



Preliminary Roost Assessment and Bat Emergence and Re-entry Surveys

1b Ashow, Kenilworth, Warwickshire, CV8 2LE.

James Dex

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Executive summary

Arbtech were commissioned by James Dex to undertake a Preliminary Roost Assessment (PRA) and Bat Emergence and Re-entry Surveys at 1b Ashow, Kenilworth, Warwickshire CV8 2LE. The surveys were completed on the 14/05/2021, 28/05/2021 and 11/06/2021. The aim of the assessment was to consider the value and suitability of the structures for roosting bats and to confirm the presence/likely absence of a bat roost. When bat roosts are identified this includes providing evidence for species, numbers and levels of activity, to identify any entrance and egress points, and to gain an understanding of the activity of bats using the site in the local landscape. The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for barn owls.

The development proposals are for a roof top extension to the northeast and replacement of two windows. A planning application is being prepared for submission to Warwick District Council.

Recommendations

Ref	Survey conclusions	Foreseen impacts	Recommendations / Mitigation	Enhancements
B1	The surveys concluded that there is a day roost of one common pipistrelle bat which entered under the timber fascia board on the eastern elevation which is where bat droppings were located during the Preliminary Roost Assessment.	As the proposed development involves the extension of the northern elevation of B1, the bat roosts will be destroyed. Any bats present during the works could be injured or killed.	A European protected species mitigation licence (EPSML) will be required from Natural England prior to the commencement of works, once planning has been granted. As there is one bat roost of low numbers of common species present, the works can be completed under a Natural England bat mitigation class licence (low impact).	The Local Planning Authority has a duty to ask for enhancements under the NPPF (July 2018) The mitigation and compensation detailed for the EPSML will provide sufficient enhancements of the developed site for bats.

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1.0 Introduction and Context

1.1 Background

Arbtech were commissioned by James Dex to undertake a Preliminary Roost Assessment (PRA) and Bat Emergence and Re-entry Surveys at 1b Ashow, Kenilworth, Warwickshire CV8 2LE. The surveys were completed on the 14/05/2021, 28/05/2021 and 11/06/2021. The assessment is informed by the Bat Conservation Trust publication *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, J. (Ed) 2016).

No previous reports have been produced for this site by Arbtech Consulting Ltd.

1.2 Site Context

The site is located at National Grid Reference SP 31095 70440 and has an area of approximately 0.1ha. There is one building within the site boundaries that was surveyed as this will be affected by the proposed development.

1.3 Scope of the report

This report provides a description of all features suitable for roosting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. This report also provides a description of the bat activity observed and recorded during each survey. The aim of the assessment was to characterise any roosts present including species, number of individuals, number and location of roost access points, and to gain an understanding of how bats use the site.

Information is provided regarding any constraints to the proposals as a result of roosting bats, and summarises any mitigation required to achieve planning permission and statutory consent to comply with wildlife legislation.

To achieve the aims of the assessment, the following steps have been taken:

- A desk study has been carried out including a request for information from the local bat group or records centre.
- A field survey has been undertaken, including an external survey and internal inspection where possible.
- An outline of likely impacts on any known roosts has been provided, based on current development proposals.

A survey plan is presented in Appendix 1, proposed plans in Appendix 2 (where available), desk study results in Appendix 3 and a summary of relevant legislation is presented in Appendix 4.

1.4 Project Description

The development proposals are for a roof top extension to the northeast and replacement of two windows. A planning application is being prepared for submission to Warwick District Council.

2.0 Methodology

2.1 Desk Study methodology

The desk study included a 2km radius review of statutory and non-statutory designated sites, Biodiversity Action Plan (BAP) Priority Habitats and granted EPSML records for bats held on Magic database. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

Existing bat records relating to the site and a surrounding 2km radius are required to conform to national guidelines. The data search is confidential information that is not suitable for public release and has been analysed and summarised for presentation in this report.

2.2 Site Survey methodology – Preliminary Roost Assessment

The Preliminary Roost Assessment element of the survey(s) was undertaken by Matthew Edwards: accredited agent to Natural England bat licence: 2016-22119-CLS-CLS on the 14th May 2021. All features that will be impacted by the project proposals were assessed for their bat roosting and/or commuting habitat. The surveyor systematically surveyed all features suitable for bats and signs of bat activity.

For any surveyed buildings:

A non-intrusive visual appraisal from the ground using binoculars, inspecting the external features of the building(s) for potential access/egress points, and for signs of bat use. An internal inspection of the building was also made, including the living areas of derelict or abandoned buildings and the accessible roof spaces of all buildings, using an endoscope, torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

For any surveyed trees:

A visual inspection from ground level using binoculars and where accessible and safe to do so, an internal inspection of potential roosting features using an endoscope, torch and ladders.

2.3 Site Survey methodology – Emergence and Re-entry Surveys

The lead surveyor is Matthew Edwards: accredited agent to Natural England bat licence: 2016-22119-CLS-CLS and was assisted by experienced surveyors with several years of bat survey experience. Three surveyors were used to provide sufficient cover of the building during each survey. The designated position of each surveyor during each survey is detailed in the tables in Section 3.9 below and shown on the plan in Appendix 1.

The surveys involved surveyors positioned around the building ensuring that all elevations and roof sections with suitable roosting features could be clearly observed. Particular attention was paid to the areas of the building identified as providing suitable access points to bat roosts. The location of each surveyor during each survey is shown in Appendix 1. Each surveyor was assigned an area of the building to observe for the duration of the survey. Surveyors used heterodyne and frequency division bat detectors, and Wildlife Acoustics EM3+ and Echo Meter Touch detectors connected to iPads. Bat echolocation calls recorded during the surveys were analysed using Wildlife Acoustics sound analysis software Kaleidoscope V3.1.7 when required. The Echo Meter Touch includes an auto ID function for bat species. However, this is not 100% accurate and further post-survey sound analysis is often required to confirm species that could not be

identified by the auto ID software during the survey. Surveyors also used head torches, survey record sheets and pens/pencils for recording all activity observed during the surveys. Each surveyor was also provided with a handheld radio for communication between surveyors to assist with confirming ambiguous bat activity e.g. a bat emergence or a bat passing over the building.

