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Ecological Consultants
Environmental and Rural Chartered Surveyors

BAT, BARN OWL & NESTING BIRD SURVEY AT

Tan Yard Farm, Ribchester

Green at Heart
BEN
GOLD

RICS
The mark of
property professionalism worldwide

[redacted]

Accuracy of report

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, bats, nesting birds and barn owls are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and or in their interaction with bat species, nesting birds and or barn owls. If bats, nesting birds or barn owls are found during a work programme and continuing the work programme could result in their disturbance, injury or death either directly or indirectly an offence may be committed.

These species may only be disturbed, injured or killed under licence.

If in doubt, stop work and seek further professional advice.

Quality and Environmental Assurance

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Signed

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Director

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1. EXECUTIVE SUMMARY

It is understood that the barns at Tan Yard Farm, Ribchester, will be converted to form residential accommodation.

A daytime inspection was undertaken on the 7th January 2023. This involved a close inspection of the buildings for signs of use by bats, barn owls and birds both internally and externally.

A desk study and data search were also undertaken to ensure the reasonable probable use of the site by bats, barn owls and nesting birds could be determined.

The habitat around the site offers a low-moderate potential for foraging being open and exposed. There is poor connectivity between the site and higher quality foraging areas.

The buildings have low-moderate potential for use by bats, barn owls and nesting birds.

Two emergence surveys have been undertaken in accordance with Collins, J (ed) (2016)

No indications of use of the site by bats were found during the survey. A single female Barn Owl *(Tyto alba)* and nesting Feral Pigeons *(Columba livia domestica)* were recorded on site.

On the basis of the survey work carried out, under guidance provided in respect of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, and considering the plans for the site, it is considered that a Protected Species Mitigation Licence (PSML) for bats will not be required prior to works being carried out.

A mitigation strategy has been prepared and should be followed in order to ensure that the

2. INTRODUCTION

2.1 Site Description

The site lies in a rural location at Ribchester. The surveyed buildings comprise two stone built barns under slate roofs.

There is fragmented woodland in the local area but the site is in an exposed and open position at SD625365, Figure 1 and 2.

Figure 1

Ordnance Survey map of site location

Site Boundary

Building Number

Figure 2

Site Boundary

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2.2 Proposed Works

It is proposed that the buildings are converted to form residential accommodation. There will be significant internal and external alteration to the areas of the buildings affected.

The timing of work is unknown.

2.3 Aims of Study

To ensure that the proposed development does not affect any bat species, barn owls or nesting birds which are listed under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019and or the Wildlife and Countryside Act (1981) (as amended) the survey will:-

- ⇒ Identify past and/or current use of the site by bat species, barn owls and nesting birds.
- ⇒ Assess the likely impact of the proposed development on these species.
- ⇒ Provide an outline mitigation/compensation scheme (if required) for bat species, barn owls and nesting birds affected by the development.

3. METHODOLOGY

3.1 Bats

3.1.1 Rationale of Survey

The methods used **comply with those described in** Hundt (2012) and Collins, J (ed) (2016). The following extracts from Collins, J (ed) (2016) are used to determine the appropriate level of survey in accordance with the guidelines.

Key point 1: Guidelines should be interpreted using professional expertise.

> *"The guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. However, in this scenario an ecologist should provide documentary evidence of (a) their expertise in making this judgement and (b) the ecological rationale behind the judgement.*
>
> *Equally, it would be inappropriate for someone with no knowledge or experience to read these guidelines and expect to be able to design, carry out, interpret the results of and report on professional surveys as a result, simply following the guidelines without the ability to apply any professional judgement."* Section 1.1.3

Key point 2: Guidelines are descriptive rather than prescriptive and must be adapted on a case by case basis.

> *"The guidelines should be interpreted and adapted on a case-by case basis according o site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive."* Section 1.1.3

Key point 3: Surveys should be undertaken where it is reasonably likely bats are present and may be affected by the proposal. Where bats are not likely to be present and or will not be affected by the proposal, survey could but need not be undertaken.

> *"It is reasonable to request surveys where proposed activities are likely to negatively impact bats and their habitats. However, surveys should always be tailored to the predicted, specific impacts of the proposed activities (see Section 2.2.2). Excessive, speculative surveys are expensive and cause reputational damage to the ecological profession."* Section 2.1

Key point 4: Surveys should be proportionate to predicated impacts.

> *"When planning surveys it is important to take a proportionate approach. The type of survey (or suite of surveys) undertaken and the amount of effort expended should be proportionate to the predicted impacts of the proposed activities on bats. Clause 4.1.2 of BS42020 (BSI, 2013) states that 'professionals should take a proportionate approach to ensure that the provision of information with the (planning) application is appropriate to the environmental risk associated with the development and its location"* Section 2.2.5

3.1.2 Desk Study

"The aim of a desk study for bats is to collate and review existing information about a site and its surroundings to inform the design of subsequent bat surveys." Section 4.2.1

"As a minimum, it is recommended that background data searches should be carried out upto 2km from the proposed development boundary." Section 4.2.2

Key point 5: A records search was undertaken of the Envirotech dataset. No additional data searches were considered necessary at this site as the bat species likely to be found in the local area could be adequately determined from the records searched.

"The desk study records provide contextual information for the survey design stage as well as the evaluation of the survey results. They should be interpreted to identify:

- *If proposed activities are likely to impact on a SAC or the qualifying feature of a SAC (this may trigger the need for a HRA);*
- *If the proposed activities are likely to impact on other designated sites and thus require consultation with relevant bodies;*
- *Any species (or genera) confirmed/thought to be present;*
- *Any bat roosts that will be impacted (on or off-site);*
- *If it is likely that the CSZs of bats from roosts off-site will be impacted (see Section 3.7);*
- *If there are any rare species in the area that may require species-specific survey methodologies."* Section 4.2.3

Key point 6: Likely bat roosting and feeding sites on and adjacent to the site were identified from aerial photography and the use of Google Street View for ground level analysis. This allows us to identify habitat connectivity and potential foraging areas at a landscape level. We are also able to relate the results of the records search against habitat types and the species of bat which could and or are recorded in the local area. Identification of bat species which may occur locally allows for additional field based surveys to be correctly targeted.

3.1.3 Field Survey

Key Point 7: To ground truth the desktop data (Key point 5) a field assessment of habitat at and adjacent to the site was made. This allows us to cross check our interpretation of aerial photography with actual habitat on the ground. There is occasionally significant change between landscape detailed on aerial photographs and habitat on the ground. Buildings, hedgerows and roads may be built or removed. For example occasionally woodland is felled or has been replanted.

"A preliminary ecological appraisal for bats is a walkover of the proposed development site to observe, assess and record any habitats suitable for bats to roost, commute and forage both on site and in the surrounding area (it is important that connectivity within the landscape is also considered at this stage). The aim is to determine the suitability of a site for bats, to assess whether further bat surveys will be needed and how those surveys should safely be carried out." Section 4.3.1

Key point 8: A thorough inspection of the walls and eaves was undertaken using a torch and short focus binoculars to locate potential bat roosts. Gaps and cracks in the walls or under the eaves and soffits may provide access to the buildings by bats. Where possible all gaps and cracks

judged to be of a suitable size for bats to take entry to the buildings were inspected either from the ground or the top of a ladder. Where appropriate an endoscope was used to fully inspect these gaps internally.

