicum*). The open roof space in Building 2 may provide potential roosting features for barn swallow (*Hirundo rustica*).

5.3.1.2 Mature trees were recorded along the boundaries of the site, in close proximity to the proposed works, and within the wider local context which were considered suitable to support breeding birds.

5.3.2 Roosting Bats

5.3.2.1 Building 1 was assessed to have a confirmed roost after the identification of approximately 50 bat droppings, of various ages, in the internal loft space. The extent of the suitability pertained to the external features where lifted roof tiles, gaps in the brick mortar and gaps under the eaves provided crevices for roosting bats and access into the internal roof void which was considered suitable to support breeding populations of bats (see PRF Map in Appendix 4). Building 2 was assessed to support negligible suitability to support roosting bats due to the lack of PRFs identified and the exposed nature of the building.

5.3.2.2 The internal roof void of Building 1 offered suitable features to support roosting bats, and the lack of soffits and fascia boards to the exterior, increased the likelihood of bats entering the roof void through numerous gaps under the eaves. The main structural features of the building, and their suitability for supporting roosting bats are summarised below (Table 5), and associated figures can be found in Section 5.4.

5.3.3 Foraging and Commuting Bats

The habitats on site and in the local context were assessed to provide moderate suitability for foraging and commuting bats. As there is a confirmed roost on site, the features close to building 1 may provide important commuting lines for the bat roost. Mature hedgerows and trees were recorded along the boundaries of the site, in the fields adjacent to the site and in the wider local context, which provide linear connectivity to the wider environment (Figure 7).

Table 5. Summary of Bat Roost potential and evidence found within each of the buildings/structures on site (Supporting Figures within Section 5.4).

High Moderate Low Negligible None				
Building Number	Description	Bat evidence / Potential Roosting Features (PRFs)		Roost Suitability
B1	External: Two storey red-brick vacant residential dwelling with a slate tile pitched roof and ridge tiles. The roof was in moderate condition and supported a brick chimney with lead flashing, two gable ends and a pitched roof porch at the front door. The building featured a single-story extension on the northern gable elevation. This extension had two PVC windows on the northern elevation (Figure 2) and a PVC window and wooden door on the western elevation (Figure 5). External windows were PVC and the front door, on the eastern elevation, was constructed within a timber frame (Figure 3), all of which were flush and appeared well sealed at the time of the survey. Internal: The roof space was unused and unlit. The interior roof space was approximately 1.5m from base to apex and was supported by timber frame with bitumen felt lining and red brick gable ends. There was no boarding to the floor and the contents of the loft space consisted only of loft insulation (Figure 6).	- Large gap in brick mortar on the northern elevation gable end (Figure 3). - Several small holes in the brick mortar on the eastern elevation as well as loose lifted roof tiles and crevices under the roof eaves (Figure 4 and 5). - Gaps under the roof tiles on the eaves on the southern elevation (Figure 6). - Crevices under the roof eaves and loose, lifted tiles on the western elevation (Figure 7). Evidence of previous bat activity was recorded during the assessment, pertaining to approximately 50 bat droppings of various ages, in the internal loft space.		Confirmed Roost
B2	External: Corrugated metal shed outbuilding to the west of Building 1. Internal: Exposed at one end and loose wooden panelling on the other end, providing some shelter (Figure 8).	No notable PRFs recorded No evidence of previous bat activity was recorded during the assessment.		Negligible

5.4 Site Photographs

Photographs were taken to provide evidence of the survey findings and support the classification of the buildings potential to support protected species.

Figure 2: Northern Elevation The walls of the northern elevation provided several PRFs. A number of gaps in the brick mortar were recorded, including a large gap on the verge of the gable end. The three PVC windows on this elevation appeared well sealed.	
Figure 3: Northern Elevation PRFs Two large gaps in the brick mortar provide crevices for roosting bats	
Figure 4: Eastern Elevation The walls of the eastern elevation were mostly well sealed but provided several PRFs. There were various small holes in the brick mortar, notably under the left-hand window (circled). Roof gaps along the eaves and loose, lifted tiles were also noted. The brick chimney with lead flashing and the four PVC windows on this elevation appeared well sealed.	