In accordance with the latest bat survey guidelines (Collins, J. 2016) dusk emergence surveys commenced 15 minutes before sunset and continued for 1½ - 2 hours after sunset – depending upon bat activity and surveyor visibility. Dawn re-entry surveys commenced 2 hours before sunrise and continued until 15 minutes after sunrise.

Surveys were completed during optimal weather conditions i.e. when temperatures were above 10°C, with no rain or strong winds, as these adverse weather conditions can impact upon bat emergence and foraging behaviour.

2.4 Breeding birds and other incidental observations

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for barn owls *Tyto alba*.

2.5 Suitability Assessment

All affected survey features on site were categorised according to the likelihood of bats being present, in line with best practice guidelines (Collins, J. (ed) 2016). The features that dictate the likelihood of roosting bats are summarised in Tables 1 and 2 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats

Likelihood of bats being present	Feature of building and its context
Higher	Buildings/structures with features of particular significance for roosting bats e.g. mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g. river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data).
Lower	A small number of possible roost sites/features, used sporadically by more widespread species. Habitat suitable for foraging in close proximity but isolated in the landscape. Or an isolated site not connected by prominent linear features. Few features suitable for roosting, minor foraging or commuting.

Table 2: Features of a tree that are correlated with use by bats

Likelihood of bats being present	Feature of tree and its context
Higher	A 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.
Lower	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential.

2.6 Limitations

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site. These surveys follow best practice guidance to assess the habitat suitability of the building on site and to confirm presence/likely-absence of roosting bats. Where present, roosts have been characterised. However, this information is collected at finite dates and times, and provides an indication of the conditions on site only. The use of the building, and the site as a whole by bats, at all times cannot be established based on this information.

There were no specific limitations to the surveys.

3.0 Results and Evaluation

3.1 Desk Study Results

A summary of desk study results is provided below, full details are presented in Appendix 3.

3.2 Designated sites

Details of any statutory and non-statutory designated sites within a 1km radius of the survey site, including their reasons for notification, are provided in the table below.

Table 3: Designated sites within 1km radius of the site

Designated Name	Site	Distance from Site (approx.)	Reasons for Notification from Natural England and/or BRD or LPA policy maps
Statutory Sites			
None			
Non-statutory Sites			
Birmingham Greenbelt	Within	N/A	

3.3 Landscape

A review of the designated sites, aerial photographs (Figure 1), the Magic database and OS maps has been undertaken. Collated together, the site's local bat habitat is described below:

The site is situated in a rural area of Warwickshire. The landscape is dominated by arable fields with tree-lined and hedgerow boundaries which will provide suitable foraging and commuting areas for bats. Furthermore, there are ancient woodlands to the east and west which could be important habitat for bats. Additionally, the ancient woodlands are connected through wood pasture and parkland which could provide important foraging and commuting corridors for bats.

Priority habitats within 1km of the site are listed in the table below.

Table 4: Priority Habitat Inventory within 1km (Magic.gov.uk):

Habitat	Closest distance from site
Wood-pasture and Parkland	~165m north
National Forest Inventory	~500m north-east
Deciduous woodland	~500m north-east
Ancient woodland	~500m west

