



**Siddows Hall, Henthorn Road, Clitheroe,
Lancashire, BB7 3BY
Bats: Building Inspection & Activity Surveys**

Simply Ecology Limited

Ref: SE/ PDO001&2 /01

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For

Planit Design Ltd

40 Cliff Road

Ryhope

Sunderland

SR2 0NW

CONTENTS	PAGE
1.0 INTRODUCTION	1
1.1 Background Information.....	1
1.2 Aims	1
1.3 Site Description and Proposed Works.....	1
2.0 SURVEY METHODOLOGY	4
2.1 Bat Building Survey	4
2.2 Bat Activity Surveys.....	4
2.3 Personnel	4
2.4 Timing and Constraints.....	5
3.0 BAT SURVEY RESULTS	7
3.1 Site and Habitat Description.....	7
3.2 External Inspection	7
3.3 Internal Inspection.....	11
3.4 Activity Survey (2019).....	14
3.5 Activity Surveys (2020)	15
4.0 CONCLUSIONS AND RECOMMENDATIONS.....	19
5.0 MITIGATION AND COMPENSATION	21
5.1 Mitigation.....	21
5.2 In-situ retention of roosts	21
5.3 Impacts on existing roosts	21
5.4 Mitigation - Planned timing of works.....	21
5.5 Mitigation – Exclusion.....	22
5.6 Compensation/New roost provision – a strategy for the short and long term	23
5.7 A notice for contractors	25
5.8 Post development site maintenance and management	25
5.9 Population monitoring.....	26
5.10 Mechanism for ensuring site safeguard of mitigation/compensation and post-development management and monitoring works	26
6.0 REFERENCES	27
ANNEX A: STATUTORY AND PLANNING CONTEXT	28

PLANS	PAGE
Plan 1: General site location	2
Plan 2: Aerial shot of site location	2
Plan 3: Existing and Proposed Site Plans	3
Plan 4: Existing building plans and elevations.	3
Plan 5: Proposed building plans and elevations.	3
Plan 6: Locations of bats observed emerging from the building during the 2019 survey.	15
Plan 7: Flight-lines and roost locations of the soprano pipistrelles.....	17
Plan 8: Roost impacts and retention.	18

Control Sheet

	Name	Position
Author:	Samantha Gray BA GradCIEEM	Business Ecologist
Checked and Approved by:	Jason Reynolds MSc MCIEEM	Director

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1	06/12/2019	N/A	JR	First Issue
2	18/06/2020	PW	JR	Addition of 2020 bat activity surveys and revision of advice

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1.0 INTRODUCTION

1.1 Background Information

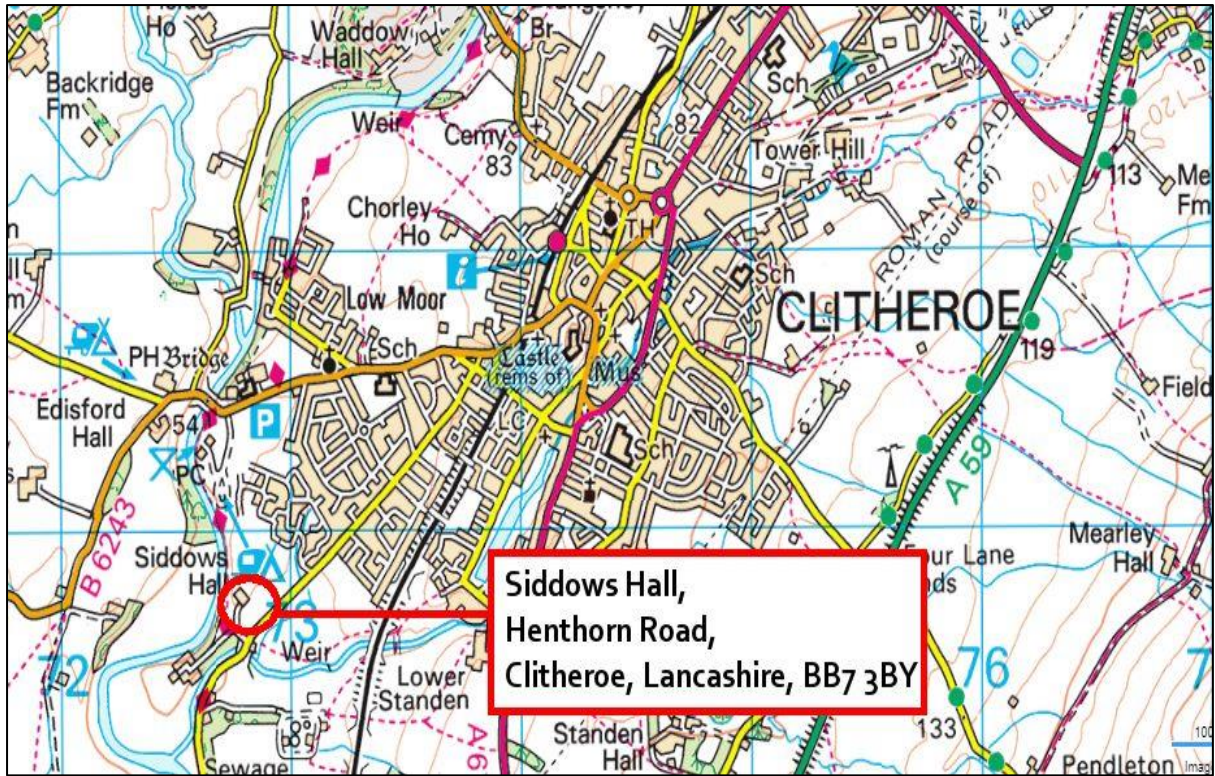
- 1.1.1 In October 2019, Simply Ecology Limited was commissioned by Planit Design Ltd to undertake a bat activity survey of Siddows Hall, Henthorn road, Clitheroe, Lancashire, BB7 3BY (OS Grid Ref: SD 727 407).

