



Preliminary Bat Roost Assessment & Nesting Bird Survey Report

305 Peppard Road, Emmer Green,
Reading, RG4 8TQ

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Quality Assurance

	Name	Position	Date	Signature
Surveyor and Survey Date	Robert Dunn BSc, MSc, ACIEEM	Director/ Senior Ecologist	07/07/2021	
Authored	Robert Dunn	Director/ Senior Ecologist	09/07/2021	
Reviewed	Rachel Barber BSc, MSc, MCIEEM	Director/ Senior Ecologist	14/07/2021	
Approved	Rachel Barber	Director/ Senior Ecologist	14/07/2021	

Document History

Version	Date	Revision
1	14/07/2021	Issued to the client.

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The evidence in this document is based upon the field survey(s) detailed. Due to the changing nature of ecology the list of species present cannot be considered comprehensive and Smart Ecology cannot guarantee that other protected/notable species and habitats are not present.

The ecology of a site is constantly changing and therefore the information provided in this document is only relevant at the time of survey. If it has been over 12 months since this survey was undertaken advice should be sought on whether an updated survey is necessary.

The evidence which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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Non-Technical Summary

Purpose of Report	Smart Ecology was commissioned by Martha Unia to undertake a preliminary bat roost assessment and nesting bird survey of a residential dwelling and garage at 305 Peppard Road, Emmer Green, Reading, RG4 8TQ. This was to inform a planning application for the demolition of the buildings and the erection of a new dwelling and garage on the site (Planning Reference: 210321).
Methodology	A desk study was undertaken, and a daytime external and internal inspection of the buildings was carried out to look for evidence of, and potential for, roosting bats and nesting birds.

Results and Recommendations			
Species	Suitability Assessment	Survey & Mitigation Requirements	Timing
Bats	Low (active and hibernation period)	Emergence/re-entry survey - One survey to determine the presence or likely absence of roosting bats in the residential dwelling and garage. If roosting bats are found to be present then one or more additional surveys may be required to fully characterise the roost(s).	May to August inclusive
Birds	Potential	Mitigation - Demolish the residential dwelling and garage outside of the nesting season. If this is not possible then the buildings must be checked by an ecologist for active nests no more than 48 hours before works commence. Any active nests found must be left undisturbed until the young have fledged.	Demolish the buildings outside of the nesting season (i.e. between September and February inclusive), or an inspection must be carried out by an ecologist.

Conclusions	A further survey is required to determine the presence or likely absence of roosting bats in the buildings. Mitigation is required to avoid potential impacts on nesting birds. It is recommended that artificial bat roost and bird habitat is provided within the proposed development to permit a biodiversity enhancement.
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Contents

1	Introduction	1
1.1	Background	1
1.2	Aims	1
1.3	Site Context	1
2	Methodology	2
2.1	Desk Study	2
2.2	Field Survey	2
2.3	Limitations	5
3	Results	6
3.1	Desk Study	6
3.2	Field Survey	8
4	Evaluation	13
4.1	Bats	13
4.2	Birds	14
5	Further Actions	16
5.1	Surveys and Mitigation	16
5.2	Enhancements	16
6	References	18
7	Figure	19
	Figure 1 – Location Map	
	Appendix – Building Survey Photographs	20



1 Introduction

1.1 Background

- 1.1.1 Smart Ecology was commissioned by Martha Unia to undertake a preliminary bat roost assessment and nesting bird survey of a residential dwelling and garage at 305 Peppard Road, Emmer Green, Reading, RG4 8TQ (central grid reference SU 7222 7684). See Figure 1, Section 7 for a site location map.
- 1.1.2 This was to inform a planning application to Reading Borough Council for the demolition of the existing residential dwelling and garage and the erection of a new dwelling and garage on the site (Planning Reference: 210321).
- 1.1.3 The survey comprised a daytime external and internal inspection of the residential dwelling and garage to look for evidence of, and potential for, roosting bats and nesting birds.
- 1.1.4 This report has been prepared by Robert Dunn, director at Smart Ecology and an associate member of the Chartered Institute of Ecology and Environmental Management (CIEEM), with reference to the Bat Conservation Trusts (BCT) good practice guidelines (Collins, 2016), CIEEM's Guidelines for Ecological Report Writing (CIEEM, 2017), and BS42020 Biodiversity – a code of practice for planning and development (BSI, 2013).

1.2 Aims

- 1.2.1 The purpose of the survey and report was to:
 - Check the residential dwelling and garage for evidence of roosting bats and nesting birds.
 - Describe and assess the suitability of the residential dwelling and garage for roosting bats and nesting birds.
 - Assess the impact of the proposed development on bats and nesting birds.
 - Provide recommendations for further surveys, mitigation, and enhancements.