Figure 5: Eastern Elevation PRFs Large gap in the brick mortar under the left-hand, top storey window	
Figure 6: Southern Elevation The bricks on this elevation appeared well sealed. Gaps under the roof tiles on the eaves provide PRFs at the gable end. The two PVC windows on this elevation appeared well sealed.	
Figure 7: Western elevation The walls of the western elevation were well sealed. Roof gaps along the eaves and loose, lifted tiles provide PRFs. The brick chimney with lead flashing and the three PVC windows on this elevation appeared well sealed.	

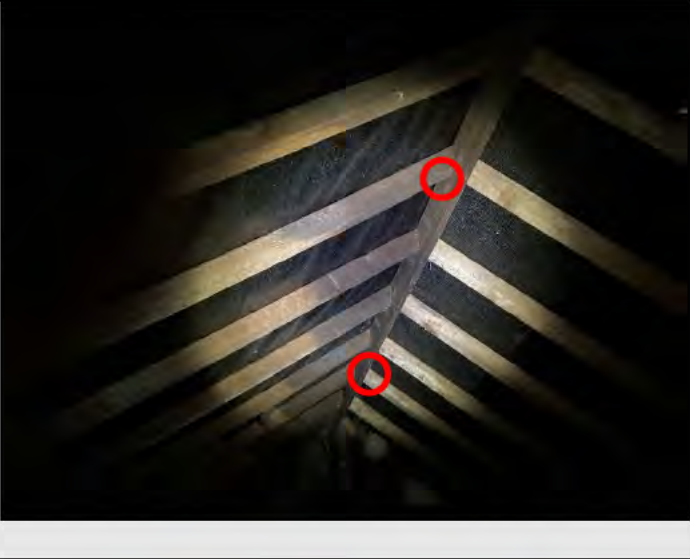
Figure 8: Internal loft space Gable end gaps, exterior lifted tiles and gaps in the eaves provide access to the roof void. The timber beam construction provides PRFs and the large, open, unused and unlit loft space provides space for bat flight pre- or post-roosting. Approximately 50 bat droppings of various ages, were identified within this roof space.	
Figure 9: Bat droppings in the internal loft space Photo taken from the loft hatch, facing the southern elevation gable end.	
Figure 10: Bat droppings in the internal loft space Photo taken from the loft hatch, facing the northern elevation gable end	

Figure 7:

Surrounding Environment

Mature hedgerows and trees were recorded along the boundaries of the site and in the fields adjacent to the site. These provide PRFs as well as connectivity to the wider environment.



Figure 8:

Building 2

The outbuilding to the west of Building 1 was a corrugated metal shed with no notable PRFs, assessed to have negligible bat roosting suitability.



6 Evaluation

6.1 Development Proposals

The site is the subject of a full application for the demolition of the existing dwelling and outbuilding and erection of a new dwelling and garage. Design proposals for the site are presented in Appendix 5 of this report.

6.2 Desk Study Impacts

No sites with statutory designations were found within 2km of the site. Direct impacts on the nearby ancient woodland, Birch Wood, as a result of the proposed development are considered unlikely. The extent of the development is to be contained within the current boundary fence line which forms the application boundary. Access to the site will be via the existing access track, which is to be retained. The existing boundary fencing and trees are also to be retained. On the basis that the proposed development is to have no effect on vegetative habitats within the application site boundary, the likelihood of indirect impacts to the wider local environment is considered negligible.

6.3 Breeding Birds

6.3.1 All wild birds, their eggs and nests are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure, or take any wild bird whilst nesting, or take, damage or destroy the nest of any such bird while in use or being built. In addition, species listed on Schedule 1 of the Wildlife and Countryside Act 1981 or their dependant young are afforded additional protection from disturbance whilst they are at their nests.