1.2 Aims

- 1.2.1 The aims of this survey were to gather up-to-date information on the presence of bats at the site. This involved:
- Identifying potential structures of the buildings that could be used by bats.
 - Identifying if there was any evidence of bats around the buildings.
 - Identifying whether bats were emerging from the buildings, and if so, to identify the number and species present.
 - Providing an assessment of the likely importance of the site for bats and their conservation.
 - Advising the client in relation to the proposed development and any impacts upon bats in order to ensure legislative compliance.
- 1.2.2 To achieve this, a bat building inspection was undertaken on the 17th October 2019. A follow up bat emergence activity survey was completed on the 23rd October 2019. Further activity surveys were undertaken in May and June 2020. This submission presents the results of the surveys at the site.

1.3 Site Description and Proposed Works

- 1.3.1 The site was located 1 mile to the south west of the town of Clitheroe and approximately 8 miles north west from the centre of Burnley (see Plan 1). The site was a 2-acre plot with a residential dwelling, which was situated amongst established grounds with various trees and shrubs. The wider landscape surrounding the property was largely agricultural, with fields separated by hedgerows and given over variously to mixed arable and pasture (see Plan 2).
- 1.3.2 The total footprint of the building was estimated to be approximately 250m². At the time of the original surveys, the building was undergoing extensive internal renovation works, although these were not affecting the roof space. However, during the course of minor re-wiring in the loft, a bat was encountered by a contractor. Simply Ecology attended site to advise on these minor works but also to provide longer-term advice.
- 1.3.3 The surveys described in this report will form part of a future planning application which will be for an extension to the east side of the building. This planning process will continue in 2020. Proposed plans include extending the property, across two storeys, from the northwest facing gable end (see Plan 3, Plan 4 and Plan 5).