1.3 Site Context

- 1.3.1 The site is located on the northern fringe of Reading, and comprises a residential dwelling and detached garage, with hardstanding, amenity grassland, and a roadside hedgerow present to the east of the buildings, an amenity grassland dominated garden located to the west, and a conifer hedgerow present along the northern site boundary. A road with street lighting is located immediately to the east of the site, and residential dwellings with associated gardens are located to the north, west, and south. Further low-density residential development is present to the north, west, and south, and ancient woodland, a recreational ground, and arable and pasture fields with boundary hedgerows/tree lines are located to the east.



2 Methodology

2.1 Desk Study

2.1.1 The Multi-Agency Geographic Information Centre (MAGIC)¹ website was consulted for existing information on:

- Statutory designated sites designated for bats within 6 km of the site².
- Granted bat EPS mitigation licences within 2 km of the site.
- Habitats within 6 km of the site³.

2.1.2 A data search was not obtained from the Local Records Centre as it was considered that this would not provide any significant additional information to inform the assessment.

2.2 Field Survey

Personnel

2.2.1 The survey was carried out by Robert Dunn; see Table 2-1 for details of the surveyor's experience and qualifications. All work was undertaken with reference to BCT's good practice guidelines (Collins, 2016).

Table 2-1: Surveyor information

Surveyor	Natural England Bat Survey Licence	Experience
Robert Dunn BSc, MSc, ACIEEM	Level 1 (2016-23966)	Eight years' experience in ecological consultancy. MSc Environmental Biology: Conservation and Resource Management (University of Swansea - Merit). Biological Sciences with Environmental Resources (University of Warwick – 1 st).

Habitat Assessment

2.2.2 Habitats on and in the vicinity of the site were assessed for their suitability for commuting and foraging bats.

2.2.3 Taking into account information regarding habitats within 6 km of the site obtained during the desk study, an assessment of habitat suitability was then made with reference to the BCT good practice guidelines (Collins, 2016); see Table 2-2 for the assessment criteria.

¹ <http://magic.defra.gov.uk> (accessed July 2021).

² 6 km is the largest known bat Core Sustainance Zone (CSZ) (Collins, 2016).

³ To inform an assessment of the suitability of habitats for commuting and foraging bats.



Table 2-2: Habitat suitability assessment criteria

Suitability	Description
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats 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	Continuous habitat connected to the wider landscape that could be used by bats for commuting 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	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats 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, treelined watercourses and grazed parkland. Site is close to and connected to known roosts.

Building Survey

- 2.2.4 The survey was undertaken on the 7th of July 2021. Refer to Table 2-3 for details of weather conditions during the survey.

Table 2-3: Survey weather conditions

Variable	Weather Conditions
Cloud cover	90 – 100 %
Temperature	15 – 16°C
Wind	Moderate breeze (BWS 3)
Precipitation	None

- 2.2.5 The buildings were surveyed for evidence of, and potential for, roosting bats following the methodology outlined in the BCT good practice guidelines (Collins, 2016). A detailed external and internal inspection of the buildings was undertaken using a high-powered torch (Clulite 1 million candle power), close focusing (8.5 x 21) binoculars, and an endoscope. Possible entry/exit locations for bats, potential roost sites, and the presence of or evidence of bats (e.g. carcasses, droppings, urine, grease marks, feeding remains, squeaking etc.) were noted.
- 2.2.6 An assessment was made of the suitability of the buildings for roosting bats during the bat active period (i.e. March to October) with reference to the BCT good practice guidelines (Collins, 2016); see Table 2-4 for the assessment criteria.



Table 2-4: Bat roost suitability assessment criteria and required surveys

Suitability	Description	Number of Surveys Required ²
Negligible	Negligible suitability for roosting bats.	None
Low	1 + potential roost sites that may be used by individual bats opportunistically. However, these potential roost sites do not provide suitable conditions ¹ or have suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.	One
Moderate	1 + potential roost sites with suitable conditions ¹ and surrounding habitat but unlikely to support high conservation status roosts.	Two
High	1 + potential roost sites with good conditions ¹ and surrounding habitat, that are obviously suitable for use by large number of bats regularly.	Three
Confirmed bat roost	1 + roost sites.	Two (minimum)

¹ Conditions include size, protection, shelter, temperature, humidity, height above ground, light levels and disturbance levels.

² Recommended number of emergence/re-entry surveys required by the BCT good practice guidelines (Colins, 2016) to provide confidence that bats are absent from the building/structure, or to characterise confirmed roosts.