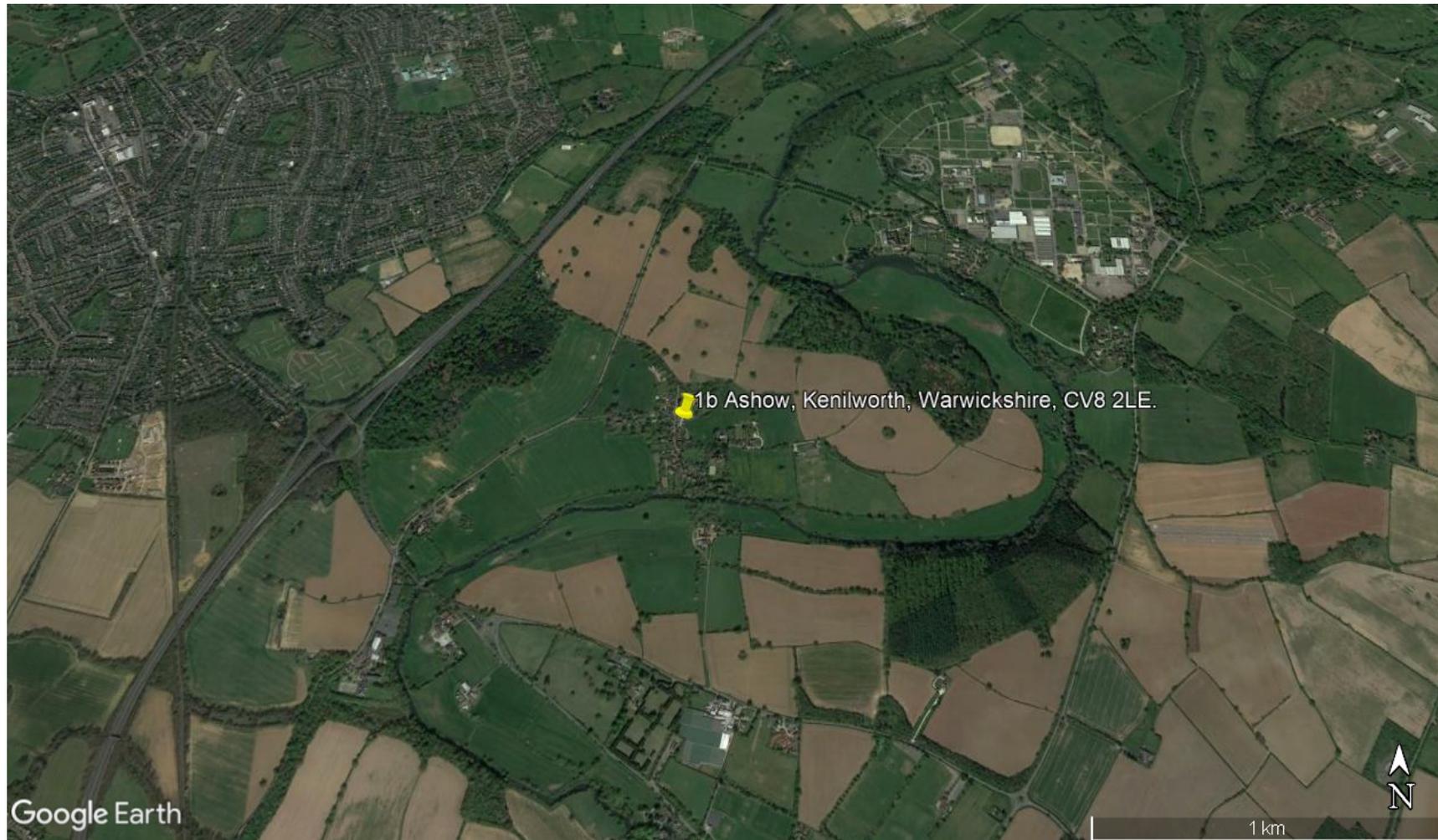


Figure 1: Aerial photo of site, showing landscape structure.

3.4 Historical records

Warwickshire Biological Records Centre (WaBRC) was not commissioned to provide bat records for within 2km of the site.

Table 5: Historical records* of bats within 2km of the site

Common name	Scientific binomial	Number of records	Number of roost records	Maternity roost records
Not obtained				

A search of the Magic database for granted European Protected Species Mitigation Licences (EPSMLs) for bats for bats within a 1km radius of the site has been completed. Displaced bats from recently destroyed bat roosts >1km away from the survey site will find alternative roosting sites either within the mitigation measures implemented as part of the licence or will relocate to other known roost sites in close proximity to the Licenced site. The EPSML records show that one bat roost has been destroyed within a 2km radius involving common pipistrelle bats.

Table 6: Granted EPSMLs (bats) within 1km of the site.

Case reference of granted application	Approx. distance from site	Bat Species Effected	Licence Start Date:	Licence End Date:	Impacts allowed by licence
EPSM2011-3252	182m east	C-PIP;BLE	01/08/2011	01/07/2012	Destruction of a resting place

3.5 Field Survey Results – Preliminary Roost Assessment

One building on site was surveyed, designated as B1 and illustrated in the map in Appendix 1. The weather conditions recorded at the time of the survey are shown in the table below.

Table 7: Weather conditions during the survey

Date: 14/05/2021	
Temperature	11°C
Relative Humidity	80%
Cloud Cover	20%
Wind	3mph
Rain	None

3.6 Site Feature descriptions and photos

B1 Exterior

B1 is a two-storey brick-built semi-detached residential dwelling with a cross-pitched and gabled roof clad in ceramic roof tiles. The roof structure appears in a good condition with no missing or raised roof tiles that would provide suitable roosting space for crevice-dwelling bats or provide access into the loft spaces for void-dwelling bats. The brickwork around the building also appears in a good condition with no gaps or cracks that could provide suitable roosting space for crevice-dwelling bats. The timber fascia on both the eastern and southern elevations could provide gaps. However, as this is painted black it is difficult to identify if they are loose fitting. However, the client has informed the author that bats have been emerging from the red circle opposite and video footage was provided.



Southern and western elevation of B1 (pictured above).



Red circle showing bat emergence location (pictured above).



Eastern elevation of B1 (pictured above). The red arrow showing emergence feature of bat.



Close-up of black fascia on the eastern elevation of B1 (pictured above).

B1 Interior

Internally, there is one loft space within the main roof void of B1. The internal roof structure is constructed from modern timber beams and there is an internal roof lining of bitumen felt. The internal roof structure appeared in a good condition with no daylight entering through the roof indicating that it is tightly sealed with no bat access points. However, there is one section located to the east where the bitumen felt is loose fitting and droppings are located within the vicinity (pictured below). This section is a crawl space less than 1m tall and approximately 1m wide, items were stored to the height of the loft void and would provide no suitability for void dwelling bats.



Eastern section of the loft void of B1 (pictured above).



Bat droppings located on cobwebs from the air vent on the eastern elevation and below an opening within the bitumen felt gap (pictured above).

B1 Evidence of bats

There were approximately 20 droppings located at the eastern elevation of the loft space adjacent to the gable-end. The size, shape and colour of the droppings indicate that they were deposited by a crevice dwelling species such as a pipistrelle bats and are assessed to have been recently deposited.

B1 Breeding birds and other incidental observations

There was no evidence of nesting birds located internally or externally on the survey building.

3.7 Preliminary Roost Assessment Recommendations

This Preliminary Roost Assessment Survey identified the following survey requirements for the site in line with best practice:

Table 8: Recommended surveys

Ref	Survey assessment conclusions (with justification)	Foreseen impacts	Recommendations
B1 Bats	The building is a confirmed roost as droppings were found internally in the loft space.	As the proposals include the extension of the roof space on this section of the building, any bat roosts present would be destroyed. This could result in death, injury or disturbance of bats.	Three bat emergence/re-entry surveys are required during the active bat season (May – September) to characterise the roosts present. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive. Sub-optimal: early May and September. One of these surveys must be a dawn re-entry survey. Three surveyors are required to provide full coverage of the building.