Key Point 9: A thorough inspection of the roof was undertaken using a torch and short focus binoculars to locate potential bat roosts. Gaps under the roof coverings, ridge lines and flashing may provide suitable roost sites for bats. All gaps and cracks judged to be of a suitable size for bats to take entry to the buildings were inspected either from the ground or the top of a ladder. Using short focus high quality binoculars and a torch to illuminate any gaps underneath the roof coverings it is often possible to see residual evidence of bats such as droppings, scratch, grease and urine staining, lichen build-up from increase nutrient levels or bats themselves.

Key Point 10: A thorough inspection of the interior and exterior of the buildings to look for signs of bats such as grease or scratch marks, bat droppings and feeding detritus was made. Windows and or other items in and around the site were inspected for urine staining.

Key Point 11: A thorough search for detritus associated with bat feeding perches and roosts was undertaken. These roosts are usually in roof voids, under eaves and open buildings.

Key Point 12: Internal voids and rooms were assessed where it was considered bats may be able to take access. Indications of use such as grease and scratch marks, urine staining, droppings, desiccated young bats, dead bats in water tanks and cobweb free areas under the roof and roof supports were all assessed.

> *"The time needed for a preliminary roost assessment will vary according to the complexity of the structure and the number of ecologists deployed. Large structures with multiple roof spaces, multiple human access points and/or abundant voids and crevices will clearly take some time to understand and search thoroughly. Also, structures may contain several different bat roosts of different species each with their own access point and used at different times of the year. This all adds time to the survey."* Section 5.2.7

Key Point 13: It is the considered opinion of the surveyors who undertook this survey that the time taken to undertake the survey was sufficient given the complexity of the buildings, methods used, time of year and species of bat which may be present. The times in Collins, J. (ed) (2016) should be considered in light of Key Point 1 (Professional judgement), Key point 2 (interpretation on a case by case basis) and Key Point 3 (survey should cover areas where it is reasonably likely bats are present and may be affected by the proposal).

> *"Where the possibility that bats are present cannot be eliminated or evidence of bats is found during a preliminary roost assessment, then further surveys (such as winter hibernation (Section 5.3), presence/absence (Section 7.1) and/or roost characterisation (Section 7.2) surveys) are likely to be necessary if impacts on the roosting habitat (or the bats using it) are predicted. The ecologist should consider the further surveys needed (if any), their logistics (resources, emergence survey locations, timings), and any potential health and safety hazards reported.*
>
> *If the structure has been classified as having low suitability for bats (see Table 4.1), an ecologist should make a professional judgement on how to proceed based on all of the evidence available.*

If sufficient areas (including voids, cracks and crevices) of a structure have been inspected and no evidence found (and is unlikely to have been removed by weather or cleaning or be hidden) then further surveys may not be appropriate.

Information (photographs and detailed descriptions) should be presented in the survey report to justify this conclusion and the likelihood of bats being present at other times of the year estimated. If there is a reasonable likelihood that bat roosts could be present, and particularly if there are areas that are inaccessible for survey, then further surveys may be needed and these should be proportionate to the circumstances (see Section 2.2.5).

If no suitable habitat for bats is found, then further surveys are not necessary. In this scenario, it is necessary to document how this decision has been reached; photographs and detailed descriptions should be made available as evidence of a robust survey and assessment." Section 5.2.9

Key Point 14: The suitability of a sites potential for roosting is categorised by BCT Collins, J (ed) (2016) as Negligible, Low, Moderate and High and then suggests a level of survey effort required to be confident in the absence of bats. We consider this range to be too course, there being a transition between each level of suitability which is not reflected in the guidelines. We have a modified schedule of suitability using a risk level between 0 and 7. See Key points 1, 2, 3, 4 and 13 which justify this approach.

Suitability Collins (2016)	Description Roosting habitats	Risk Level	Survey level
	Modified from Collins (2016)		
Negligible	No features on site which could be used by roosting bats.	0	No additional survey required
	Negligible habitat features on site likely to be used by roosting bats.	1	
	Features on site could only be used by bats occasionally, habitual use in or between years is unlikely	2	Surveyor to make judgement as to if additional surveys likely to provide useful information about the site. RAM's and provision of new roosting provision to be recommended
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically but no evidence of use found, could provide roost sites which are used in or between years.	3	
	One or more potential roost sites. Potential for habitual use in or between years. Unlikely to contribute to long term favourable conservation status of the species.	4	Single survey (dusk or dawn) at appropriate time of year May to August. Roosts are often transitional, surveys early and late in season may be appropriate (April and September)
	Potential for habitual use in or between years, roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). May be used for transitional or day roost sites by common bat species. Function likely to support favorable conservation status of bats locally.	5	Single survey (dusk or dawn) between May and August. Roosts are often transitional, surveys early and late in season may be appropriate. Consider additional survey in transitional period April and September
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	6	Two surveys (dusk or dawn) between May and August. Consider additional survey in transitional period April and September
High	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.	7	Three surveys (at least one dawn) between May and August. Consider additional survey in transitional period April and September

Table 1 *Risk and need for additional survey following preliminary appraisal for bats.*

Key Point 15: Having undertaken a detailed inspection of the site, additional presence/absence surveys were required:

A roost has been identified, but more information is needed in order to assess its importance and the potential significance of any impacts on it. Information may be needed on the number of bats within the colony, the access points, the species, and flight paths to and from the roost	☐
A comprehensive internal inspection survey is not possible because of restricted access, but given the sites location, bat species likely to be found in the local area, and potential roost sites, the structure or tree has a reasonable likelihood of supporting bats	☐
A comprehensive preliminary roost assessment is not possible because it is a sub-optimal time of year, or there is a risk that evidence of bat use may have been removed by weather, human activities or the presence of livestock	☐
A preliminary roost assessment has not ruled out the reasonable likelihood of a roost being present, but no definitive evidence of the presence of bats has been recorded.	☒
A preliminary roost assessment has ruled out the reasonable likelihood of a roost being present, but the surveyor was on site at a time of day when additional survey information could be gained to provide additional contextual information about the site and the opportunity to do so can be taken.	☐

Table 2 *Need for additional survey following preliminary ecological appraisal for bats.*

Key Point 16: Potential roost locations were identified during the initial survey and were all adequately covered during the emergence survey. There was either direct visual coverage, with appropriate overlap between surveyors, coverage by infrared video camera or areas with limited visual coverage were noted and surveyors were positioned such that any bats emerging from these areas could be distinguished from bats which had commuted into the site.

Key Point 17: Bat commuting routes and activity in and around the site were observed and noted. The surveyors were either in visual and verbal contact or used 2-way radios to communicate bat activity over the site to each other. This reduced the potential for double counting or miss-recording bats which have flown into rather than emerged from the site or vice versa.

Key Point 18: A passive pre-emergence scan was made around potential roost sites with a bat detector set at 17 KHz. This would detect pre-emergence social chatter from bats. The surveyors were also listening for audible chatter during the inspection.

