

Preliminary Roost Assessment

Survey site:

Boughurst Farm, Leywood Road, Meopham, Gravesend, Kent DA13 0UD

Client:

Greg Ohlson

Survey date:

23rd May 2025

Project:

This report is prepared to inform a planning application with the Gravesham Borough Council. The proposal is described as: A two-story rear extension providing a new kitchen area and bedroom above.

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2024.](#)

The site survey was undertaken by Harry Switala BSc (Hons), MSc, Graduate Ecologist [Accredited Agent on Natural England Bat Licence]					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
23/05/2025	18	47	40	0	None
PRA Survey Factor		Detailed using desk study and site survey. Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.			
See PRA plan in Appendix 1, location plan in Appendix 2, proposed plans in Appendix 3 and photos in Appendix 4.					
Background and Site Location					
Summary of site and desk Study		Site Context The survey site is centred on National Grid Reference TQ 65980 63175 and has an area of approximately 0.015ha. The site is characterised by one residential building. The site is surrounded by large arable fields. The wider landscape comprises further rural areas, with pockets of woodland copses and urban towns scattered throughout. For example Brimp Wood is located 212m southeast of the site while the town of Culverstone Green is located 1573m west. The underlying geology comprises the chalk of the Seaford Chalk Formation and Newhaven Chalk Formation. The overlying soils comprise slightly acid loamy and clayey soils with impeded, suited to a wide range of pasture and generally broadleaved and mixed woodland types. The site has not been subject to previous surveys. Designated Sites			

Details of statutory sites within a 2km radius retrieved from the MAGIC database are detailed in the table below. The presence of non-statutory designated sites within a 2km radius of the site cannot be determined without biological records data from Kent and Medway Biological Records Centre.			
Designated Site Name		Distance From Site	Reasons for Notification from Natural England/GiGL
Statutory Designated Site	Kent Downs Area of Outstanding Natural Beauty (AONB)	On site	Rich ecological diversity, including rare chalk grasslands, ancient woodlands, and diverse river valleys. These habitats support a wide range of wildlife, including many rare and threatened species, making the area important for biodiversity conservation. The landscape's mosaic of natural features creates a haven for plants, birds, insects, and mammals, contributing significantly to the region's environmental value.
	North Kent Woods and Downs National Nature Reserve (NNR)	1856m southwest	Ancient woodlands, chalk grasslands, and wetland habitats that support a wide range of rare and threatened species. The area is home to diverse flora and fauna, including orchids, dormice, and rare butterflies, making it vital for biodiversity. Its well-preserved natural landscapes provide important breeding, feeding, and sheltering grounds for wildlife, contributing significantly to national conservation efforts.
	Halling to Trottiscliffe Site of Special Scientific Interest (SSSI)	1538m northeast	This site consists of an extensive area of the North Downs west of the Medway Gap. The site is representative of Chalk grassland in west Kent and beech woodland on the chalk. Outstanding assemblages of plants and invertebrates are present.
North Downs Woodlands Special Area of Conservation (SAC) is located 979m northeast. The area supports a significant presence of semi-natural dry grasslands and scrubland on calcareous substrates, specifically of the Festuco-Brometalia type, which are important for biodiversity. It is also recognised as one of the best areas in the United Kingdom for Asperulo-Fagetum beech forests, a valuable and characteristic woodland habitat. Additionally,			

	the region contains some of the finest examples of <i>Taxus baccata</i> (yew) woods in the British Isles, further highlighting its ecological importance. These priority habitats provide good commuting, foraging and roosting opportunities for bats. <u>EPSL Data</u> A review of the MAGIC database revealed no granted European Protected Species Licenses (EPSLs) for bats within a 2km radius of the site. There are no Special Areas of Conservation designated for bats within 10km of the site.
<i>Limitations</i>	A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.
Field survey results	
<i>Summary of Survey Findings</i>	<u>Foraging and Commuting Habitat</u> Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of scattered trees and hedgerows, a pond, modified grasslands and arable land. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. Habitats in the wider landscape, such as woodland copses, hedge-lined parks and large arable fields, also provide ideal habitats for foraging and commuting bats. <u>Roosting Habitat</u>

		Buildings and trees to be impacted by the proposed development are assessed for their suitability to support roosting bats below. There is a total of 1 building on site; the main dwelling (B1). Evidence of roosting bats was identified within B1, see below.
B1 Building Description		Photographs
<i>Summary</i> B1 is a double storey brick built residential dwelling. The walls are lined with clay hanging tiles on the second storey, along all elevations. The windows and doors are timber framed. There are timber soffits along all elevations. The roof is hipped with clay tiles. There is one chimney present. There is one internal void within B1 (see below). >1000 Brown long eared bat droppings were identified within the loft void of B1. The building has high habitat value.		
Feature	Condition/Description/Suitability	Photograph(s)

Brick built walls, with clay hanging tiles along the second storey.	Condition/Description Brick work is in good condition with no cracks or gaps. Clay hanging tiles are lifted in several places. A hanging tile is slipped creating a large gap under the soffit at the southwestern corner of B1. Suitability/Access/Evidence of Bats Gaps beneath hanging tiles could provide opportunities for crevice dwelling species. Slipped hanging tiles can provide access into the loft void.	
		

Clay roof tiles	Condition/Description Multiple slipped/raised tiles across the roof. Suitability/Access/Evidence of Bats Slipped/raised tiles may provide access into the loft void as well as provide opportunities for crevice dwelling species.	
Timber soffits	Condition/Description Linear gap between the façade of the building and the soffit along all elevations. Suitability/Access/Evidence of Bats Provides possible bat access into internal void.	