3.8 Field Survey Results – Bat Emergence and Re-entry Surveys

One building on site was surveyed as this was assessed to provide suitable roosting habitat for bats and evidence of a bat roost was located during the Preliminary Roost Assessment. This building is designated as B1 and illustrated in the map in Appendix 1.

The results of each survey are provided in the tables below.

Table 9: Survey results

Date		14/05/2021		
Start and End Times		20:35 – 22:30 Sunset: 20:54		
Weather Conditions		<table border="0"> <tr> <td>Start: Temp: 11°C Relative Humidity: 80% Cloud Cover: 20% Wind: 3mph Rain: None</td> <td>End: Temp:9°C Relative Humidity: 84% Cloud Cover: 80% Wind: 1mph Rain: None</td> </tr> </table>	Start: Temp: 11°C Relative Humidity: 80% Cloud Cover: 20% Wind: 3mph Rain: None	End: Temp:9°C Relative Humidity: 84% Cloud Cover: 80% Wind: 1mph Rain: None
Start: Temp: 11°C Relative Humidity: 80% Cloud Cover: 20% Wind: 3mph Rain: None	End: Temp:9°C Relative Humidity: 84% Cloud Cover: 80% Wind: 1mph Rain: None			
Surveyor (position) As shown in Appendix 1		Kathryn Carpenter – Several years’ experience conducting bat surveys (Position 1 – observing the eastern elevations and roof structure of B1) Farhat Ramzan – Several years’ experience conducting bat surveys (Position 2 – observing the southern and western elevations and roof structure of B1) Louise Haycock – Several years’ experience conducting bat surveys (Position 3 – observing the northern and western elevations and roof structure of B1)		
Building Reference	Surveyor Position	Notes/observations:		
B1	1	<p>No bats were seen emerging or re-entering the building during the survey.</p> <p>The first bat activity was a pass by a common pipistrelle at 21:13, the bat flew from the neighbouring site to the north over the B1 towards the west. At 21:20 there was a distant pass by a soprano pipistrelle. However, the bat was not seen, and the echolocation was too brief to determine direction of flight.</p> <p>For the remainder of the survey there were regular common pipistrelle passes.</p> <p>At 21:45 there was a commuting pass by a Myotis sp. which appeared from the south off site and continued northwards off site.</p> <p>At 21:57 there was a brief pass by a brown long-eared bat. The bat was not seen, and the echolocation was too faint to determine direction of flight.</p>		
B1	2	<p>No bats were seen emerging or re-entering the building during the survey.</p> <p>The first bat activity was a pass by a common pipistrelle at 21:13, the bat flew from the east over the roof of B1 continuing off site to the west. There were regular passes and foraging by common pipistrelle bats throughout the survey.</p>		
B1	3	<p>No bats were seen emerging or re-entering the building during the survey.</p> <p>The first bat activity was a pass by a common pipistrelle at 21:13, the bat flew from the east over the roof of B1 continuing off site to the west. There were regular passes and foraging by common pipistrelle bats throughout the survey.</p>		

Table 10: Survey results

Date		28/05/2021		
Start and End Times		20:55 – 22:50 Sunset: 21:14		
Weather Conditions		<table border="0"> <tr> <td style="vertical-align: top;"> Start: Temp: 14°C Relative Humidity: 75% Cloud Cover: 100% Wind: 2mph Rain: None </td> <td style="vertical-align: top;"> End: Temp: 14°C Relative Humidity: 76% Cloud Cover: 100% Wind: 2mph Rain: None </td> </tr> </table>	Start: Temp: 14°C Relative Humidity: 75% Cloud Cover: 100% Wind: 2mph Rain: None	End: Temp: 14°C Relative Humidity: 76% Cloud Cover: 100% Wind: 2mph Rain: None
Start: Temp: 14°C Relative Humidity: 75% Cloud Cover: 100% Wind: 2mph Rain: None	End: Temp: 14°C Relative Humidity: 76% Cloud Cover: 100% Wind: 2mph Rain: None			
Surveyor (position) As shown in Appendix 1		Katy Perry – Natural England Bat Licence Number: 2020-46965-CLS-CLS (Position 1 – observing the eastern elevations and roof structure of B1) Farhat Ramzan – Several years’ experience conducting bat surveys (Position 2 – observing the southern and western elevations and roof structure of B1) Louise Haycock – Several years’ experience conducting bat surveys (Position 3 – observing the northern and western elevations and roof structure of B1)		
Building Reference	Surveyor Position	Notes/observations:		
B1	1	<i>No bats were seen emerging or re-entering the building during the survey.</i> The first bat activity recorded was a brief call at 21:32 by a common pipistrelle bat. The call was too brief to observe the bat and direction of flight could not be determined. Throughout the survey there was regular foraging activity from common pipistrelle bats circling the rear garden area.		
B1	2	<i>No bats were seen emerging or re-entering the building during the survey.</i> The first bat activity recorded was a distant pass by a common pipistrelle at 03:45, which was heard on the detector but not seen. Further distant passes were recorded at 03:56 and 03:58. No further bat activity was recorded during the survey.		