6.3.2 Building 1 did not support any evidence to suggest that birds have recently or are currently breeding within the building. However, features on the building were considered suitable to support nesting birds. Lifted roof tiles on the eastern and western elevations provide suitable nesting features for swift (*Apus apus*) and small passerine birds such as blue tit (*Cyanistes caeruleus*). Additionally, the roof eaves have the potential to support nesting barn swallow (*Hirundo rustica*) and house martin (*Delichon urbicum*). Building 2 did not support any evidence to suggest that birds have recently or are currently breeding within the building. However, the wooden beams in the internal open roof space of the building were considered suitable to support nesting birds

such as barn swallow (*Hirundo rustica*). The recommendations section of this report sets out important guidance on measures to avoid impacts on this species group.

- 6.3.3 The hedgerows and mature trees within the site boundary and in the fields adjacent to the site could provide suitable breeding habitat for birds. These trees are to be retained; however some are located less than 10m from the proposed works. Therefore, breeding birds, and their young could be disturbed during the demolition of the current building and erection of the new property. The recommendations section of this report sets out important guidance on measures to avoid impacts on this species and measures to support its conservation status through ecological enhancement.

6.4 **Bats**

- 6.4.1 All bat species are protected under the Wildlife and Countryside Act (1981) as amended and The Conservation of Habitat Regulations (2017) as amended making it an offence to, intentionally kill, injure, or take any species of bat, intentionally or recklessly disturb bats, intentionally or recklessly damage destroy or obstruct access to bat roosts.

6.4.2 *Roosting bats*

Building 1 was assessed to be a confirmed roost, following the identification of approximately 50 bat droppings of various ages characteristic of pipistrelle (*Pipistrellus* sp.) within the internal roof space. To confidently determine the species present and classify the roost type, further roost characterisation surveys are required. Building 2 was assessed to have negligible suitability for roosting bats due to the lack of PRFs. The proposed plans show the demolition of the existing dwelling and outbuilding and erection of a new dwelling and garage, which will see the destruction of the Building 1 roof structure. If the development was to continue as planned, it would likely lead to the destruction of a known roosting site of a protected species, and increased disturbance, injury or harm to individual bats and/or their young. The recommendations section of this report sets out important guidance on the roost characterisation surveys recommended in order to classify the roost type and bat species present.

6.4.3 *Foraging and Commuting Bats*

6.4.3.1 The mature hedgerows and trees recorded along the boundaries of the site and in the fields adjacent to the site provide suitable foraging and commuting habitat for bats from the site to the wider environment, and the area is considered to have moderate suitability following BCT assessment guidelines. Although no areas of foraging habitat are proposed for removal as part of the development, mitigation of impacts on retained habitats would be desirable for the continued success of bats in the surrounding area.

6.4.3.2 The presence of a roost within the internal roof space of the building indicates that the commuting habitat is of particular importance on a local scale. Although the habitat is not proposed for removal, its retention in its current state is desirable for the continued success of bats roosting within the property and the surrounding area. Chapter 7 of this document sets out important recommendations to safeguard habitats used by bats upon completion of the works.

7 Recommendations

As with all development sites; efforts should be made to support National and Local Biodiversity Action Plans, and seek opportunities to incorporate ecological enhancement schemes within the proposed development. Such site enhancements should be viewed positively in light of the NPPF (2019) which seeks biodiversity enhancements and net gain through the planning process.

7.1 Breeding Birds

Breeding Birds	Timing
Recommendations	
Building 1 and 2 on site have been identified as being suitable for use by breeding birds. Given their protection, development must be sympathetic to the value of this habitat and potential impacts on breeding birds, their eggs, nests and young. The breeding bird season is generally accepted as being between March and September. Developers should consider and implement the options most appropriate to their scheme; a) Demolition works should be undertaken outside of the breeding bird season, between the months of October and February where possible. b) If works are to be undertaken during the breeding bird season, entrance points can be netted to prevent birds nesting, and reduce the chance of impacts for this species. This process should be undertaken by a suitably qualified ecologist and the netting should be checked and monitored by an ecologist during its use. c) Any works to the roof between the months of March and September should be subjected to a search for active birds' nests 24 hours prior to commencement of works.	Work should be conducted outside of the breeding bird season between March and September inclusive.
Enhancement Prescriptions	
One Vivara Pro WoodStone Swift Nest Box (or similar) to be installed on the northern elevation	During construction