Key Point 19: An active scan was made with a bat detector post emergence. The surveyors adjust the frequency of the bat detector in response to bat sightings to confirm species. Some bat detectors have auto-tuning capability, see Table 3.

Bat Detector	Capabilities	Used
Bat Box Duet	Heterodyne and frequency division, manual tuning.	☐
Echo Meter EM3(+)	Heterodyne, frequency division or time expansion. Recording capability, auto tuning.	☐
Echo Meter Touch 2 Pro	Heterodyne, frequency division or time expansion. Recording capability, auto tuning.	☒
Anabat	Zero Crossing, recording capability.	☐

Table 3 *Bat detectors used and capabilities.*

3.1.4 Timing

> *"Recorded bat activity is dependent on the prevailing conditions at the time of the survey, which vary temporally (through the night, between nights, through the seasons and between years) and spatially (dependent on latitude and longitude).*
>
> *Bat activity is also determined by what the bats are doing at different times of the year; in general:*
>
> - *April surveys may detect transitional roosts.*
> - *May to August surveys may detect maternity colonies and males/non-breeding females in summer roosts.*
> - *August is particularly good for maximum counts of both adults and juveniles and can be useful to observe roost re-entry because the young bats are inexperienced at flying and are often easy to observe as they try to enter the roost.*
> - *August to October surveys may detect mating bats. September and October surveys may detect transitional roosts used after bats have dispersed from maternity colonies but before they go into hibernacula (although October may be less suitable for surveys in more northerly latitudes).*
>
> *It is important to stress that prevailing conditions and local trends in bat activity (for example, when were the young born in the year in question?) should be considered and recorded to provide context to survey results.* Section 7.1.7

Key Point 20: Bats use of sites varies throughout the year. The "most active season" for bats is April – September. For assessing maternity colonies the optimum time period is May to August. Surveys should however be chosen to maximize the likelihood of detecting bat activity which may be between April and October for summer roosts and December and February for winter hibernation. There is overlap between the two periods which should be addressed by survey where appropriate.

The timing of the survey should therefore account for the functionality and potential of the site to be used by bats for different purposes. Some sites may be unsuitable for maternity roosting but have a high potential for transition or day roosts. Some sites may have the potential to perform several functions.

Mitchell-Jones (2004) indicate that:

> *"The presence of a significant bat roost (invariably a maternity roost) can normally be determined on a single visit at any time of year, provided that the entire structure is accessible and that any signs of bats have not been removed by others".*

Bats use different types of roost at different times of the year. The following roost types/ times shown on Figure 3 are taken from Mitchell-Jones (2004) and were considered in the assessment of this site. Times of the year given in Figure 3 should however be considered in light of factors such as fluctuations in temperatures between years, altitude, weather conditions, species and latitude which all affect the movement of bats between roost sites.

> *"An experienced surveyor should carry out surveys at a time that gives them the highest chance of establishing whether or not bats are present and how they are using the habitat including roosts). Actual timings will depend on a number of factors including the surveyor's knowledge and experience of the site and surrounding habitats, existing data records, possible bat species present, geographical location, weather conditions in that particular year and, of course, the aims and objectives of the survey."* Section 2.4

This site was assessed at the following period in the bat year. Some roost types can be clearly identified when not in use or can be inferred from habitat type/residual evidence.

Month of Year		Jan		Feb		Mar		Apr		May		June		July		Aug		Sep		Oct		Nov		Dec	
Survey timing at this site =		☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		Hibernation; activity in mild weather						Becoming more active		Maternity sites. Babies born in late-May/June, independent by July-August						Mating & swarming sites						Hibernation; activity in mild weather			
Activity surveys																									
Inspection of buildings and structures for roosts																									
Tree Survey- Emergence or re-entry surveys																									
Tree Surveys- Observation from the ground																									
Bat detector surveys for dusk/dawn emergence/re-entry for	Transitional Roost																								
	Maternity roosts																								
	Satellite Roost																								
	Mating Roost																								
	Hibernation Roost																								
	Night Roost																								
	Day Roost																								
	Feeding Roost																								
	Swarming																								

Figure 3 *Survey timing in the bat year from Mitchell-Jones (2004).*

Key Point 21: An assessment of the species of bat likely to be found at the survey site has been made (Key Point 5, 6, 7 and 8). An assessment of the weather and time of year before and during the survey was also made. The duration and timing of survey was considered proportionate to the species of bats likely to be found, potential roost types, weather and cover around potential roost entrances.

Key Point 22: Based on the above criteria, two dusk activity surveys were undertaken. The number of surveys and timing are in accordance with Collins, J. (ed) (2016) Table 3, Figure 3 and Figure 5 because the site is low risk.

Key Point 23: Sunset is a very poor indicator of bat emergence times as lux levels associated with it are highly variable and are dependent upon atmospheric conditions. A combination of sunlight, high pressure, dry air dust particles and cloud cover can create a prolonged sunset. Delayed emergence can occur during very high pressure systems, which intensify and prolong sunsets. This can delay or bring forward emergence considerably and can skew conclusions as to how far bats have travelled from their roost if sunset is used as the time base from which activity is then monitored. Variations in local conditions also do not allow for comparisons to be made between emergence at different sites on the same day. The time of year also affects the time it takes to go dark with light levels falling and rising more quickly in spring and autumn than in summer when the arc of the sun is higher in the sky.

There is a variable correlation between sunset and lux levels hence we consider they should be used independently of each other. Lux levels provide a far greater degree of certainty in respect of identifying likely bat emergence time and commuting distances, time after sunset is a poor substitute for analysing bat activity information

Emergence of *Pipsitrelle* spp. usually commences at 200lux (from maternity roosts when bats have a high energy requirement) and 40lux from non-breeding and transitional roosts. Noctule are also an early emerging species at around 200lux. Emergence for whiskered/Brandts occurs between 40 and 4 Lux with brown long-eared and Daubenton's using emerging when light levels fall below 4 Lux.

During the activity survey lux levels were monitored by taking an average light reading, facing away from any potential roost sites at an angle of 45 degrees.

The activity survey continued until such a time as bat flight heights, emergence points and activity could no longer be reasonably determined. At this point the no additional useful information about the site could be gained

Date of visit		18th May 2021		21st June 2021		Notes
Site inspection		1hr		1hr		
Weather conditions	Cloud	50%		20%		1
	Wind	Nil		Nil		1
	Rain	Nil		Nil		1
	Temperature	9°C		12°C		1
Emergence survey	Start/ Light Level	21:10	250 lux	21:40	250 lux	
	End/ Light Level	22:20	0.2Lux	23:00	0.2Lux	
Surveyors		SC, JS		AG, JS		

Table 4 *Survey dates and times.*

1. Weather conditions were considered acceptable for a survey at the site given the potential for use of the site and species which may be present. Bats are usually active with temperatures above 7 degrees Celsius.