- 2.2.7 During the survey, the interior and exterior of the buildings were also checked for evidence of birds (e.g. droppings, feathers, nesting material etc.), and features with potential for use by nesting birds.

Hibernation Assessment

- 2.2.8 An assessment of the suitability of the buildings for hibernating bats was undertaken, which considered the following aspects (Middleton, 2019):
- Presence and suitability of potential roost features.
 - Temperature and humidity conditions likely to be present during the hibernation period (i.e. between November and February).
 - The suitability of habitat in the local landscape for bats.
 - Presence of known roosts within, or close to, the structure/building.
- 2.2.9 Refer to Table 2-5 for the assessment criteria and suitability.

Table 2-5: Hibernation assessment criteria (adapted from Middleton, 2019)

Suitability	Description
Negligible	Negligible suitability for roosting bats.

Suitability	Description
Low	Limited number of external features, many features shallow (e.g. less than 10 cm deep). The features would not typically be regarded as providing the protection from weather or favourable temperature and humidity conditions required during the winter period. OR External and/or internal features present which offer full protection from the weather, however the surrounding habitat offers negligible/low suitability for bats. OR No roosts exist in the structure or nearby over the active period.
Moderate	External and/or internal features present which larger numbers of bats could occupy. The features offer full protection from the weather and there is potential for suitable temperature and humidity conditions. The site is well connected to moderate or high suitability habitat.
High	External and/or internal features present which offer a 'classic' hibernation setting (e.g. stable temperature, humid conditions, underground site). The site is well connected to moderate or high suitability habitat.

2.3 Limitations

- 2.3.1 Bat droppings may not be found during surveys as these often remain in inaccessible locations such as under tiles, between tiles and felt, or within crevices and cavities. However, it was still possible to note whether there were any suitable features which could be used by roosting bats, and this is not considered to be a significant limitation to determining the presence or likely absence of bat roosts provided that the required emergence/re-entry survey is carried out.
- 2.3.2 The north facing roof slope of the garage could not be fully inspected due to the presence of an obscuring conifer hedgerow.



3 Results

3.1 Desk Study

Statutory Designated Sites

- 3.1.1 Two statutory designated sites which include bats as a reason for their designation are located within 6 km of the site; see Table 3-1 for details.

Table 3-1: Statutory designated sites designated for bats within 6 km

Site	Approximate Distance from Site (km)	Description
Ali's Pond Local Nature Reserve (LNR)	3.8	Local Biodiversity Action Plan (BAP) species which have colonized the site include pipistrelle bats.
Blundells Copse LNR	5.7	Ancient woodland with a stream. Bats present.

EPS Mitigation Licences

- 3.1.1 Five EPS bat mitigation licences have been granted within 2 km of the site; refer to Table 3-2 for details. This shows that bats are present in the area and that the local landscape has suitability for bats.

Table 3-2: Granted bat EPS mitigation licences within 2 km

Case Reference	Approximate Distance from Site (km)	Species Affected	Start Date	End Date	Impact Allowed
EPSM2012-4078	0.25	Brown long-eared Daubenton's bat Natterer's bat	05/10/2012	30/01/2014	Damage to a breeding site and resting place
2017-32046-EPS-MIT	0.56	Soprano pipistrelle	01/11/2017	30/04/2018	Destruction of a resting place
EPSM2013-6025	0.62	Brown long-eared	26/07/2013	31/12/2013	Damage to a breeding site and damage and destruction of a resting place
EPSM2011-3175	1.77	Common pipistrelle	10/07/2011	31/08/2012	Damage to a breeding site and resting place
EPSM2012-4727	1.85	Common pipistrelle Soprano pipistrelle Brown long-eared	16/10/2012	31/10/2012	Destruction of a resting place



Habitat Assessment

- 3.1.2 With reference to Collins (2016), it is assessed that habitats within the local landscape have **moderate suitability** for foraging and commuting bats; see Table 3-3 for details of the assessment. The presence of moderately suitable habitats in the local landscape indicates a likelihood that bats may roost in buildings close to these habitats where suitable roosting opportunities are available.