7.2 Roosting Bats

Roosting Bats	Timing
Recommendations	
A bat roost was confirmed within the internal roof space of Building 1. Further roost characterisation surveys are required to determine the extent, and type of roost present within the building. This information is required to understand the implications of the development works on the local species population, and develop appropriate mitigation and enhancement. This process is essential to inform a planning application, Method Statement or an application for a European Protected Species (EPS) Development Licence, to allow the works to proceed legally.	May – September (In weather conditions conducive to finding bats) Three surveys - one must be undertaken at dusk, and one undertaken at dawn. The final survey can be undertaken as either a dusk or dawn survey.
Enhancement Prescriptions	
In light of the need for additional surveys, enhancement prescriptions will be set out within a Bat Emergence Survey Report as a separate document.	

7.3 Foraging and Commuting Bats

Foraging and commuting bats	Timing
Recommendations	
Hedgerows and mature tree lines considered suitable for foraging and commuting bats are present along the boundaries of the site and in the fields adjacent to the site. The wider area is considered to have moderate suitability to support foraging and commuting bats, and the suitability within the red-line boundary is considered to be high. However, no removal of habitat has been proposed. That said, the physical characteristics and current management of the boundary features should be maintained to prevent disturbance to potential commuting lines.	During and Post Construction

The extent of disturbance should be reduced where possible employing a sensitive lighting scheme during construction works, and artificial security lighting should not be installed post construction directed at the habitats mentioned above.

If lighting is required, a scheme should be devised and positioned to have minimal disturbance following the guidance of an ecologist.

This may be influenced by the results of the recommended surveys within 7.2 above.

Appendix 1. General References

Bell, S. McGillivray, D. (2006) *Environmental Law*. 6^h ed. Oxford University Press.

Byron, H (2000) *Biodiversity and Environmental Impact Assessment: A Good Practice Guide for Road Schemes*. The RSPB, WWF-UK, English Nature and the Wildlife Trusts, Sandy.

Collins, J (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, (3rd edition), Bat Conservation Trust, London

Gilbert G, Gibbons DW, Evans J. (1998) *Bird Monitoring Methods: Breeding Bird Survey* (pages 389-393). RSPB.

Mitchell-Jones A.J. McLeish, A.P. (2004) *Bat Workers Manual* (3rd Edition). Joint Nature Conservation Committee.

Mitchell-Jones A.J. *Bat Mitigation Guidelines* 2004. English Nature.

Treweek, J. (1999) *Ecological Impact Assessment*. Blackwell Science.

Williams, C. (2010) *Biodiversity for Low and Zero Carbon Buildings, A Technical Guide for New Build*. Riba Publishing.

Appendix 2. Legislation and Guidance Sources

Articles of British wildlife and countryside legislation, policy guidance and both Local and National Biodiversity Action Plans (BAPs) are referred to. The articles of legislation are:

- The Wildlife and Countryside Act 1981 (as amended)
- The Conservation of Habitats and Species Regulations 2017 (as amended)
- The Natural Environment and Rural Communities Act 2006
- Department for Communities and Local Government. National Planning Policy Framework (2021)
- EC Council Directive on the Conservation of Wild Birds 79/409/EEC
- The United Kingdom Biodiversity Action Plan
- Local Biodiversity Action Plan (LBAP).