Plan 1: General site location

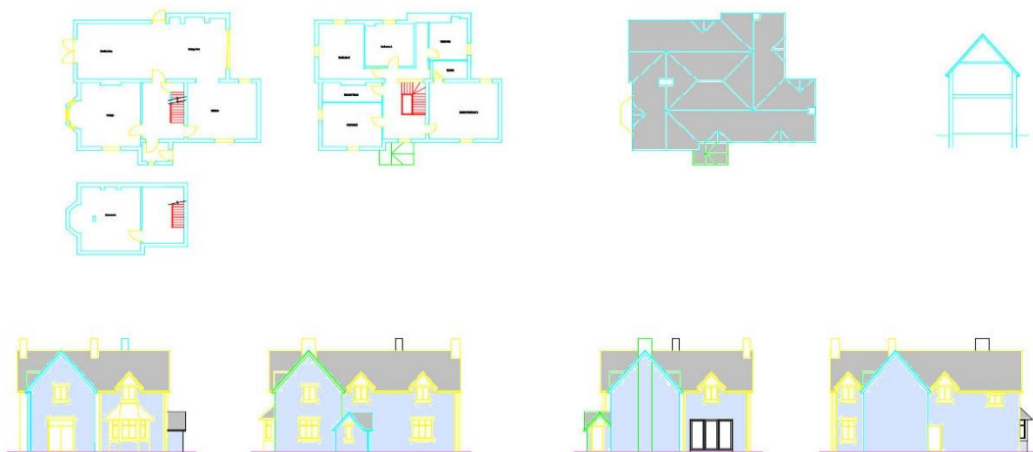


Plan 2: Aerial shot of site location



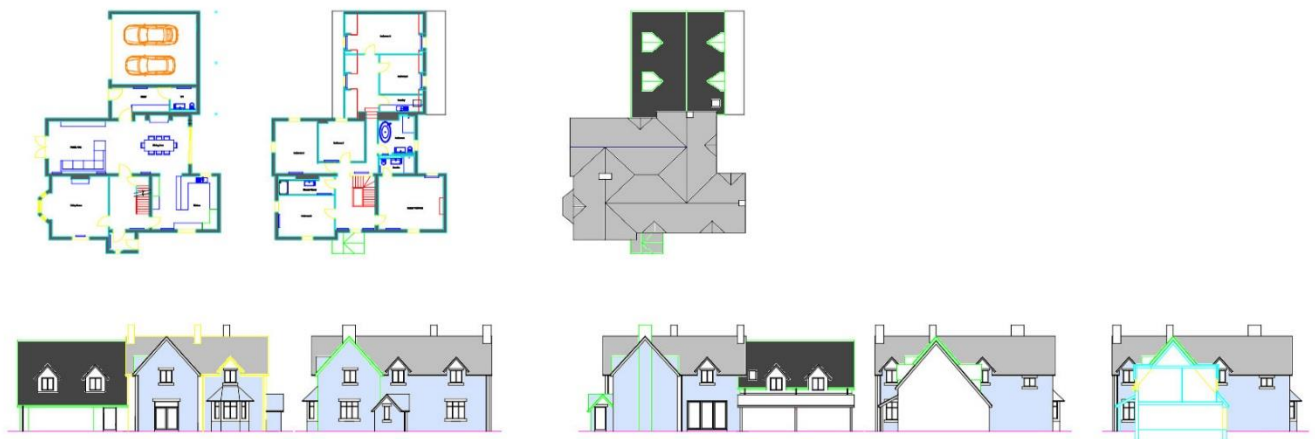
Plan 3: Existing and Proposed Site Plans

Existing



Plan 4: Existing building plans and elevations.

Proposed



Plan 5: Proposed building plans and elevations.

2.0 SURVEY METHODOLOGY

2.1 Bats: Building Survey

2.1.1 The building survey was undertaken in accordance with the standard methods described in the 'Bat Worker's Manual' (JNCC 2004) and 'Bat Surveys – Good Practice Guidelines' (BCT 2016). The survey comprised the following elements:

- An inspection of the exterior of the buildings to look for obvious signs of bat activity (such as droppings on windowsills) and assessing the potential for entry/exit into the roof.
- An inspection of the interiors of all buildings, examining walls, the underside of roofs and within any loft spaces in the property to determine whether bats were present, to look for signs of bat activity (such as discarded prey items and droppings) and to assess suitability for bats. Lighting was provided by a Led Lenser XEO 19R (2,000lm) and Lezyne Mega Drive (1,200lm).
- An assessment of the surrounding habitat quality for bats was carried out by walking the area on foot and later from reference to aerial images (Bing Maps). These searches were used to identify important land use and habitat features known to be favoured by bats.

2.2 Bats: Activity Surveys

2.2.1 An emergence (dusk) survey was undertaken in accordance with the standard methods described in the 'Bat Worker's Manual' (JNCC 2004) and 'Bat Surveys – Good Practice Guidelines' (Bat Conservation Trust 2016). In accordance with best practice, the surveys comprised the following elements:

- Emergence Survey (2019): One night-time visit was undertaken of the entire site to determine if bats were emerging from the buildings and to assess levels of bat activity.
- Emergence Survey: One night-time visit was undertaken of the entire site to determine if bats were emerging from the buildings and to assess levels of bat activity.
- Re-Entry Survey: One survey was undertaken at dawn to determine the exact location of any roosts on site.
- During each survey, a surveyor was positioned to provide the best coverage of the buildings based upon the potential roost locations. The surveyor would be expected to hear and also see any bats emerging from the buildings. Activity was detected using Wildlife Acoustics EM Touch full spectrum bat detectors.