Table 11: Survey results

Date		11/06/2021		
Start and End Times		03:15 – 05:00 Sunrise: 04:45		
Weather Conditions		<table border="0"> <tr> <td style="vertical-align: top;"> Start: Temp: 16°C Relative Humidity: 85% Cloud Cover: 90% Wind: 9mph Rain: None </td> <td style="vertical-align: top;"> End: Temp: 16°C Relative Humidity: 78% Cloud Cover: 90% Wind: 9mph Rain: None </td> </tr> </table>	Start: Temp: 16°C Relative Humidity: 85% Cloud Cover: 90% Wind: 9mph Rain: None	End: Temp: 16°C Relative Humidity: 78% Cloud Cover: 90% Wind: 9mph Rain: None
Start: Temp: 16°C Relative Humidity: 85% Cloud Cover: 90% Wind: 9mph Rain: None	End: Temp: 16°C Relative Humidity: 78% Cloud Cover: 90% Wind: 9mph Rain: None			
Surveyor (position) As shown in Appendix 1		Louise Haycock – Several years’ experience conducting bat surveys (Position 1 – observing the eastern elevations and roof structure of B1) Rebecca Burt – Several years’ experience conducting bat surveys (Position 2 – observing the southern and western elevations and roof structure of B1) Farhat Ramzan – Several years’ experience conducting bat surveys (Position 3 – observing the northern and western elevations and roof structure of B1)		
Building Reference	Surveyor Position	Notes/observations:		
B1	1	<i>One common pipistrelle re-entry from under the timber fascia on the eastern elevation at 04:18.</i> The first bat activity recorded was a distant pass by a common pipistrelle at 03:16. Throughout the survey there was regular passes and foraging from both common and soprano pipistrelle bats. The last observation was a re-entry by a common pipistrelle bat.		
B1	2	<i>No bats were seen emerging or re-entering the building during the survey.</i> There were regular passes and foraging from common and soprano pipistrelle bats throughout the survey. At 04:18 there was a low flying noctule commuting to the north.		
B1	3	<i>No bats were seen emerging or re-entering the building during the survey.</i> There were regular passes and foraging from common and soprano pipistrelle bats throughout the survey.		

4.0 Conclusions, Impacts and Recommendations

4.1 Informative guidelines

When bat roosts are present, the bat surveys undertaken at a site facilitate the characterisation of the roost type. This allows for appropriate mitigation and compensation to be designed to inform a European Protected Species Mitigation Licence (EPSML) application to Natural England.

The definitions of bat roost types are provided below, taken from the *Bat Mitigation Guidelines* (English Nature, 2004) and the Bat Conservation Trust publication *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, J. (Ed) 2016).

Day roost: a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

Night roost: a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.

Feeding roost: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.

Transitional / occasional roost: used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.

Swarming site: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites

Mating sites: sites where mating takes place from later summer and can continue through winter.

Maternity roost: where female bats give birth and raise their young to independence.

Hibernation roost: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity. Sites where hibernating bats have been confirmed by appropriate survey effort should be classed as 'hibernation confirmed'.

Satellite roost: an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

Other: roost types are interchangeable and not always easy to classify according to the nuances of certain species.

The surveys undertaken to date in and around B1 provide sufficient information to inform a European protected species mitigation licence (EPSML). An EPSML **will be required** to enable the proposed works to be lawfully undertaken, whilst ensuring the favourable conservation status of the species concerned in their natural range; detailed mitigation will be described in the EPSML method statement. Appropriate justification for this assessment is provided in Section 3 of this report.

Natural England issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law. Licences are issued for specific purposes stated in the Regulations, if the following three tests are met:

- The purpose of the work meets one of those listed in the Habitats Regulations (see below);
- That there is no satisfactory alternative;

- That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range

The Habitats Regulations permits licences to be issued for a specific set of purposes including:

1. ***include preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;***
2. scientific and educational purposes,
3. ringing or marking
4. conserving wild animals

Development works fall under the first purpose and Natural England issues bat mitigation licences for developments.

4.2 Evaluation

Taking the desk based assessment and site survey results into account, the following value for roosting bats has been placed on each site survey feature.

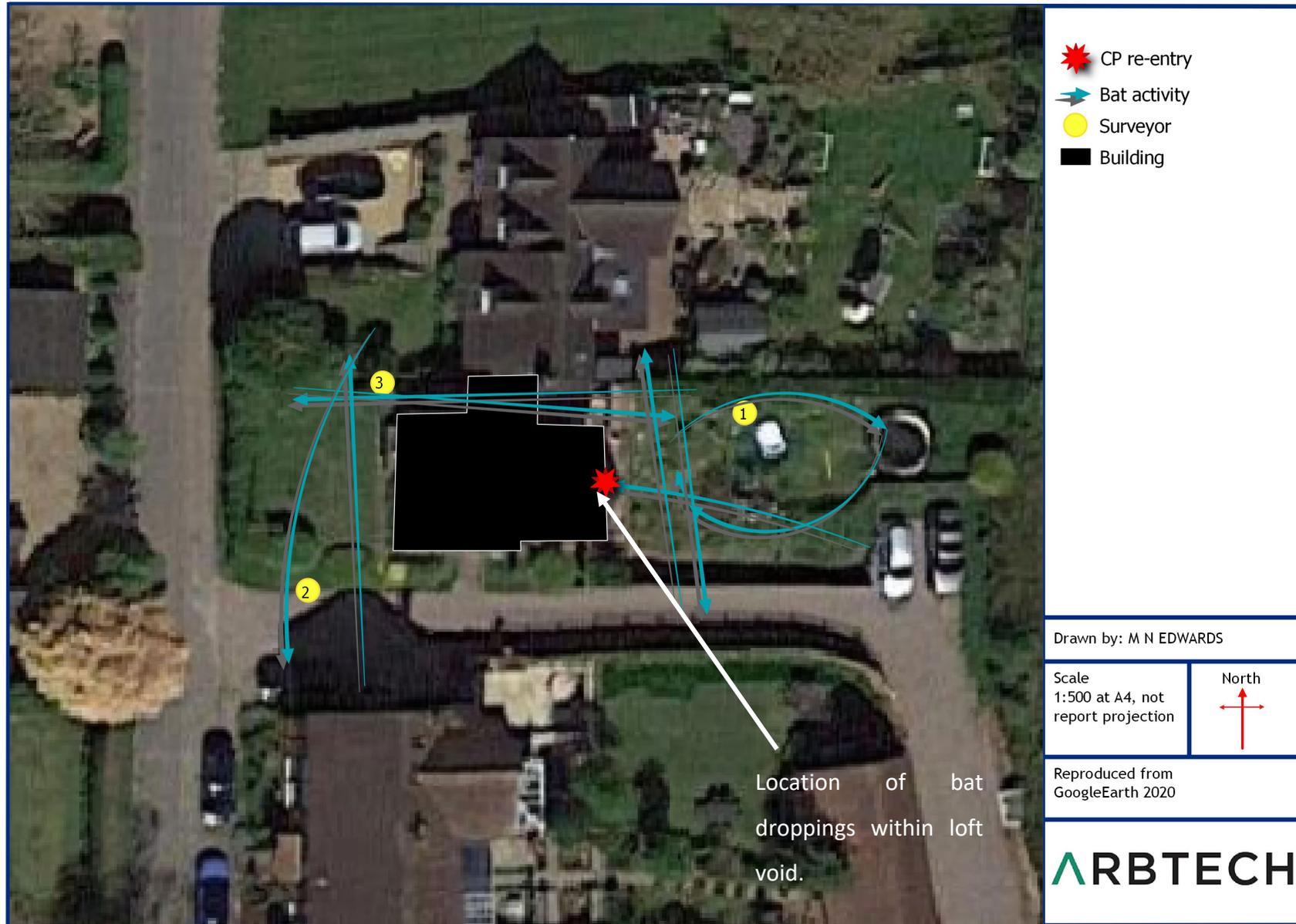
Table 12: Evaluation of building on site