Timber framed window/doors	Condition/Description Well-sealed. Suitability/Access/Evidence of Bats N/A	
Internal voids	Condition/Description L1 is a rectangular loft that measures 14.7m long, 3.2m wide and 2.6m tall from the floor to the ridge. Conditions: 19.1°C, 41.1% RH. The roof is lined with plastic lining along all aspects of the loft. The floors are insulated with mineral wool. The loft is supported by timber beams. The loft is largely empty with only a few stored household items. Suitability/Access/Evidence of Bats	

	High numbers (>1000) bat droppings were found on the floor of the loft. Samples were collected for DNA analysis. The results of the DNA analysis reveal these are brown long eared bat droppings. No estimates can be made of species, roost type at this stage, however the large volume of droppings indicates a possible maternity roost. Furthermore, the droppings were scattered across the entire loft, suggesting this is a long standing roost. Bat dropping locations shown in appendix 1. High numbers of insect remains such as wings were also identified. The loft lining is damaged in multiple places, allowing access into the loft void, via slipped/raised tiles.	 
Foreseen Impacts	<u>Roosting Habitat [Buildings]</u>	

	The proposed development will result in the construction of a double storey extension to the northeast elevation. This will involve a part removal of the existing roof and loft structure. This could result in the destruction of any bat roosts present and could cause disturbance, death or injury to bats. <u>Foraging and Commuting Habitat</u> The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. <u>Artificial Lighting</u> No new lighting will be installed as a result of the proposed development.
<i>Recommendations</i>	<u>Roosting Habitat [Buildings]</u> Three bat emergence/re-entry surveys are required on B1 during the active bat season (May – September) to confirm presence/likely-absence of bats roosting in or on the building. These survey visits should be completed during the optimal survey period mid-May to August inclusive. The survey visits should be at least three weeks apart. Two surveyors are required to provide full coverage of the building's elevations to look for emerging/re-entering bats. Surveyors will be equipped with infrared cameras to see where any specific roost locations are located. If any bat roosts are confirmed from this survey schedule, a bat license would be required to demolish the buildings as it would involve the destruction of roosts. This is applied for with the help of a class 2 licensed bat ecologist after planning permission is granted, but before commencement of works. Lighting mitigation may be required based on the outcome of the night bat survey(s). <u>Foraging and Commuting Habitat</u>

	No further surveys are required.
Nesting Birds	
<i>Summary of Survey Findings</i>	<u>Buildings</u> Slipped hanging tiles can provide access into the loft void for small bird species. The slipped tile located at the southeastern corner of the site has signs of vegetation resembling a nest. However, this could not be seen from the loft void and was not easily observed from the ground. No habitat for schedule 1 birds was observed.
<i>Foreseen Impacts</i>	<u>Buildings</u> The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.
<i>Recommendations</i>	<u>Buildings</u> Any construction work should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a suitably experienced ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. <u>Suggested Biodiversity Enhancements</u> Installation of two bird boxes at the site – preferably two integrated swift bricks (considered to be universal nest bricks for small bird species) within the fabric of the building during construction. To be suitable for swifts, they will need to be placed at least 5m above ground level under the eaves of a building. Integrated nesting bricks are preferable to bird boxes; even if it cannot fulfil the height requirement for swifts, it will still be suitable for other passerine species. If the building material does not allow for integrated nesting bricks, two nest boxes mounted on the exterior of the building or on retained trees will also be acceptable. Nest bricks/boxes should be sheltered from prevailing wind, rain, and strong sunlight, and should be placed on an open aspect with no trees or large shrubs potentially obstructing flight paths.

Appendix 1: PRA plan



Appendix 2: Location map



Appendix 3: Proposed plan



NOTES: Report all discrepancies, errors and omissions. Verify all dimensions on site before commencing any work on site or preparing shop drawings. All materials, components and workmanship are to comply with the relevant British Standards, Codes of Practice and appropriate manufacturers recommendations. See relevant drawings for all specialist work. This drawing and design are copyright of James Clague Architects Ltd, company registration number 8664802.		
Rev	Date	Description
DRAFT PLANNING NOT FOR CONSTRUCTION		
Project Title Mr Ohlson Boughurst Farm Leywood Road Meopham Gravesend Kent DA13 0UD		
Drawing Description Proposed Site and Roof Plan		
Scale 1:200@A3		
Date December 2024		Drawn By TPS
JAMES CLAGUE ARCHITECTS		
40 / 41 Castle Row Canterbury, Kent CT1 2QY T: 01227 649 073 E: info@jamesclague.co.uk W: jamesclague.co.uk		
Drawing Number 27680_PL009		Revision -

Appendix 4: Photos



Figure 1. Southern and eastern elevations of B1.



Figure 2. Northern and western elevations of B1.

Limitations and Copyright

Limitations

A biological records data search has not been undertaken. To date, Arbtech has not been commissioned to obtain the data. Bat records can be acquired at a later date and will be necessary for any subsequent license application to Natural England.

Legal

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

Version control			
Status	Issue	Name	Date
Draft	0.1	Harry Switala, BSc (Hons), MSc, Graduate Ecologist	23/05/2025
Proof	0.2	Charlie Drapala BSc (Hons) AMRSB, Natural England CL18 Bat Licence, Consultant Ecologist	02/05/2025
Final	1.0	Harry Switala, BSc (Hons), MSc, Graduate Ecologist	02/05/2025