Table 3-3: Habitat assessment

Habitat and Environmental Context	Suitability Descriptions ¹		Comment	Suitability ¹
General location	H	Rural	Suburban location on the northern fringe of Reading. Woodland (including ancient woodland) and farmland present beyond residential areas.	M
	M	Suburban/intensive farmland		
	L	Dense urban		
Foraging opportunities (within 50 m)	H	Well connected, high quality habitat (e.g. broadleaved woodland, tree-lined watercourses, grazed parkland)	Low density residential area with gardens.	M
	M	Connected habitat (e.g. trees, scrub, grassland, water)		
	L	Isolated habitat (e.g. lone tree, small scrub patch)		
Foraging opportunities within 2 km	H	Well connected, high quality habitat (e.g. broadleaved woodland, tree-lined watercourses, grazed parkland)	Approximately 40% of area (to the south) comprises suburban residential areas of Reading. Remainder is farmland, several ancient woodlands (closest approximately 75 m east) and broadleaved deciduous woodlands with an area of wood-pasture and parkland and a few small traditional orchards.	M
	M	Connected habitat (e.g. trees, scrub, grassland, water)		
	L	Isolated habitat (e.g. lone tree, small scrub patch)		
Foraging opportunities within 2 - 6 km	H	Well connected, high quality habitat (e.g. broadleaved woodland, tree-lined watercourses, grazed parkland)	More extensive areas of woodland including many ancient woodlands, and areas of floodplain marsh grazing.	M
	M	Connected habitat (e.g. trees, scrub, grassland, water)		
	L	Isolated habitat (e.g. lone tree, small scrub patch)		



Habitat and Environmental Context	Suitability Descriptions ¹		Comment	Suitability ¹
Commuting opportunities	H	Continuous, high quality, well connected habitat (e.g. river valleys, hedgerows, tree lines, woodland edge)	Continuous connectivity to foraging habitat via gardens, field hedgerows/tree lines and woodland.	H
	M	Continuous connected habitat (e.g. tree lines, linked back gardens)		
	L	Isolated habitats (e.g. gappy hedgerow, unvegetated stream)		
Overall Assessment Result			Features in the local landscape have moderate suitability for foraging and commuting bats.	MODERATE

¹ H = High; M = Moderate; L = Low

3.2 Field Survey

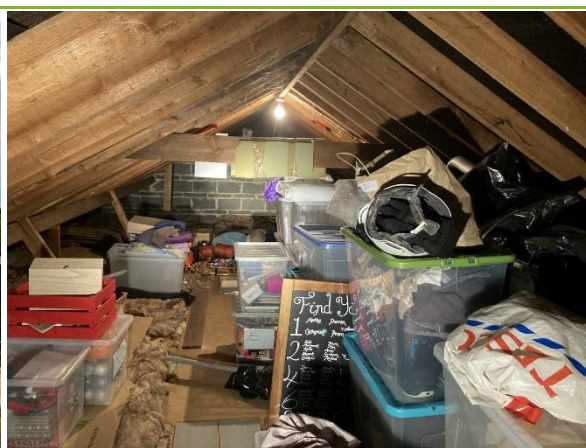
3.2.1 A residential dwelling and garage were surveyed. Refer to Tables 3-4 and 3-5 for the results of the survey.

Table 3-4: Preliminary Roost Assessment results (residential dwelling)

General Photographs	
	
Eastern and southern elevations	Northern elevation



Western elevation



Larger roof space



Smaller roof space

General Description	Building description	Bungalow with pitched and flat roofs.
	Current use	Residential.
	Number of storeys	One and two.
	Age	Understood to have been constructed in the 1960s.
External Description	Elevation construction	Brickwork. Timber tongue and groove cladding gable ends.
	Roof type	Double pitched gable ended roof. Two flat roofed sections on western elevation.
	Roof material	Interlocking double Roman concrete tiles (pitched roof), and bitumen felt (flat roofs).
	Roof ridge orientation	Approximately east to west (larger roof space section) and north to south (smaller roof space section).
	Bargeboards/fascias/soffits	uPVC fascias, soffits and bargeboards on double pitched roof section, wooden fascia and soffits of unknown material on flat roofed sections.
	Windows/doors	uPVC framed windows and doors. Metal framed French doors.
	Lead flashing	Around base of chimney and in roof valley.