Magic Maps 2km Data Search



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Site Check Report generated on Tue Jul 19 2022
You selected the location: Centroid Grid Ref: SK28383605
The following features have been found in your search area:

Ancient Woodland (England)

Wood Name	BIRCH WOOD
Theme Name	Ancient Replanted Woodland
Theme ID	1104727
Area (Ha)	0.650091
Wood Name	BIRCH WOOD
Theme Name	Ancient Replanted Woodland
Theme ID	1104727
Area (Ha)	0.189612
Wood Name	BIRCH WOOD
Theme Name	Ancient & Semi-Natural Woodland
Theme ID	1104727
Area (Ha)	0.889246
Wood Name	BIRCH WOOD
Theme Name	Ancient & Semi-Natural Woodland
Theme ID	1104727
Area (Ha)	2.959233
Wood Name	BIRCH WOOD
Theme Name	Ancient & Semi-Natural Woodland
Theme ID	1104727
Area (Ha)	3.5585
Wood Name	BIRCH WOOD
Theme Name	Ancient Replanted Woodland
Theme ID	1104727
Area (Ha)	0.552852

Granted European Protected Species Applications (England)

Case reference of granted application	2018-33846-EPS-MIT
Species group to which licence relates	Bat
Species on the licence	C-PIP,WHISK
Site county of licence	Derbyshire
Licence Start Date	26/03/2018
Licence End Date	25/03/2023
Does licence impact on a breeding site	N
Does licence allow damage of breeding site	N
Does licence allow damage of a resting place	N
Does licence allow destruction of breeding site	N
Does licence allow destruction of a resting place	Y
Does licence impact on a hibernation site	Unknown
NERC agreement reference	Unknown

Case reference of granted application	2018-33846-EPS-MIT-1
Species group to which licence relates	Bat
Species on the licence	C-PIP,WHISK
Site county of licence	Derbyshire
Licence Start Date	16/10/2018
Licence End Date	25/03/2023
Does licence impact on a breeding site	N
Does licence allow damage of breeding site	N
Does licence allow damage of a resting place	N
Does licence allow destruction of breeding site	N
Does licence allow destruction of a resting place	Y
Does licence impact on a hibernation site	Unknown
NERC agreement reference	Unknown

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF 2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications	
Infrastructure	Airports, helipads and other aviation proposals.
Wind & Solar Energy	
Minerals, Oil & Gas	
Rural Non Residential	

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Residential
Rural Residential
Air Pollution

Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m³, manure stores > 3500t.

Combustion
Waste
Composting
Discharges
Water Supply
Notes 1
Notes 2

GUIDANCE - How to use the Impact Risk Zones

[/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf](#)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW? 2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications
Infrastructure
Wind & Solar Energy
Minerals, Oil & Gas

Airports, helipads and other aviation proposals.

Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.

Rural Non Residential
Residential
Rural Residential
Air Pollution

Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m³, manure stores > 3500t.

Combustion
Waste
Composting
Discharges
Water Supply
Notes 1
Notes 2

GUIDANCE - How to use the Impact Risk Zones

[/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf](#)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW? 2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications
Infrastructure
Wind & Solar Energy
Minerals, Oil & Gas

Airports, helipads and other aviation proposals.

Rural Non Residential
Residential
Rural Residential
Air Pollution

Combustion
Waste
Composting
Discharges
Water Supply
Notes 1
Notes 2

GUIDANCE - How to use the Impact Risk Zones

[/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf](#)

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Infrastructure
Wind & Solar Energy
Minerals, Oil & Gas

Airports, helipads and other aviation proposals.

Rural Non Residential
Residential
Rural Residential
Air Pollution

Combustion
Waste
Composting
Discharges
Water Supply
Notes 1
Notes 2

GUIDANCE - How to use the Impact Risk Zones

[/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf](#)

Local Nature Reserves (England)
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National Nature Reserves (England)
No Features found

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Ramsar Sites (England)
No Features found