Ref	Survey conclusions	Foreseen impacts	Recommendations / Mitigation	Enhancements The Local Planning Authority has a duty to ask for enhancements under the NPPF (July 2018)
B1	The surveys concluded that there is a day roost of one common pipistrelle bat which entered under the timber fascia board on the eastern elevation which is where bat droppings were located during the Preliminary Roost Assessment.	As the proposed development involves the extension of the northern elevation of B1, the bat roosts will be destroyed. Any bats present during the works could be injured or killed.	A European protected species mitigation licence (EPSML) will be required from Natural England prior to the commencement of works, once planning has been granted. As there is one bat roost of low numbers of common species present, the works can be completed under a Natural England bat mitigation class licence (low impact).	The mitigation and compensation detailed for the EPSML will provide sufficient enhancements of the developed site for bats.

5.0 Bibliography

- British Trust for Ornithology (2016) www.bto.org/about-birds/nbw/putting-up-a-nest-box
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- Magic database (2021) <http://www.magic.gov.uk/MagicMap.aspx> accessed on 14/07/2021.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Appendix 1: Survey Plan – Preliminary Roost Assessment and Bat Emergence and Activity Surveys



Appendix 2: Proposed Site Plan

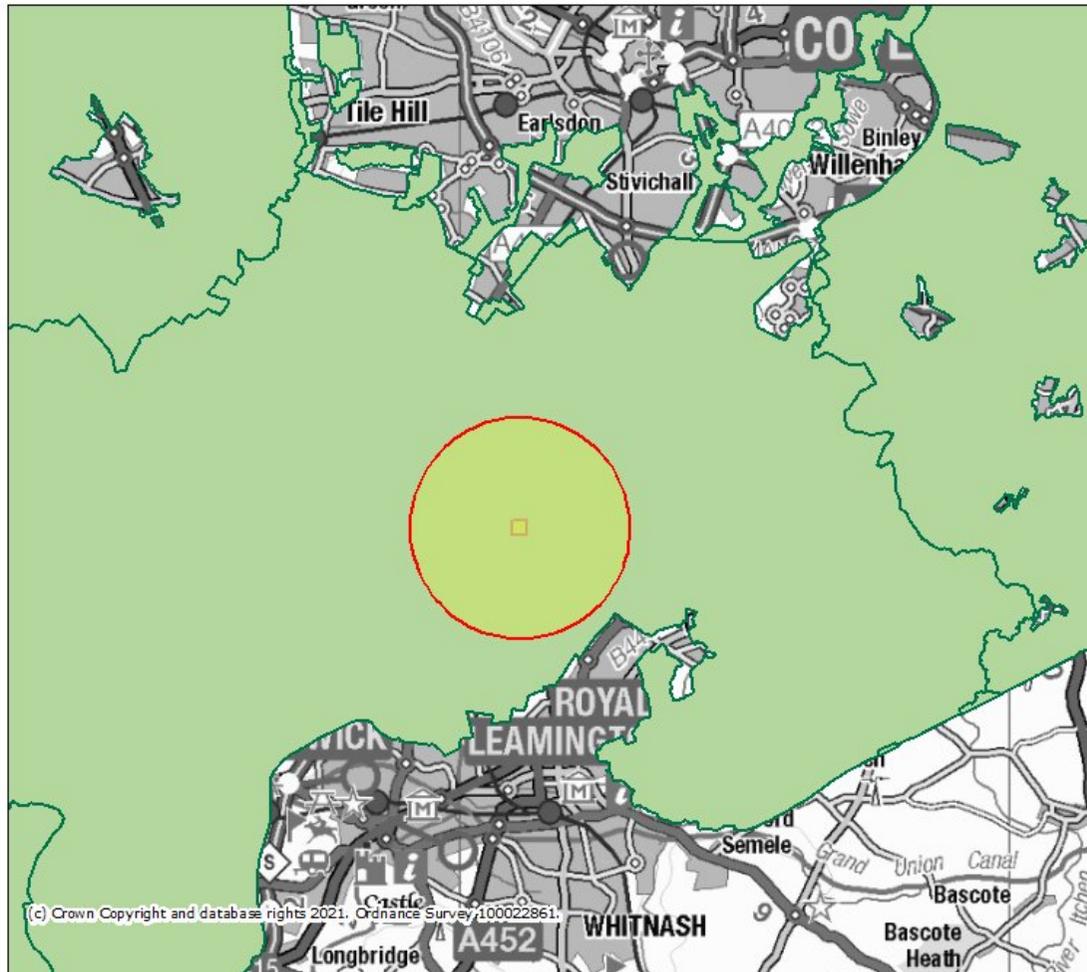
None provided

Appendix 3: Desk Study Information

Full historical records can be provided on request.