	Artificial lighting	- Under porch on eastern elevation (switch controlled), at east end of northern elevation (switch controlled), and motion sensor controlled light on western gable. - Light spill from windows and French doors.
External Potential Roost Features (See the Appendix for photographs)		- Gaps at the end of roof tiles on all elevations which could permit bats access to areas between tiles and bitumen felt (P1). - Gap between bitumen felt on wall and timber cladding extending upwards approximately 20 cm on the western gable (P2). This feature was fully inspected and no bats, or evidence of use by bats, were identified. - Gap at the northern side of timber cladding on the western gable which extended back approximately 30 cm (P3). The entrance to this feature was covered by dense cobweb, which indicated no recent use by bats, and the feature was fully inspected and no bats, or evidence of use by bats, were identified. - Two holes in the fascia on the eastern elevation which provided access to the soffit box and wall top (P4).
External Features for Birds		- Gaps at the end of some roof tiles. - Gaps in timber cladding. - Soffits.
Internal Description	Number of roof spaces	One 'T' shaped roof space, comprising larger northern section and smaller southern section.
	Roof space dimensions	Larger roof space: approximately 2.3 high, 12.0 m long, and 5.5 m wide. Smaller roof space: approximately 1.2 m high, 6.5 m long, and 4 m wide.
	Presence and extent of cobwebs	Light to moderate cover along ridge boards and some cobweb hanging down from rafters in places.
	Roof construction	Machine cut wooden rafters and ridge boards.
	Roof lining	Bitumen felt.
	Elevation construction	Blockwork.
	Natural light levels	None - dark.
	Exposure to weather	Sheltered.
	Level of disturbance	Moderate disturbance in larger roof space which is used for storage, and low in the smaller roof space which is not used for storage.
	Flight space	Relatively uncluttered, although stored items are present in part of the larger roof section.
	Artificial lighting	Switch controlled light in the larger roof section.
Internal Potential Roost Features (See the Appendix for photographs)		- Ridge boards and rafters, although no evidence of use (i.e. droppings) beneath. - Several holes and gaps in the bitumen felt, providing access to gaps between tiles and the felt (P5). - Cavities within the blockwork wall at the eastern end of the larger roof space (P6). Light to moderate coverage of cobweb was present within these features, which indicated no recent use by bats, and visual inspection showed that no bats were present.



Potential Access Points to Interior	Potentially via holes and gaps in the bitumen felt.
Internal Features for Birds	Floor.
Evidence of Bats	None.
Evidence of Birds	None.

Table 3-5: Preliminary Roost Assessment results (garage)

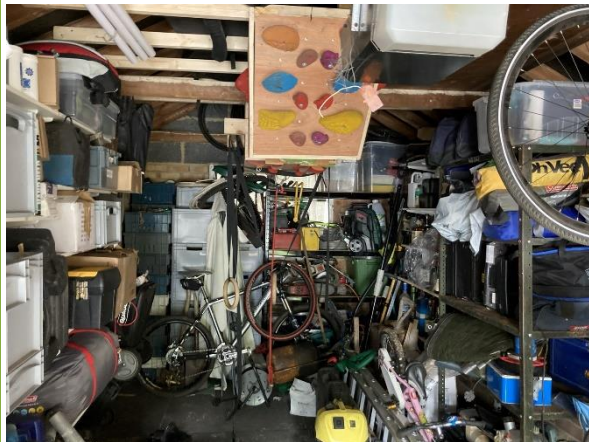
General Photographs



Eastern elevation and southern roof slope



Western and southern elevations



Interior

General Description	Building description	Detached garage.
	Current use	Storage.
	Number of storeys	One.
	Age	Understood to have been constructed in the 1960s.
External Description	Elevation construction	Brickwork.
	Roof type	Double pitched gable ended roof.
	Roof material	Interlocking double Roman concrete tiles.

	Roof ridge orientation	Approximately east to west.
	Bargeboards/ fascias/soffits	uPVC fascias, soffits and bargeboards.
	Windows/ doors	Wood framed doors. Metal and wood framed windows.
	Lead flashing	None.
	Artificial lighting	None which appeared to be operational.
External Potential Roost Features (See the Appendix for photographs)	Gaps at the end of roof tiles on all elevations which could permit bats access to areas between tiles and bitumen felt (P7).	
External Features for Birds	Gaps at the end of roof tiles.	
Internal Description	Number of roof spaces	None – open up to the roof.
	Roof space dimensions	N/A.
	Presence and extent of cobwebs	Light cover only under roof timbers.
	Roof construction	Machine cut wooden rafters and ridge board.
	Roof lining	Bitumen felt.
	Elevation construction	Brickwork.
	Natural light levels	None - dark.
	Exposure to weather	None.
	Level of disturbance	Moderate/high.
	Flight space	Relatively cluttered due to presence of stored items.
	Artificial lighting	Switch controlled light.
Internal Potential Roost Features	- Ridge board and rafters, although no evidence of use (i.e. droppings) beneath. - Small number of sagging sections of bitumen felt.	
Potential Access Points to Interior	None confirmed.	
Internal Features for Birds	On top of stored items.	
Evidence of Bats	None.	
Evidence of Birds	None.	