Surveyors

1. (AG) Mr Andrew Gardner BSc (Hons), MSc, MRICS
   Natural England Bat Class Licence (Level 2)
   Natural England Barn Owl Licence

2. (JS) Mr Jack Sykes BSc (Hons), MCIEEM
   Natural England Bat Class Licence (Level 2)

3. (SC) Ms Sian Comlay BSc (Hons), Grad CIEEM
   Natural England Bat Class Licence (Level 2)

3.2 Barn Owls

3.2.1 Rationale

Shawyer (2011) states

> "Surveys are a sampling activity where discrete information is gathered from a specific site or wider area.
>
> They usually represent a single case study but can involve repeat visits to a site. A survey is distinguishable from monitoring which usually takes place at regular intervals, often yearly, the main aim of which is to investigate the progress of a research or conservation objective and may involve the study of population dynamics in the species concerned.

The purpose of this survey is, in accordance with Shawyer (2011) to determine the:

i. Distribution, abundance and breeding status of barn owls in the area of interest;
ii. Extent to which barn owls are likely to be affected by a proposed development, and where the presence of this bird has been confirmed;
iii. To enable an appropriate mitigation strategy to be designed and implemented.

In particular the survey is necessary for the purposes of:

i. Ensuring legal compliance;
ii. Determining a planning application;
iii. Avoiding the enforced cessation of development work should an active breeding site be discovered that would be directly or indirectly damaged or disturbed through continuance of the work.

3.2.2 Desk Study

Key Point 24: A desk study was conducted within 2km of the site. The purpose of this initial study was to assess the probability of barn owl occurrence on the site and to provide an estimate of its population size and relative abundance at the local, regional and national levels. This enables the significance of any adverse effect from a proposed development to be determined not only on the site itself but within the wider area and provides important guidance for any future mitigation strategy.

Key Point 25: Where the initial desk study has revealed a reasonable likelihood that barn owls may be present in the general area of interest (and in many rural areas of Britain this will be a high probability) or where a barn owl recovery programme is suspected or has been identified there, a field survey must then be undertaken.

3.2.3 Field Survey

Field surveys are essential to determine the full status of the species in the study area, the potential effect of the development and the mitigation, compensation or enhancement measures to be applied. They should aim to locate and confirm the distribution, abundance and

breeding status of barn owls as well as the relative importance of the habitats they utilise within the survey area.

Cavities, mostly those located in the main trunk or crown of mature hollow trees, provide almost one third of natural breeding sites in the UK Shawyer (2011). Fissures in rock faces, including quarries, make up a small proportion of other breeding sites, particularly in northern Britain.

3.2.3.1 Defining and recording a Potential Nest Site (PNS)

Key Point 26: Trees and built structures were observed at close quarters to establish if they possess any holes, cavities or chambers and where these were identified, using appropriate techniques, they were checked to determine if they were of a suitable size and structure to provide a suitable barn owl nest site. Only those sites which possess a hole of at least 80 mm diameter (about tennis ball size) or vertical slot of this width backed by a sufficiently large and dark chamber with a floor area greater than 250 mm x 250 mm, were recorded, as a Potential Nest Sites (PNS).

3.2.3.2 Defining and Recording an Active Roost Site (ARS)

Key Point 27: These are defined as a place at which breeding does not occur, but where the bird is seen or heard regularly or its current or recent presence (last 12 months) can be recognised by signs of thick, chalky-white, streaky droppings (commonly referred to as 'splashing', 'whitewash', 'mutes' or 'liming') which is usually accompanied by regurgitated pellets and moulted feathers. Pellets and feathers are diagnostic and provide evidence that the roost site is that of a barn owl rather than another bird of prey such as a kestrel (*Falco tinnunculus*), little owl (*Athene noctua*) or tawny owl (*Strix aluco*) which also excrete, projectile chalky-white droppings but whose feathers and pellets differ in appearance.

Key Point 28: Any ARS were recorded as being occasionally-used or regularly-used, depending on the amount of pellets, droppings and feathers that are revealed at the site. ARS were also recorded as a winter, spring, autumn or summer roost. This can usually be determined by the age of pellets and the presence or absence of moulted wing and tail feathers at the site.

3.2.3.3 Defining and Recording a Temporary Rest Site (TRS)

Key Point 29: Small spots of thick, chalky cream-coloured droppings that can often be seen underneath a tree, in a building or on a fence post and which are sometimes accompanied by an occasional pellet or body feather, can indicate a temporary night-time stopping-off place of a barn owl. Although this level of observation is not an essential requirement of a barn owl survey, when these signs are identified they are best described and recorded as a Temporary Rest Site (TRS) rather than an ARS.

3.2.3.4 Confirming an Occupied Breeding Site (OBS)

Key Point 30: To confirm the presence of an Occupied Breeding Site (OBS), e.g. one where breeding was taking place or where it had done so in the recent past a detailed inspection of the PNS and ARS previously identified is carried out. This is accomplished by checking for the presence of adult barn owls, their moulted feathers, pellets, eggs, egg shells, chicks or down.

3.3 Nesting Birds

3.3.1 Rationale

The purpose of the survey is to determine the:

i. Distribution, abundance and breeding status of birds in the area of interest;
ii. Extent to which birds are likely to be affected by the proposed work, and where the presence of nesting birds has been confirmed;
iii. To enable an appropriate mitigation strategy to be designed and implemented.

In particular the survey is necessary for the purposes of:

i. Ensuring legal compliance;
ii. Determining a planning application;
iii. Avoiding the enforced cessation of development work should an active breeding site be discovered that would be directly damaged or disturbed through continuance of the work.

3.3.2 Desk Study

Key Point 31: A desk study was conducted for the area within 2km of the site. The purpose of this initial study was to assess the probability of nesting birds' occurrence on the site and to provide an estimate the population and relative abundance at the local, regional and national levels. This enables the significance of any adverse effect from a proposed development to be determined not only on the site itself but within the wider area and provides important guidance for any future mitigation strategy.

Key Point 32: Where the initial desk study has revealed a reasonable likelihood that nesting birds may be present in the general area of interest (and in many rural areas of Britain this will be a high probability) a field survey must then be undertaken.

3.3.3 Field Survey

Field surveys are essential to determine the full status of the species of nesting bird in the study area, the potential effect of the development and the mitigation, compensation or enhancement measures to be applied. They should aim to locate and confirm the distribution, abundance and breeding status of birds as well as the relative importance of the habitats they utilise within the survey area.

Key Point 33: Cavities, mostly those located in the main trunk or crown of mature hollow trees, gaps, cracks and the eaves and internal spaces of buildings, shrubs, scrub and hedges on and adjacent to the development area may all provide suitable nest sites. These were all inspected for indications of past or current nesting and roosting by birds. The species of bird and its relative abundance on site was also assessed were possible based upon droppings, nest shape, size and location, egg remains, feathers and birds seen on site which from their behaviour indicate nesting may occur.

4. DEFINITIONS

Definitions used in this report are detailed here, in reference to Hundt (2012) and Collins ed. (2016).

Building

A structure with walls and a roof, for example a residential property, block of flats, office block, warehouse, garden house, folly, barn, stable, lime kiln, tower, church, former military pill box, school, hospital or village hall. Some buildings have cellars (underground sites) beneath them.

Built structure

A structure that was made by humans but cannot be described as a building or as an underground site, for example a bridge, wall, monument, statue, free-standing chimney, or derelict building consisting only of walls.