MAGiC

Non statutory designated sites



Legend

Green Belt (England)

Projection = OSGB36

xmin = 409700

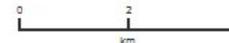
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xmax = 453700

ymax = 282400

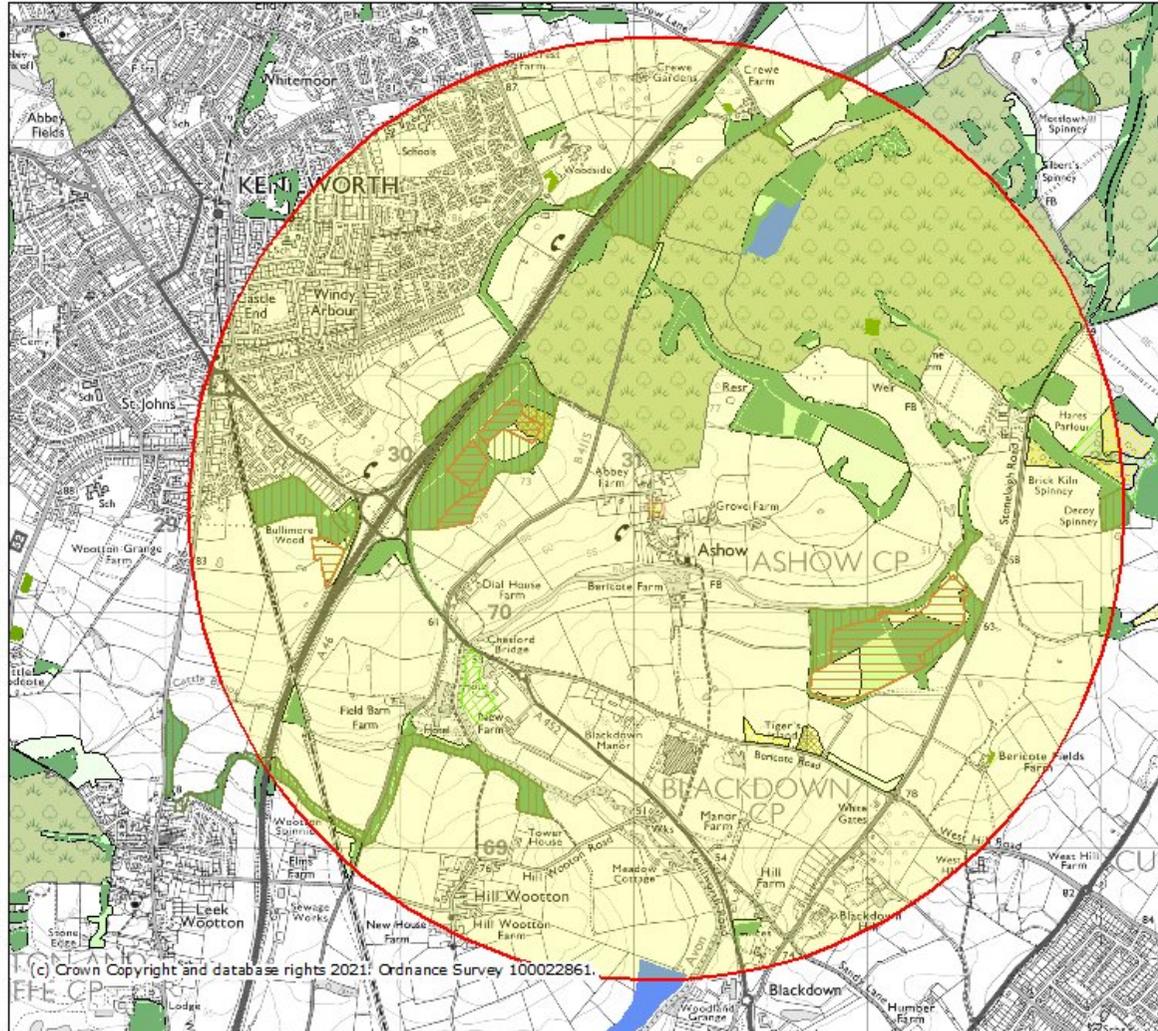
Map produced by MAGiC on 14 July, 2021.