4 Evaluation

4.1 Bats

Suitability Assessment

- 4.1.1 The residential dwelling and garage were assessed to have **low suitability** for roosting bats during the active season with several potential roost sites (e.g. under tiles) with suitable conditions and moderate suitability habitat in the vicinity, but which are considered unlikely to be used on a regular basis or by larger numbers of bat.
- 4.1.2 The buildings were assessed to have **low suitability for hibernation**, with features present only with potential for use by species which hibernate in more exposed conditions (e.g. gaps under roof tiles), but which are not considered likely to provide the protection from weather or favourable temperature and humidity conditions during the winter period which would be found in a classic hibernation site. If the buildings are found not be used by roosting bats during the active period then it is considered that the suitability for hibernation would be downgraded to negligible.

Legislation and Planning Policy

- 4.1.3 All bat species and their roosts are protected by the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended); see Table 4-1.

Table 4-1: Legal implications of legislation with regard to bats

Legislation	Legal Implications
Conservation of Habitats and Species Regulations 2017 (as amended)	It is illegal to: • Deliberately capture, injure or kill bats. • Deliberately disturb¹ bats. • Damage or destroy a breeding site or resting place².
Wildlife and Countryside Act 1981 (as amended) – sub-sections 9(4) b and c and 9(5) only	It is illegal to: • Intentionally or recklessly disturb bats while they are occupying a structure or place of shelter or protection². • Intentionally or recklessly obstruct access to a structure or place of shelter or protection².

¹ Disturbance under the Conservation of Habitats and Species Regulations 2017 (as amended) is defined as impairing the ability of an animal to survive, breed, reproduce, rear or nurture their young, hibernate or migrate, or to significantly affect the local distribution or abundance of the species.

² Bat roosts are any structure or place used for breeding, shelter or protection and are protected even when bats are not present.

- 4.1.4 A EPS licence is required if works affect bats or their roosts. EPS licences are issued by Natural England only after the following three tests have been satisfied:
- The proposed works must be for the purpose of preserving public health or safety or other imperative reasons of overriding public interest.
 - There is no satisfactory alternative to the proposed works.
 - The proposed works will not be detrimental to the maintenance of the species concerned at



a favourable conservation status in their natural range.

- 4.1.5 The presence of bats is a material consideration in the planning process and local planning authorities will refuse planning permission where a EPS licence is unlikely to be granted and a criminal offence relating to bats is likely to result from a development.
- 4.1.6 Additionally, barbastelle, Bechstein's bat, brown long-eared, greater horseshoe bat, lesser horseshoe bat, noctule, and soprano pipistrelle bats are designated as species of principal importance (priority species) under the Natural Environment and Rural Communities Act 2006. Section 40 of this Act places a duty on local planning authorities to 'have regard' to conserving these species when determining planning applications.
- 4.1.1 Paragraph 170 of the National Planning Policy Framework (NPPF) 2019 states that planning decisions should protect sites of biodiversity value, minimise biodiversity impacts, and contribute to net biodiversity gains. Paragraph 175 states that planning permission should be refused if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for. The NPPF also emphasises the need to protect priority species.

Impact Assessment

- 4.1.1 The proposed demolition of the buildings could potentially destroy bat roosts and disturb, kill, or injure bats (if present at the time of works).

4.2 Birds

Suitability Assessment

- 4.2.1 Birds could potentially nest in gaps at the end of roof tiles, soffit boxes and gaps behind timber cladding. No evidence of nesting or nesting behaviour was noted during the survey.

Legislation and Planning Policy

- 4.2.2 Birds and their nests are protected by the Wildlife and Countryside Act 1981 (as amended); see Table 4-2 for details.

Table 4-2: Legal implications of legislation with regard to birds

Legislation	Legal Implications
Wildlife and Countryside Act 1981 (as amended)	It is illegal to intentionally: • Kill, injure or take any wild bird. • Take, damage or destroy a wild bird's nest while it is in use or being built. • Take or destroy the eggs of any wild bird. • There is additional protection for birds listed on Schedule 1 (S1) of the Act, which includes barn owls, whereby it is an offence to intentionally or recklessly disturb a S1 bird while building a nest or in or near a nest containing eggs or young, and disturb dependent young of a S1 bird.

- 4.2.3 Additionally, several bird species are designated as species of principal importance (priority species) under the Natural Environment and Rural Communities Act 2006, including house sparrow and common starling which often nest in buildings. Section 40 of this Act places a duty on local planning authorities to 'have regard' to conserving these species when determining



planning applications. The NPPF also emphasises the need to protect priority species.

Impact Assessment

- 4.2.4 If the buildings are demolished during the nesting season (which is typically March to August inclusive) then it is possible that active nests could be damaged or destroyed.