Underground site

A human-made or natural structure that is entirely or partially underground, for example a cave, cellar, subterranean, mine, duct, tunnel, military bunker, well, or ice house.

Roost (breeding site / resting place)

The implementation of the EU Habitats Directive provides general definitions for breeding sites and resting places. For bats the two often overlap, which is why in many cases they are both referred to as roosts. Any interpretation of the terms 'breeding sites', 'resting places' and 'roosts' must take into account the prevailing conditions.

Natural England licensing guidelines (Natural England, 2011) discusses the age of roosts and mitigation requirements as well as the period of time bat roosts are protected when not used. The following is reproduced from this document.

> "Q. The development site ceased to be inhabited last year and it is prone to vandalism. I found evidence of a maternity roost but all current signs suggest that the site is now abandoned by bats. What should I mitigate for?
>
> Wildlife Advisers do not use a tightly defined period within which bat need to have used a structure beyond which it is no longer regarded as a bat roost. A structure can be regarded as a bat roost even if not knowingly occupied by bats for a year or two."
>
> The Method Statements mitigation should reflect compensation for a roost at its highest status within recent years. For example, meagre mitigation for an occasionally used, summer, non-maternity roost that had declined from a maternity roost as a result of human induced change to the roosts conditions e.g. vandalism, may not be acceptable to the Wildlife Adviser.
>
> A demolished structure, irrespective of its previous bat occupancy, clearly, ceases to be a bat roost. An intact structure without bat occupancy perhaps after a few years, and more assuredly after five years, also ceases to be a bat roost". [Emphasis added]

Natural England's guidelines are derived from the European Commission's Article 12 guidance on the definition of resting places for European Protected species.

European Commission (2007), section (54) and (59) state

> "(54) It thus follows from Article 12(1)(d) that such breeding sites and resting places also need to be protected when they are not being used, but where there is a reasonably high probability that the species concerned will return to these sites and places. If for example a certain cave is used every year by a number of bats for hibernation (because the species has the habit of returning to the same winter roost every year), the functionality of this cave as a hibernating site should be protected in summer as well so that the bats can re-use it in winter. On the other hand, if a certain cave is used only occasionally for breeding or resting purposes, it is very likely that the site does not qualify as a breeding site or resting place."
>
> (59) Resting places: a definition
>
> Resting places are defined here as the areas essential to sustain an animal or group of animals when they are not active. For species that have a sessile stage, a resting place is defined as the site of attachment. Resting places will include structures created by animals to function as resting places. Resting places that are used regularly, either within or between years, must be protected even when not occupied."

It is clear that for a site to be classified as a roost when not occupied there must have been past habitual and the probability of future use within at least a two year period as defined as "within or between years".

European Commission (2007) summaries the requirement for the protection of resting sites thus

> "Breeding sites and resting places are to be strictly protected, because they are crucial to the life cycle of animals and are vital parts of a species' entire habitat. Article 12(1)(d) should therefore be understood as aiming to safeguard the continued ecological functionality of such sites and places, ensuring that they continue to provide all the elements needed by a specific animal to rest or to breed successfully. The protection applies all year round if these sites are used on a regular basis." [Emphasis added]

As the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 derives and is guided by legislation and guidelines issued by the European Commission, this definition is still valid within the transition period.

Summary

"Breeding site"

Breeding is defined here as mating and giving birth to young. A breeding site is the area needed to mate and to give birth in, and includes the vicinity of the roost or parturition site, where offspring are dependent on such sites. For some species, breeding sites include structures needed for territorial definition and defence. Breeding sites that are used regularly, either within or between years, must be protected even when not occupied. Breeding sites include areas required for:

1. Courtship
2. Mating
3. Parturition, including areas around the parturition site when it is occupied by young dependent on that site.

Resting place

Resting places are defined here as the areas essential to sustain bats when they are not active. Resting places that are used regularly, either within or between years, must be protected even when not occupied. Resting places essential for survival include structures and habitat features required for:

1. Thermoregulatory behaviour
2. Resting, sleeping or recuperation
3. Hiding, protection or refuge
4. Hibernation

5. RESULTS

5.1 Desk Study

A search of the Envirotech dataset returned two records of two bat species within 2km but no records for the site.

Records are shown on Figure 4.

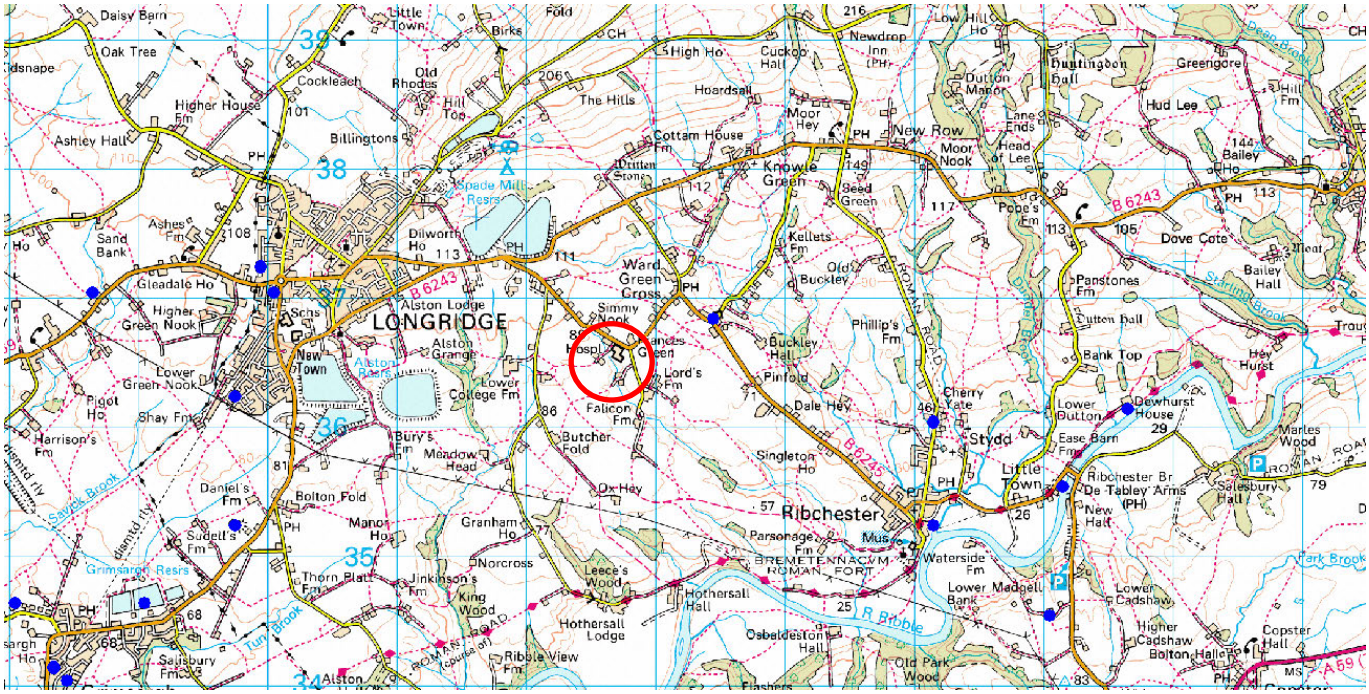

Figure 4 *Bat records shown in blue, site location circled red.*

The habitat at and adjacent to the site was assessed from satellite imagery this was then ground truthed, Figure 5.