2.3 Personnel

2.3.1 The bat building survey was conducted by Jason Reynolds MSc MCIEEM. Jason started Simply Ecology Limited in 2007. Jason is an experienced ecologist who has been continuously employed in the field of nature conservation since 1995 (24 years' experience) and has a wealth of experience in both the statutory nature conservation agencies and private consultancy. During his career has worked in Conservation Officer roles for the Joint Nature Conservation Committee, English Nature, Environment Agency, Cumbria Wildlife Trust and Durham Wildlife Trust prior to setting up Simply Ecology ecological consultancy in 2007,

where he is the Lead Ecologist. He has an MSc from The University of Aberdeen and his thesis investigated the relationship between habitat type and complexity and the foraging behaviour of Pipistrelle bats. Jason holds protected species survey licences for all British bats, white-clawed crayfish and great crested newts.

- 2.3.2 The follow up bat surveys were conducted by Jason Reynolds, Kevin Heywood, Samantha Gray, Philip Wright and Richard Lowe:
- 2.3.3 Kevin Heywood BSc (Hons) ACIEEM is an Ecologist with Simply Ecology Limited. Kevin graduated with a first-class honours degree in Ecology from Lancaster University in 2015. In addition to this, he has acquired experience since 2012 working as an ecologist in a freelance capacity and since 2015 as a full-time employee for Simply Ecology Limited. During this time, he has developed numerous field skills and carried out a wide range of botanical and protected species surveys. His expertise predominantly lies with habitat mapping and undertaking protected species surveys including: bats, great crested newts, badgers, otters and reptiles. Kevin holds a protected species licence for all British bats.
- 2.3.4 Samantha Gray BA (Hons) Grad CIEEM is a Business Ecologist working for Simply Ecology Limited. Since graduating with a Geography degree from Lancaster University in 2015, Samantha has gained over 4 years' of experience in ecology. During this period she has completed an internship with Simply Ecology, where she developed her skills in botany, bat surveys and data analysis and also subsequently worked at RSPB Leighton Moss, carrying out habitat management and species monitoring work. In 2016 Samantha became a full-time employee with Simply Ecology as an Ecologist and Office Manager.
- 2.3.5 Philip Wright MSc CIEEM is an Ecologist with Simply Ecology Limited and obtained his first degree in Biology from the University of Bath and an MSc in Ecology and Conservation from Lancaster University. He is a member of the North Lancashire Bat Group and is in his fourth season of bat surveying. His wider experience includes conducting botanical surveying and habitat management work with the RSPB and with the Wildlife Trust for Lancashire, Manchester and North Merseyside.
- 2.3.6 Richard Lowe BSc (Hons) PGCE studied Environmental Management at The University of Central Lancashire and graduated in 1996. He has worked as an ecologist since that time in a variety of consultant roles, including as a Senior Ecologist at ERAP and latterly as a freelance contractor. Richard holds a great crested newt science and education licence. He has a broad range of experience of ecological survey and reporting knowledge, covering habitat mapping, protected species surveys and Environmental Impact Assessments. Richard is also an enthusiastic environmental educator, and regularly takes out school groups in Lancashire for the RSPB in his role as a Field Teacher.

2.4 Timing and Constraints

- 2.4.1 The building survey was undertaken on 17th October 2019. The timing of the building inspection to search for signs of bats posed no constraints as building inspections can be undertaken at any time of year. An assessment of the building's potential to support bats could therefore be made according to evidence found, building condition, location and the experience of the surveyor.

- 2.4.2 The emergence activity survey was carried out on the 23rd October 2019. While this was outside of the optimal period from May to September, the survey was considered necessary to provide useful contextual information as to the extent and location of the bat roosts.
- 2.4.3 Follow up activity surveys were conducted on 12th May and 1st June 2020. These surveys were undertaken during the ideal survey period for bats
- 2.4.4 The weather conditions across all surveys were considered satisfactory to observe and record any activity of these species at the site (see Table 1). There were no significant obstructions to vision anywhere around the site and it was possible to skyline the building.

Table 1: Weather conditions during the emergence survey.

Survey Date	Temp at the start of survey (°C)	Sunset/Sunrise Time	Start and Finish Times	Weather
23/10/2019	10	17:55	17:45-19:30	Clear sky, 10% cloud cover, light breeze
12/05/2020	10	21:01	20:40-22:15	Clear sky, 5% cloud cover, still
01/06/2020	12	04:44	03:00-05:00	Clear sky, 0% cloud cover, still

3.0 SURVEY RESULTS

3.1 Site and Habitat Description

- 3.1.1 The building due for development comprised a detached Victorian house set in extensive grounds within the Ribble Valley countryside. The footprint was estimated at approximately 250m². Countryside surrounding the dwelling was mostly open farmland, separated by hedgerow and trees representing good foraging habitat with suitable connectivity of linear commuting features.