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MAGiC

Habitat



Legend

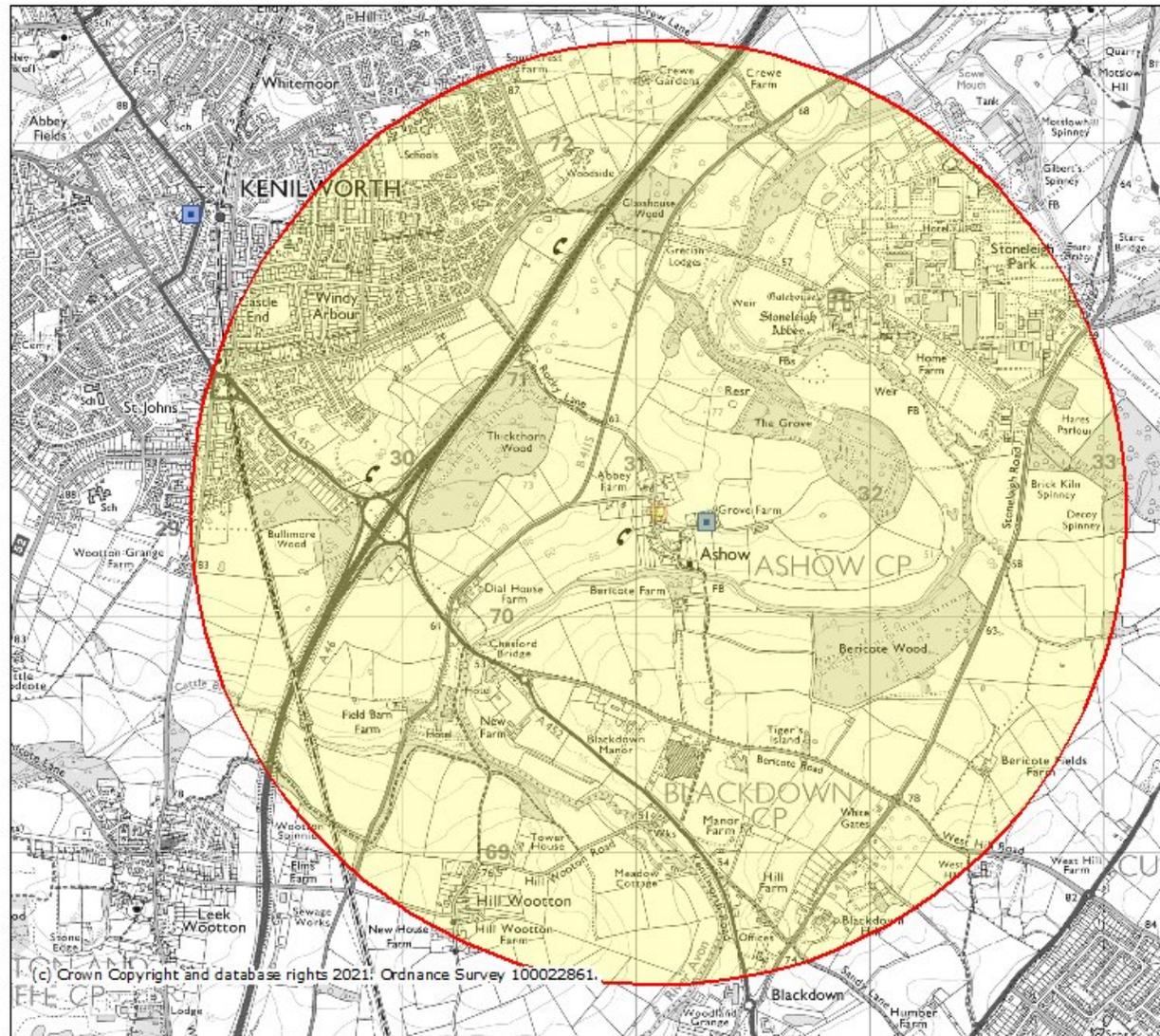
Priority Habitat Inventory - Coastal and Floodplain Grazing Marsh (England)	Failed
Ancient Woodland (England)	Felled
Ancient and Semi-Natural Woodland	Ground prep
Ancient Replanted Woodland	Low density
Priority Habitat Inventory - Deciduous Woodland (England)	Mixed mainly broadleaved
National Forest Inventory (GB)	Mixed mainly conifer
Assumed woodland	Shrub
Broadleaved	Uncertain
Cloud shadow	Windthrow
Conifer	Young trees
Coppice	Priority Habitat Inventory - Traditional Orchards (England)
Coppice with standards	Woodpasture and Parkland BAP Priority Habitat (England)

Projection = OSGB36
 xmin = 425300
 ymin = 267600
 xmax = 436300
 ymax = 273200

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MAGiC

EPSL



Legend

Granted European Protected Species Applications (England)

- Amphibian
- Bat
- Cetacean
- Invertebrate
- Other Mammal
- Plant
- Reptile

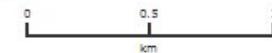
Projection = OSGB36

xmin = 425300

ymin = 267600

xmax = 436300

ymax = 273200



Map produced by MAGIC on 14 July, 2021.

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Appendix 4: Legislation and Planning Policy related to bats

LEGAL PROTECTION

All species of bat are fully protected under *The Conservation of Habitats and Species Regulations 2017* through their inclusion on Schedule 2.

Regulation 43: Protection of certain wild animals - offences

(1) A person is guilty of an offence if they:

- (a) Deliberately captures, injures or kills any wild animal of a European protected species,
- (b) Deliberately disturbs wild animals of any such species,
- (c) Deliberately takes or destroys the eggs of such an animal, or
- (d) Damages or destroys a breeding site or resting place of such an animal,

(2) For the purposes of paragraph (1) (b), disturbance of animals includes in particular any disturbance which is likely—

- (a) To impair their ability:
 - (i) To survive, to breed or reproduce, or to rear or nurture their young; or
 - (ii) In the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- (b) To affect significantly the local distribution or abundance of the species to which they belong.

Bats are also protected under the *Wildlife and Countryside Act 1981 (as amended)* through their inclusion on *Schedule 5*. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework 2017

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

Effect on development works:

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored. The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

There are 17 species of bat breeding in England and Natural England issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

Licences are issued for specific purposes stated in the Regulations, if the following three tests are met:

- The purpose of the work meets one of those listed in the Habitats Regulations (see below);
- That there is no satisfactory alternative;
- That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range

The Habitats Regulations permits licences to be issued for a specific set of purposes including:

5. ***include preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;***
6. scientific and educational purposes,
7. ringing or marking
8. conserving wild animals

Development works fall under the first purpose and Natural England issues bat mitigation licences for developments.