Site Boundary

Figure 5

Habitat Adjacent
Site

envirotech

From the pre-existing records, a review of aerial photography, a field assessment of the area adjacent to the site and the experience of the surveyor, bat species which may occur on or adjacent to the site and the rationale for this decision are detailed in Table 4. This assessment does not look at the roosting potential of the site. The assessment of bats which are indicated as potentially occurring on the site or local area is based on the initial largely desk based scoping survey. Additional site specific assessment is provided later in this report. This assessment does however allow for the scope of site survey to be refined.

BAT SPECIES	ROOST PREFERENCE*			NICHE*	SUITABLE HABITAT		RECORDED WITHIN 2KM
	Crevice	Void	Tree		Locally	On site	
Common pipistrelle *Pipistrellus pipistrellus*	✓	×	✓	Generalist	☒	☒	☒
Soprano pipistrelle *Pipistrellus pygmaeus*	✓	×	✓	Riparian/Generalist	☒	☒	☒
Nathusius pipistrelle *Pipistrellus nathusii*	✓	×	✓	Enclosed woodland	☐	☐	☐
Brown long-eared *Plecotus auritus*	×	✓	✓	Enclosed woodland	☒	☐	☐
Whiskered *Myotis mystacinus*	✓	✓	✓	Linear vegetation	☒	☒	☐
Brandt's *Myotis brandtii*	✓	✓	✓	Linear vegetation	☒	☒	☐
Natterer's *Myotis nattereri*	×	✓	✓	Enclosed riparian	☒	☐	☐
Daubenton's *Myotis daubentonii*	✓	×	✓	Open aquatic	☒	☐	☐
Alcathoe's *Myotis alcathoe*	×	×	✓	Enclosed woodland	☐	☐	☐
Noctule *Nyctalus noctula*	×	×	✓	Above woodland/water	☒	☐	☐

Table 4 *Bat species whose geographical range extends to the region in which the site is located. *Typically but not exclusively.*

Barn Owls

There are no records of barn owls within 2km of the site on the Envirotech datasets. The habitat around the site appears to be suitable for hunting barn owls as there are areas of rough grassland which are suitable for voles and other small mammal prey.

Birds

The surrounding habitat would offer suitable nesting and foraging areas for birds. Birds reliant upon buildings for nesting such as swallow are unlikely to occur at high densities on site due to its exposure and poor quality, wet ground surrounding which would not be ideal for large numbers of invertebrates.

5.2 Field Survey

5.2.1 Habitat Description

The habitat on and adjacent to the site identified from satellite images was ground truthed. Details of the habitats found on and adjacent to the site are detailed in Figure 5.

It is judged that the most suitable commuting route for bats into and out of the site is the road to the east. The surrounding habitat is considered to have low to moderate foraging potential.

5.2.2 Bat Roost Survey

5.2.2.1 General description

There are two buildings on site which comprise two stone barns.

5.2.3 Building 1

5.2.3.1 External walls/ Eaves

The walls of the building are made from natural stone and are in excellent condition. There are no structural gaps or cracks, the pointing between the dressed stone is in excellent condition.

There are no soffit or eaves boards, small gaps do however extend over the eaves into the roof voids. There were no indications of roosting by bats in these areas.

5.2.3.2 Roof

The roof of the building is made from slate and is unlined. There were occasional raised slates on both roof pitches, as well as ridgeline gaps where the mortar was missing. The full extent of the gaps could be seen from the ground with close focus binoculars and a 1,000,000 candle power torch. No indications of use by bats could be found. As the roof is unlined any use of the roof would also result in droppings being deposited internally.

5.2.3.3 Internal walls

The internal walls of the barn appear well sealed. There was a thick covering of cobwebs and dust on them.

5.2.3.4 Roof Voids/ Roof structure

The timber beams in the roof were found to be in excellent condition with no rot, splits or gaps suitable for roosting or hibernating bats. There was a good covering of cobwebs under the roof and spanning the internal space.

There are elevated hay stores which could be fully inspected. They were covered by light dust with no indications of use by bats.

5.2.3.5 Summary

To summarise the building is of moderate size and the external walls are in good condition. The roof is in good order with only occasional lifted slates. Overall this building has low potential for use by bats, our categorisation would be 5. Further details of our risk categorisation can be found on Table 1.

5.2.4 Building 2

5.2.4.1 External walls/ Eaves

The walls of the building are made from natural stone and are in excellent condition. There are no structural gaps or cracks, the pointing between the dressed stone is in excellent condition.

There are no soffit or eaves boards, small gaps do however extend over the eaves into the roof voids. There were no indications of roosting by bats in these areas.

The building has been repaired in the recent past so is in good order.

5.2.4.2 Roof

The roof of the building is made from slate and is unlined. The roof and ridge lines are well sealed having been reroofed in the recent past.

5.2.4.3 Internal walls

The internal walls of the barn are unavailable to roosting bats as the windows and doors area sealed. An open store on the West elevation had well sealed walls.

5.2.4.4 Roof Voids/ Roof structure

The timber beams in the roof were found to be in excellent condition with no rot, splits or gaps suitable for roosting or hibernating bats. There was a good covering of cobwebs under the roof and spanning the internal space. No indications of use by bats could be found.

5.2.4.5 Summary

To summarise the building is of small to moderate size and the external walls are in good condition, as is the roof having been repaired in the recent past. Overall this building has low potential for use by bats, our categorisation would be 4. Further details of our risk categorisation can be found on Table 1.

5.2.5 Activity Survey

During the first activity survey no bat activity was recorded on site.

During the second activity survey no bat activity was recorded on site.

The surveys were terminated when light levels reached 0.2 Lux and seeing bats became difficult.

5.2.6 Barn Owls

5.2.6.1 Potential Nest Sites (PNS)

There are no potential nest sites identified

5.2.6.2 Active Roost Sites (ARS)

There was no “white wash” or significant collections of fresh barn owl pellets on the floor or on surfaces inside the buildings which suggest that barn owls do not have an active roost site within the buildings.

5.2.6.3 Temporary Roost Sites (TRS)

There are no signs of barn owl pellets or whitewashing of doors or other elements inside the barns

5.2.6.4 Occupied Breeding Sites (OBS)

There were no significant collections of barn owl pellets, chick down, chick leg bones, “white wash”, moulted feathers or other indications of an occupied breeding site in the buildings.

5.2.7 Nesting birds

There were no nesting birds noted in either building

6. CONSTRAINTS

6.1 Bats

We judge that the site survey is sufficient to address the risk to bats at the site based on the species present in the local area, construction of the buildings and nature of the proposed work. The level of survey effort accords with the recommendations of Collins ed. (2016). The reasonable probable use of the site by bats has been determined.

6.2 Barn Owls

No constraints.

6.3 Nesting Birds

No constraints.

7. INTERPRETATION

7.1 Presence / absence

There was no past or current evidence of bats roosting found at the site during the survey.