Proposed Ramsar Sites (England)
No Features found

Sites of Special Scientific Interest (England)
No Features found

Special Areas of Conservation (England)
No Features found

Possible Special Areas of Conservation (England)
No Features found

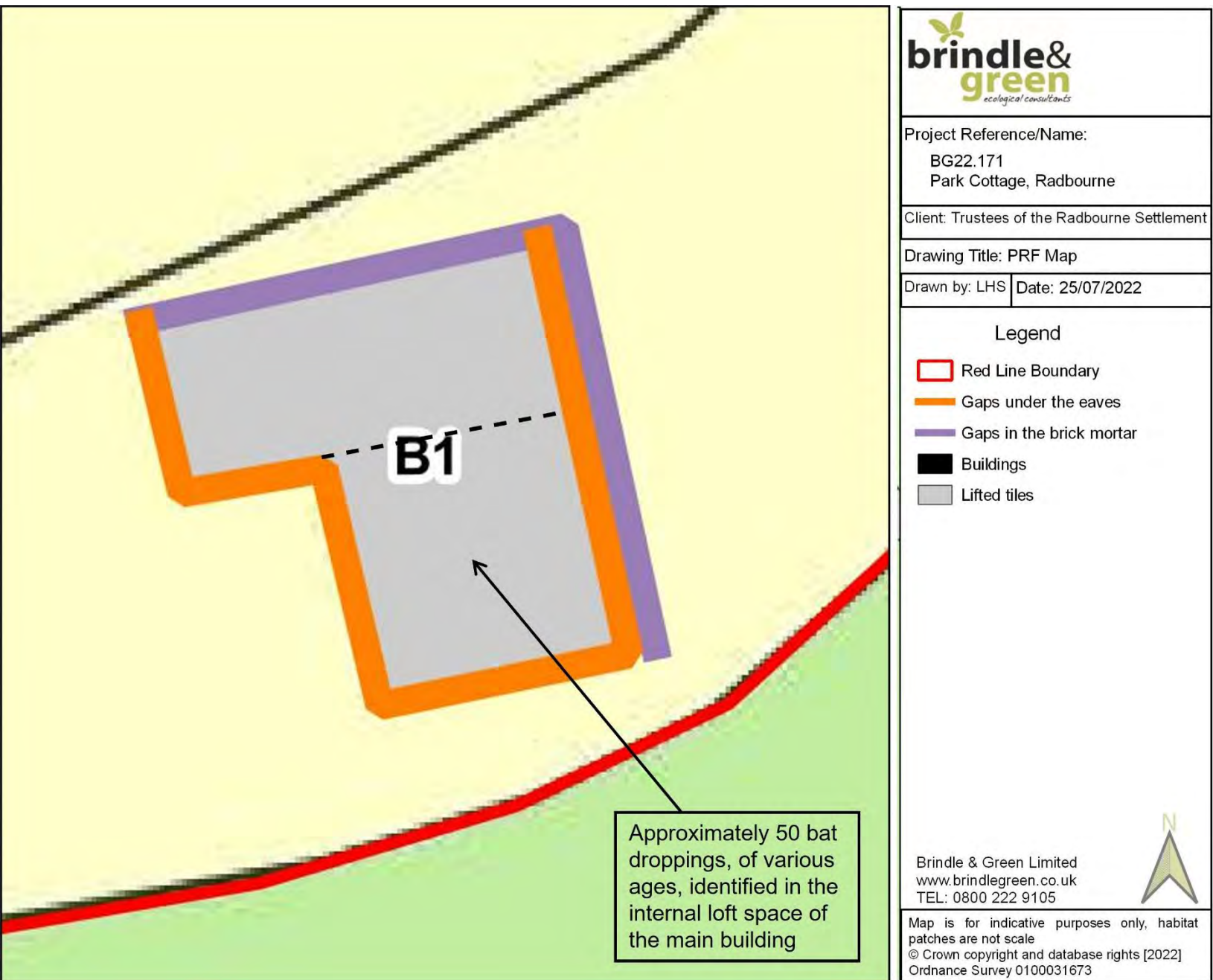
Special Protection Areas (England)
No Features found

Potential Special Protection Areas (England)
No Features found

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Appendix 4. PRF Map



Appendix 5. Proposed Plans