3.2 External Inspection

- 3.2.1 The survey began by checking the overall condition of the building structure. The building had a complex hip and valley slate roof with multiple features (see Plate 1). The walls consisted of a mixture of exposed brick and rendering, which was largely in good condition.
- 3.2.2 The roof inspection revealed multiple gaps beneath slate roof tiles all across the building, which were considered suitable for bats to gain entry into the loft space. Potential access points were also identified beneath the lead flashing surrounding the rendered white chimney breast, which bat droppings were visibly adhered to (see Plate 2). Gaps were evident along the gable end roof verges and particularly beneath the end ridge tiles. Numerous bat droppings were observed upon the fascia boards directly beneath these features, which suggested these were well-used entry point for bats (see Plate 3).
- 3.2.3 The brick walls of the building were generally well sealed; although gaps were present on the wall plate at the gable ends of the building (see Plate 4). Further cracks and crevices were also visible around the exposed roof purlins (see Plate 5). These were considered suitable for bats to gain entry into the roof space of the building.
- 3.2.4 Thorough inspection of the external features also identified bat droppings on the second storey window panes along the eastern aspect of the building (see Plate 6). This suggested recent use of a bat roost around the gable end of the dormer window.
- 3.2.5 **To summarise, the building had many potential bat access points beneath the slate roof tiles, along the gable end roof verges and upon the brick wall plates. Droppings were identified upon fascia boards, rendered chimney breast and window panes, indicating recent use by bats. A full internal inspection was necessary to identify bat roost locations within the building.**



Plate 1: Overview of the dwelling



Plate 2: Multiple gaps were visible beneath the roof tiles of the building and around the lead flashing surrounding the chimney. Bat droppings were also visibly adhered to the chimney breast.



Plate 3: Numerous bat droppings were observed on fascia boards beneath the gable end ridge tiles.



Plate 4: The brickwork along the wall plate was not tightly fitted and contained a number of gaps suitable for bats to utilise.



Plate 5: Gaps were also present in the brickwork around roof purlins.



Plate 6: Bat droppings present upon windowpanes on the building.

3.3 Internal Inspection

- 3.3.1 A thorough and systematic search began in the interior loft of the building with the aim of looking for evidence of historic or current bat activity, including scratch marks on the beams, staining and bat droppings. Flat surfaces were also inspected for droppings and discarded prey items. The loft was fully accessible and unaffected by the ongoing renovation works within the building (see Plate 7).
- 3.3.2 Numerous bat droppings were observed throughout the loft. These were found in clusters upon the insulation, flooring and within the beams (see Plate 8, Plate 9 and Plate 10). On closer examination it appeared that the droppings were not fresh, suggesting historical usage of the loft void by bats. A handful of fresh droppings were found on the inside of the south facing chimney breast.
- 3.3.3 The underside of the tiles was lined with roofing membrane. Upon entering the loft, squeaking noises were heard by the ecologist. These were traced to an area within the void between the slate tiles and the roofing membrane, where numerous bats were heard moving within this space. It was clear that a 'good number' of bats were present on top of the membrane, even though it was late in the season. Due to the number of bats heard, it was suspected that a maternity roost might well have been present within the house earlier in the season. Due to their location, no count was possible as none of these bats could be seen.
- 3.3.4 The roofing membrane had a date stamp of 2018 on it, which confirmed that re-roofing had taken place in the loft within the past year. The visual appearance of the droppings suggested that they were not from 2019, and that a bat roost areas was now probably confined to the void above the roofing membrane and underneath the roofing tiles. Only a handful of fresh droppings indicated any ongoing bat presence in the main loft void. It was considered that the bat encountered by the contractors was possibly an infrequent event since the re-roofing. Nevertheless the membrane did have some gaps evident and adjacent to the chimney breast which could potentially allow bats to access the main loft void (see Plate 11).
- 3.3.5 **In summary, extensive signs of bat activity were found throughout the loft. This included bats making social calls and bats were observed moving around on top of the roofing membrane. A large number of droppings were also distributed throughout the loft space. Further survey was therefore necessary to determine the species and size of the bat roost present.**



Plate 7: The loft was fully accessible and unaffected by the ongoing renovation works.



Plate 8: Clusters of bat droppings were present in areas throughout the loft.