We consider that the buildings are unlikely to be used by significant numbers of bats for roosting. It is highly unlikely the buildings are essential for species survival. Precautionary mitigation would be appropriate.

7.2 Population size class assessment

From a review of adjacent habitat the maximum number of bats that are likely to use an area within 250m of the site is of the magnitude 1-9 (small).

Barn owls are considered to be absent in respect of nesting and roosting.

There were no indications of current use of the site by nesting birds.

7.3 Site status assessment

Whilst the site itself is unlikely to be used as a roost by a significant number of bats, there is use of the adjacent landscape. Bats are likely to rely on a number of roost sites in buildings and trees in the local area. It is therefore likely that the site has a low significance for bats. We consider the Continued Ecological Functionality of the site is unlikely to be affected as a result of the proposal.

We are of the opinion that the buildings are currently used by barn owls at a low level and will have a low significance for this species.

The buildings may be used by low numbers of swallow and other nesting birds. The buildings are, however, likely to have a low significance for these species.

8. POTENTIAL IMPACTS

8.1 Bat Roosts

8.1.1 Pre and mid-activity impacts

A worst case scenario will be considered in addressing potential impacts at the site without mitigation.

8.1.1.1 Maternity Roosts

No signs of past maternity or gathering roosts were found at the site during the survey. The potential for a maternity or gathering roost in the buildings is judged to be very low due to the absence of highly suitable roost sites. Evidence of past use of the site by large numbers of bats such as would occur in a maternity or gathering roost, such as staining on the roof or walls, was absent. Evidence of intensive/ regular use such as occurs in such roosts can usually be found at any time of year. **We judge there is no risk to a maternity colony or gathering roost at this site from the proposed work.**

8.1.1.2 Satellite Roosts

We do not consider that satellite roosts will be affected by the proposal. There was no indication of elevated use of the site such as would occur if this roost type were present. **We judge there is no risk to a satellite roost at this site from the proposed work.**

8.1.1.3 Transitional and day roost sites

We judge there is a low risk of disturbing bats in or loss of transitional or day roost sites. We judge that on balance it is unlikely this sites potential for use for these purposes will be degraded by the proposed work. There are likely to be numerous other more suitable sites in other buildings and trees in the wider area. The buildings are unlikely to offer significant roosting potential.

8.1.1.4 Night Roosts

We do not consider the site is sufficiently close to or linked with high quality foraging habitat such that bats may use it for night roosting.

8.1.1.5 Feeding roosts

We do not consider the site is sufficiently close to or linked with high quality foraging habitat such that bats may use it for feeding roosts.

8.1.1.6 Lek sites

In our experience lek sites are commonly found in proximity to the main feeding and commuting routes. The primarily commuting and feeding area at the site was judged to be the woodland some distance from the site to the West. There were no potential lek sites identified in the buildings facing this commuting route which are also close enough to it to be used by male bats for leks. It is therefore unlikely there will be use of the buildings by bats for lekking.

8.1.1.7 Hibernation

There are no areas of rotten wood in the buildings or damp walls which also offer crevices which could be suitable for hibernating *Pipistrelle* spp. bats.

There are no areas of the buildings which are sufficiently damp, cool and darkened which would be ideal for hibernating *Myotis* spp. bats. There is very little evidence and limited potential for hibernation at the site; it is therefore unlikely there will be loss of hibernation sites.

8.1.1.8 Swarming

There is unlikely to be any loss of a swarming site. Swarming sites are generally found at or near hibernation sites. We judge that the site is unlikely to be used by *Myotis* spp. bats and brown long-eared bats which have been known to swarm as there are no hibernation sites for these species in the buildings.

8.1.1.9 Summary

Without mitigation, there is considered to be only a low potential for the alteration or loss of occasional, unconfirmed roost sites for bats at the site and this is unlikely to have a significant impact on their local distribution.

8.1.2 Long term impacts

There is on balance a low risk of long term negative impacts on the favourable conservation status of bats in the local area as a result of the proposed work.

8.1.3 Post activity interference impacts

There is unlikely to be disturbance to roosting bats during the post construction phase of the project. There is already significant disturbance at the site from existing use of the site and surrounds.

8.1.4 Other impacts

It is our opinion that there will be no significant other negative impacts relating to the proposed work which may affect bat species.

8.1.5 Bat Foraging and Commuting Habitat

There is unlikely to be a disruption to any commuting routes at the site. The site does not lie on or near to a high quality commuting route.

There is unlikely to be a disturbance to feeding bats during and after the construction phase of the project. It is judged that the foraging areas near the site will be unaffected by the proposed work.

8.2 Barn Owls

There is a low potential for use of the site by barn owls. There are no potential nest sites within the buildings and there is no indication of any type of past use.

8.3 Nesting birds

No recent bird nest sites were found at the site. It is unlikely that the loss of potential nest sites would have significant long term impacts on local bird populations.

9. RECOMMENDATIONS AND MITIGATION

9.1 Further Survey

We consider that the risk to bats in the buildings will remain low and no additional survey work is required prior to the determination of the planning application.

The site should be rechecked for nesting birds if work is to commence in the period March-September inclusive.

9.2 Mitigation Measures

9.2.1 Bats

Natural England requires that mitigation addresses the impacts picked up by the site assessment, as follows:-

- Quantitative characteristics: There should be no net loss of roost sites, and in fact where significant impacts are predicted there will be an expectation that compensation will provide an enhanced resource compared with that to be lost. The reasoning behind this concept is that the acceptability of newly created roosts by bats is not predictable.

- Qualitative characteristics: the plans should aim to replace like with like. As an extreme example, it would be unacceptable to replace maternity roosts with hibernation sites.

- Functional characteristics: compensation should aim to ensure that the affected bat population can function as before. This may require attention to the environment around the roost.

Natural England also recommends that precautions are taken to avoid the deliberate killing or injury of bats during development work at the site.

The site survey found no evidence of habitual use of the buildings by roosting bats in or between years, although there is a possibility of a low level of opportunistic use at some times of the year. The survey effort was sufficient to allow for an assessment of this to be made.

9.2.1.1 Bat Roosts

As a precautionary approach the following guidelines will be adhered to.

1. All contractors on the site will be made aware of the possible presence of bats prior to the commencement of work.

2. Contractors will be provided with the contact details of an appropriately qualified individual who can provide advice in relation to bats at any time during work. In the event that bats are found during work, unless the action has already been cleared by a suitably qualified individual, **all work will cease** and an appropriately qualified individual will be contacted for further advice.

3. Contractors will be observant during demolition work for bats which may use the buildings if new areas of the roof are exposed and left open overnight. Bats are opportunistic and may make use of gaps opened up during work overnight.

4. If it is necessary to remove a bat to avoid it being harmed, gloves should be worn. It should be carefully caught in a cardboard box and kept in the dark in a quiet place until it can be released at dusk near to where it was found, or moved to an undisturbed part of the building, with outside access, and placed in a location safe from predators.

5. **If bats or bat roosts are found during work, all work should cease**. The site will need to be re-assessed in regard to its use by bats. A Natural England licence will be required if continuing work is, on balance, likely to result in the disturbance, killing or injury of bats or the alteration, destruction or obstruction of roost site.