5 Further Actions

5.1 Surveys and Mitigation

5.1.1 Details of required further surveys and/or mitigation are provided in Table 5-1.

Table 5-1: Survey and mitigation requirements

Species	Suitability Assessment	Survey & Mitigation Requirements	Timing
Bats	Low (active and hibernation period)	Emergence/re-entry survey - One survey to determine the presence or likely absence of roosting bats in the residential dwelling and garage. If roosting bats are found to be present then one or more additional surveys may be required to fully characterise the roost(s).	May to August. Inclusive.
Birds	Potential	Mitigation - Demolish the residential dwelling and garage outside of the nesting season. If this is not possible then the buildings must be checked by an ecologist for active nests no more than 48 hours before works commence. Any active nests found must be left undisturbed until the young have fledged.	Demolish the buildings outside of the nesting season (i.e. between September and February inclusive), or an inspection must be carried out by an ecologist).

5.2 Enhancements

5.2.1 In line with the NPPF, details of opportunities to provide a biodiversity enhancement for roosting bats and nesting birds are detailed in Table 5-2.

Table 5-2: Opportunities for biodiversity enhancements

Opportunity	Details
Provision of bat tubes/boxes/shelters/	It is recommended that additional roosting opportunities are provided for bats. This could include the installation of at least two bat tubes integrated into the external elevations of the proposed new buildings (e.g. 1FR or 2FR Schwegler Bat Tube). Bat tubes provide permanent roosts for bats and require little or no maintenance. Alternatively/additionally, at least two wall mounted bat boxes/shelters could be provided on the exterior of the proposed new buildings (e.g. Schwegler 2FE Wall-Mounted Bat Shelter, 1FF Schwegler Bat Box, Beaumaris Woodstone Bat Box). Bat tubes, boxes and shelters must be installed at least 3 - 4 m above ground level, have a clear flight path to and from the entrances, be positioned where they would not be affected by artificial light spill from windows and other artificial light sources, and ideally orientated to face south, south-east or south-west.



Opportunity	Details
Provision of bird nest boxes	It is recommended that additional nesting habitat is provided for birds. This could include the installation of at least two nest boxes integrated into the elevations of the proposed new buildings (e.g. Build-in Woodstone Half Open Box, WoodStone Build-in Swift Nest Box B, Vivara Pro WoodStone House Sparrow Nest Box). Alternatively/additionally, at least two nest boxes could be installed on the exterior walls of the proposed new buildings (e.g. Schwegler 1SP Sparrow Terrace, Schwegler 1B Nest Box, 3S Schwegler Starling Nest Box, 2GR Schwegler Nest Box). Nest boxes must be installed at least 3 – 4 m above ground level, ideally facing between the north and east. Birds must have a clear flight path to and from the boxes.



6 References

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Middleton, N. (2019). *Assessing Sites for Hibernation Potential. A Practical Approach, including a Proposed Method & Supporting Notes*. Unpublished.