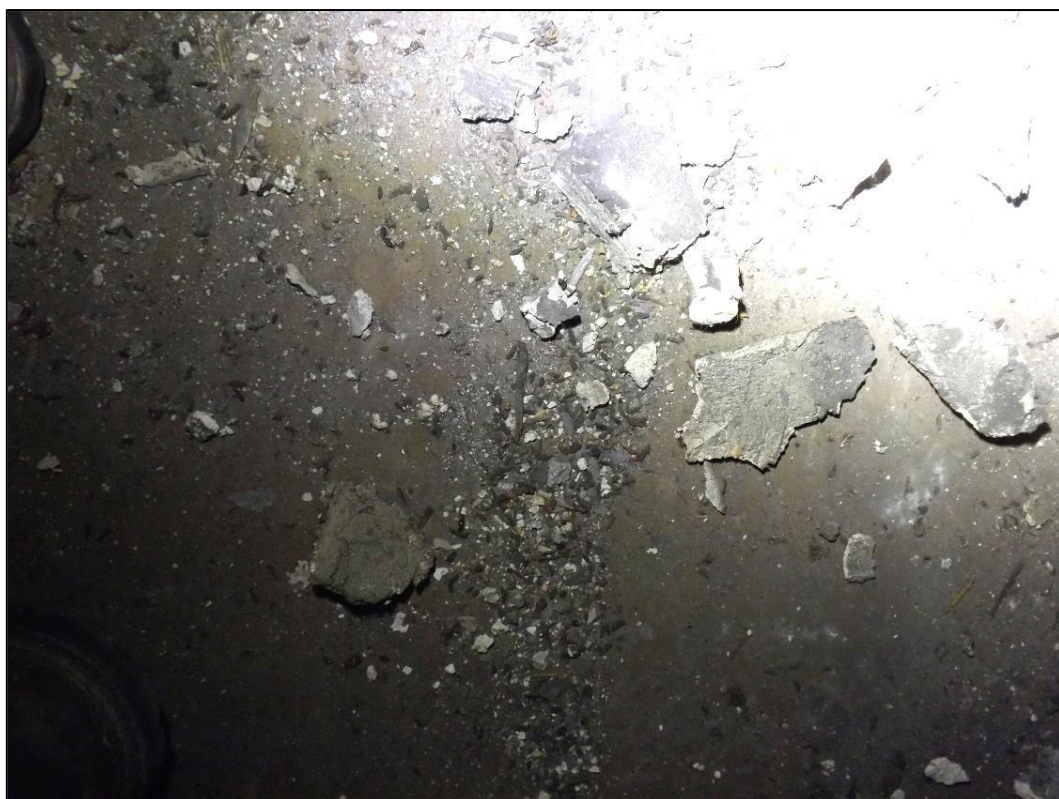


Plate 9: Further clusters of bat droppings upon the floor of the loft, although these did not appear to be fresh.



Plate 10: Bat droppings were also found between loft beams at a crevice roost location.