6. Remove all roof coverings by hand only.

7. Retain at least 8 gaps along the eaves lines of the buildings which allow access to the wall tops under the eaves during any re-roofing which is undertaken. A plan for these type of roost is shown on Figure 7. These potential roost sites will be a significant improvement on existing site conditions.

8. There is no need to restrict the timing of work. Use of the structure by bats is equally likely to occur at any time of the year but will be at low levels.

Following English Nature (Natural England) guidance Mitchell-Jones (2004), if these guidelines are followed we would consider that on balance, a disturbance to bat species which could be contrary to the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and Wildlife and Countryside Act (1981) (as amended) is unlikely. **If bats are found prior to or during work a licence application will be required.**

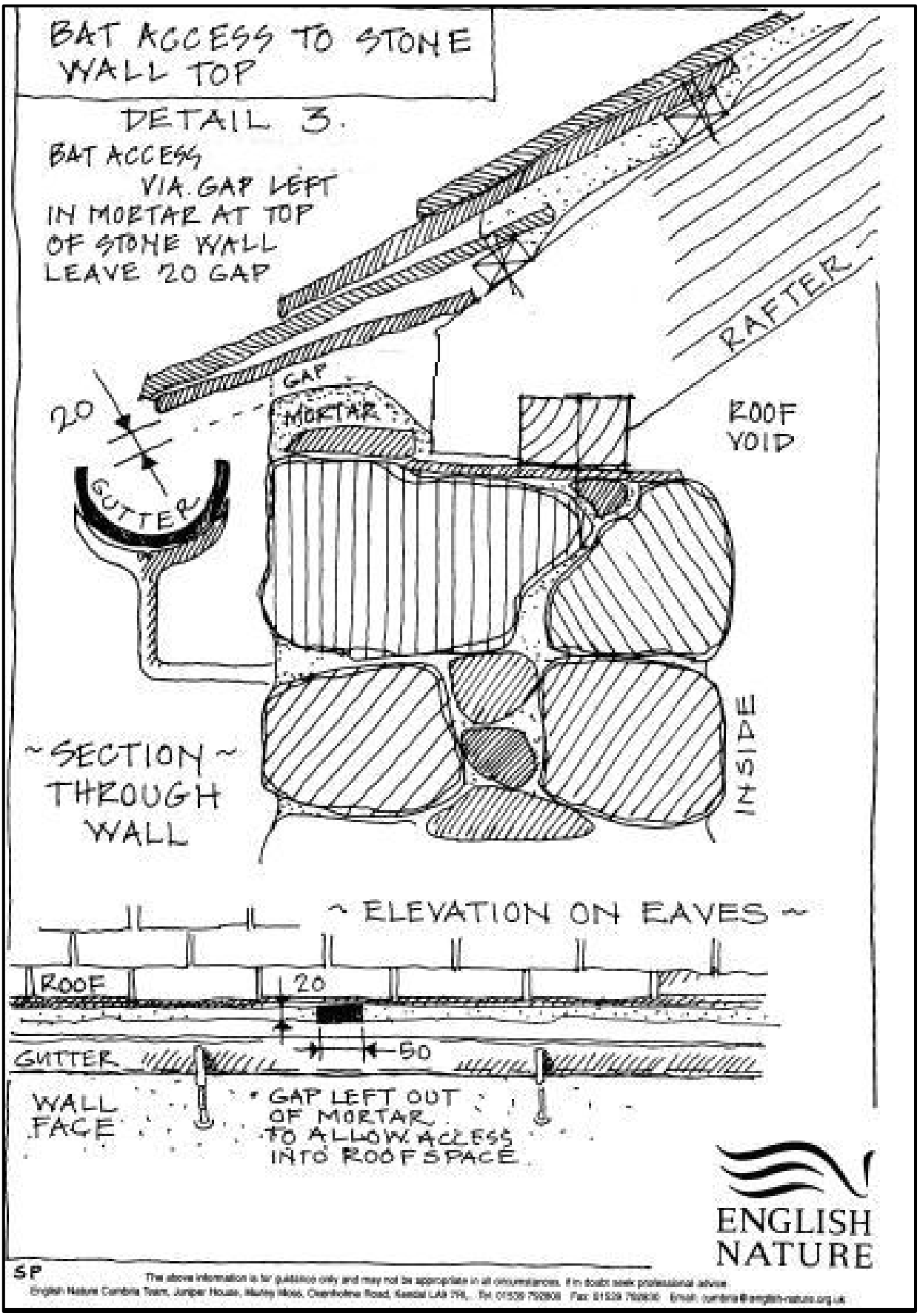

Figure 7 *New roost site creation.*

9.2.1.2 Mitigation for Foraging and Commuting Habitat

No specific mitigation for foraging and commuting habitat is necessary. The habitat surrounding the site does not change significantly.

9.2.1.3 Requirement for Habitats Regulations (EPS) Licence

At this stage, we judge that a Natural England licence will not be required to cover work on the buildings. No bats were confirmed as breeding or roosting at the site, the loss of potential roost sites will be avoided and no significant disturbance to bats will occur, so long as the recommendations of this report are followed.

If bats are likely to be significantly disturbed or bat roosts or breeding sites are found as a result of work, all work must cease and the site will need to be re-assessed by a suitably qualified person with regard to its use by bats. A Natural England licence will be required if continuing work is, on balance, likely to result in the disturbance, killing or injury of bats or the alteration, destruction or obstruction of a roost or breeding site.

9.2.2 Barn Owl Roost / Nest sites

If barn owls are seen nesting at the site, all work should cease. The site will need to be reassessed in regard to its use by barn owls. A Natural England licence will be required if continuing work is, on balance, likely to result in the disturbance of nesting barn owls or their killing or injury. The probability of barn owls using this site for nesting is very low.

9.2.3 Bird Roost / Nest sites

Work should not commence if any nesting birds are found. Birds usually finish nesting by early September. A check of the site for active nest sites should be made prior to work commencing if this is in the period March -September. A delay in the start of work will be required if active nest sites are located.

10. MITIGATION SUMMARY

The site survey found no evidence of bats roosting although there is a possibility of opportunistic use by low numbers of bats at some times of the year. The level of use is not considered likely to be significant and with the retention/creation of gaps at the eaves and precautionary mitigation, a significant disturbance and or the loss of roost sites is unlikely to occur.

There was no evidence of birds currently nesting. Work will not be commenced or undertaken in such a way as active nest sites are disturbed.

There is no evidence of past use of the buildings by barn owls for roosting or nesting.

On the basis of survey information, specialist knowledge of bat species and the mitigation that has been proposed, it is considered that on balance the proposed activity is reasonably unlikely to result in an offence under regulation 39 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. We do not consider there to be a need for a Natural England licence at this time.

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APPENDIX 1 PHOTOGRAPHS

Photograph	Notes
	Building 1 Well sealed walls and roof coverings generally in good order
	Roof verges are well sealed

	Occasional crevice's at the eaves
	Roof is unlined and vaulted Timber frame in good order Walls well sealed
	Small amounts of white wash to top of barn doors from Barn owl

Building 2

Well sealed external walls

Roof recently replaced

Roof verges well sealed

	Internal walls are well sealed Roof is unlined