7 Figure

Figure 1 – Location Map



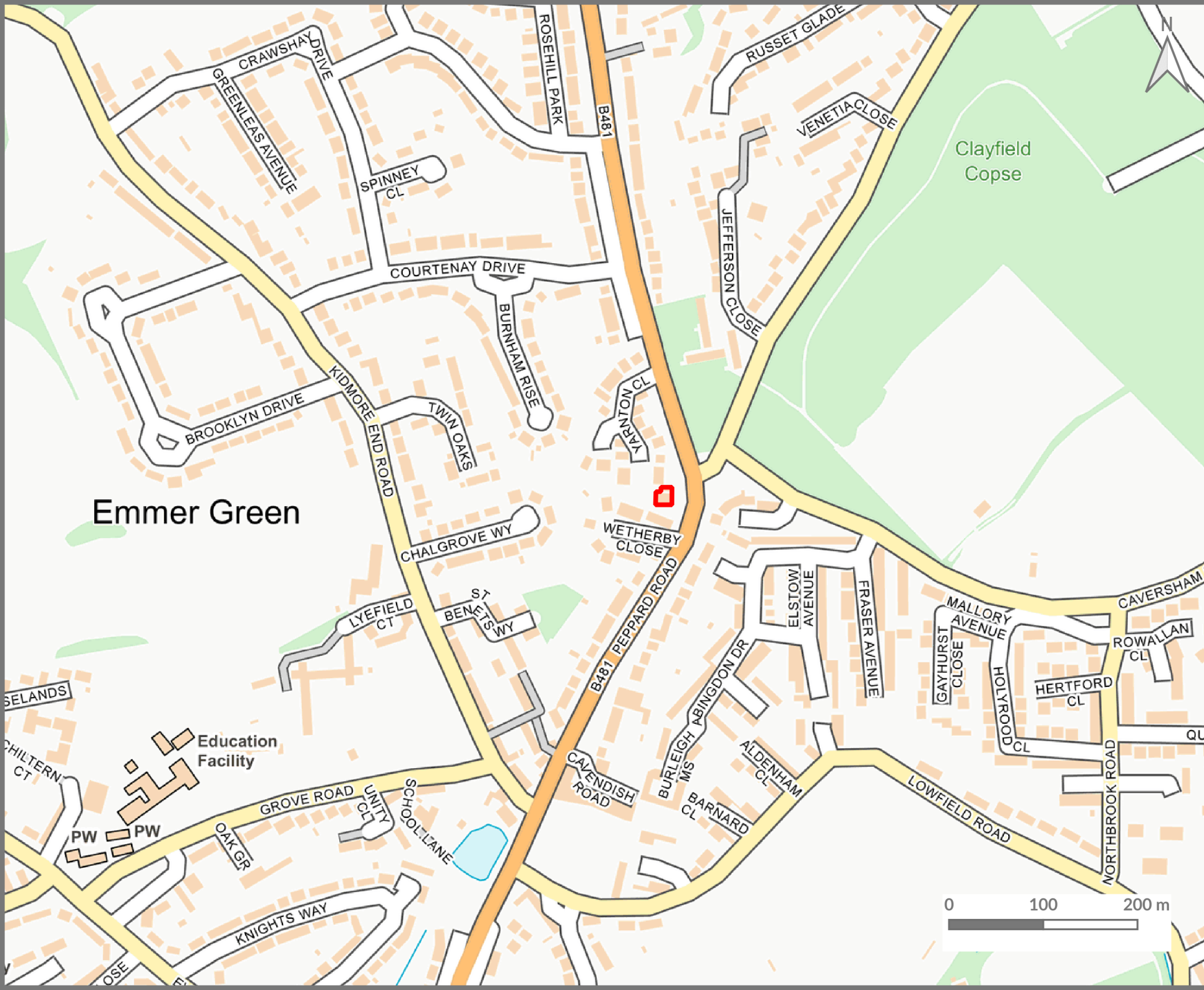


Figure 1 -
Site Location Map
305 Peppard Road
Emmer Green
Reading
RG4 8TQ

Site Boundary 

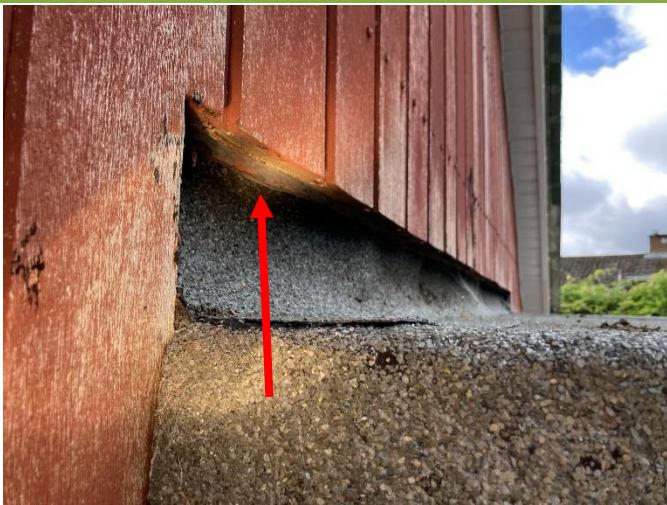
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Date:	06/07/2021
Drawn by:	Joseph Wilkie
Checked by:	Robert Dunn

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2021-062\GIS



Appendix – Building Survey Photographs

Number	Description	Photograph
Residential Building		
P1	Examples of the gaps present at the end of roof tiles which could permit bats access to areas between tiles and bitumen felt.	
P2	Gap between bitumen felt on wall and timber cladding extending upwards approximately 20 cm on the western gable. This feature was fully inspected and no bats, or evidence of use by bats, were identified.	

Number	Description	Photograph
P3	Gap at the northern side of timber cladding on the western gable which extended back approximately 30 cm. The entrance to this feature was covered by dense cobweb, which indicated no recent use by bats, and the feature was fully inspected and no bats, or evidence of use by bats, were identified.	
P4	Example of the two holes present in the fascia on the eastern elevation which provided access to the soffit box and wall top	
P5	Examples of the holes and gaps present in the bitumen felt, providing access to gaps between tiles and the felt.	

Number	Description	Photograph
		
P6	Example of the cavities present within the blockwork wall at the eastern end of the larger roof space. Light to moderate coverage of cobweb was present within these features, which indicated no recent use by bats, and visual inspection showed that no bats were present.	

Number	Description	Photograph
Garage		
P7	Example of the gaps present at the end of roof tiles which could permit bats access to areas between tiles and bitumen felt.	