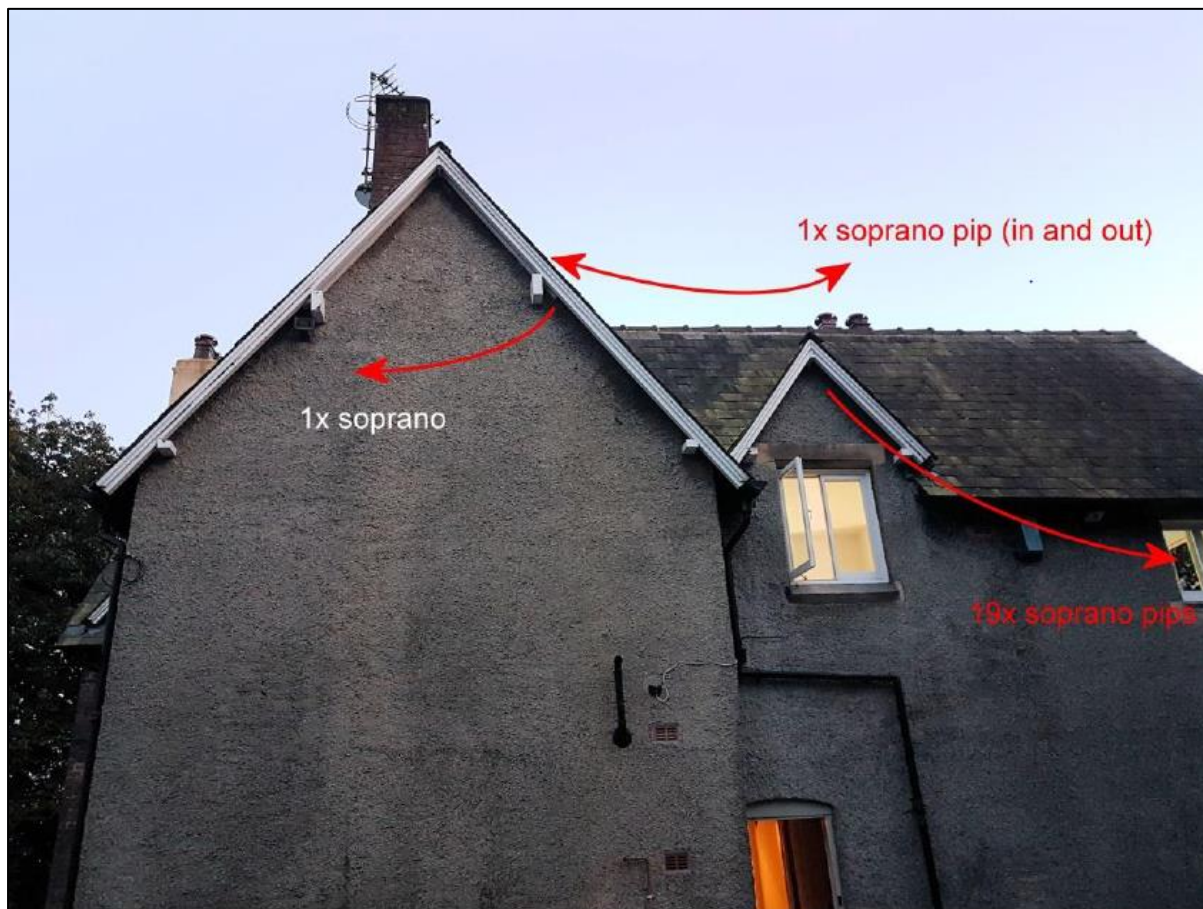


Plate 11: Some gaps were present in areas of the roofing membrane.

3.4 Activity Survey (2019)

- 3.4.1 A dusk emergence survey was undertaken on 23rd October 2019. The timing of the survey was outside of the survey season accepted by the Bat Conservation Trust Guidelines. However the decisions was taken to carry out a survey as it was clear from the building inspection that large numbers of bats were still present. It was therefore useful to carry out an emergence survey to gather contextual information to identify roost locations and inform design plans.
- 3.4.2 The survey took place on a mild night and almost constant levels of bat activity were recorded at the site. This consisted mainly of soprano pipistrelle (*Pipistrellus pygmaeus*) and common pipistrelle (*Pipistrellus pipistrellus*).
- 3.4.3 Soprano pipistrelles were observed emerging from the building in three locations along the northwestern aspect. These were beneath the tiles along the verge of the main gable end, beneath an exposed roof purlin at the gable end, and from the ridge of the dormer window gable. In total, a maximum of 21 soprano pipistrelles were recorded emerging from these locations upon the building.
- 3.4.4 Additional common pipistrelle calls were also recorded on site; however these were not seen emerging from the building. Frequent numbers of bats were observed foraging around the mature trees surrounding the site.
- 3.4.5 Overall, a maximum of 21x soprano pipistrelles were recorded emerging from eastern aspect of the building during the survey. The locations of the roosts are detailed in Plan 6. It was concluded that a maternity roost for soprano pipistrelles was present at the site.

- 3.4.6 Without mitigation, it is considered highly possible that the proposed extension would result in impacts upon a bat roost that is considered to be of high conservation concern. It is therefore essential that further surveys are to be completed prior to any proposed extension works.



Plan 6: Locations of bats observed emerging from the building during the 2019 survey.

3.5 Activity Surveys (2020)

Dusk Activity Survey

- 3.5.1 A dusk bat activity survey of the site was conducted on the 12th May 2020. The survey began at 20:40. Three bat species were identified during the survey - common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and myotis (*Myotis* sp). At 21:09 and 21:10 single soprano pipistrelles were seen to emerge from dormer gables on the northwest face and the southeast face of the property respectively. At 21:10 a single soprano pipistrelle emerged from the dormer gable on the southeast face of the house. Two more single soprano pipistrelles were seen to emerge from dormer gable on the southwest face at 21:19 and 21:20. Between 21:43 and 21:49, 3x single soprano pipistrelles emerged from the northwest facing dormer gable. No more than 1x bat was seen to emerge at any one time.
- 3.5.2 No further emergences were recorded but almost constant soprano pipistrelle foraging activity was recorded around the house and above the trees. Occasional common pipistrelle

foraging passes were recorded and a single pass of a myotis bat was recorded at 21:28. No more than 3x bat was seen to be active at any time.

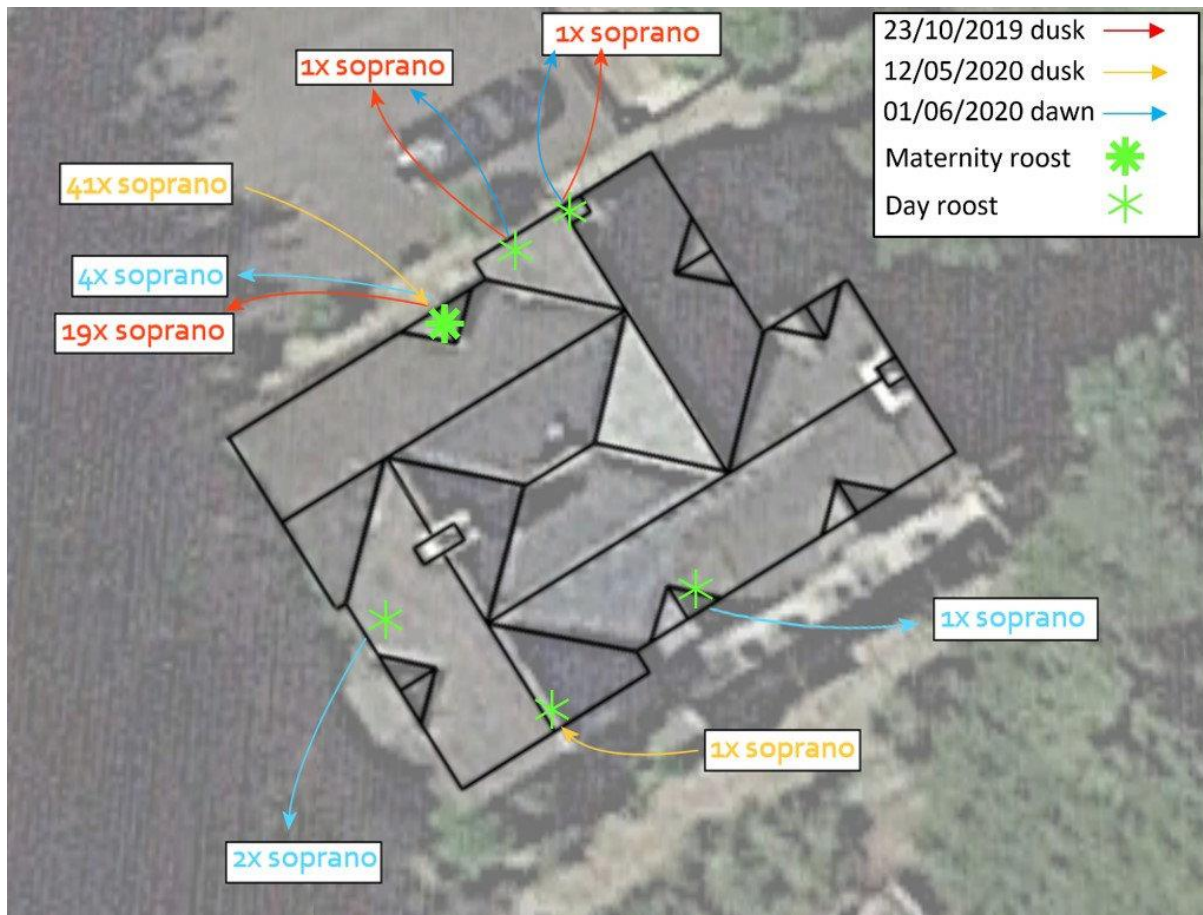
Dawn Activity Survey

- 3.5.3 A dawn bat activity survey was undertaken on the 1st June 2020 from 03:00 and, as with the previous survey, high levels of bat activity were recorded. On this occasion three species of bat were identified; soprano pipistrelle, common pipistrelle and an unidentified myotis bat.
- 3.5.4 Constant pipistrelle activity was noted from the start of the survey with bats foraging around the house and the trees.
- 3.5.5 At 03:44 a single soprano pipistrelle was seen to make preliminary landing approaches to the southwest facing dormer gable and another approach flight was made to the apex of the southeast facing gable at 03:57. Further approach flights were made to the southeast facing dormer gable.
- 3.5.6 A single soprano pipistrelle was seen enter a roost in the southeast facing gable at 04:00 and, at the same time, a single soprano pipistrelle entered a roost in the northwest facing dormer gable.
- 3.5.7 Between 04:00 and 04:11 a total of 41x soprano pipistrelle were seen to enter this roost in the northwest facing dormer gable. Up to 10x bats were seen to be swarming near the roost entrance at any one time. All bat activity had ceased by 04:24.



Plate 12: Soprano pipistrelle approaching and entering roost in northwest dormer gable.

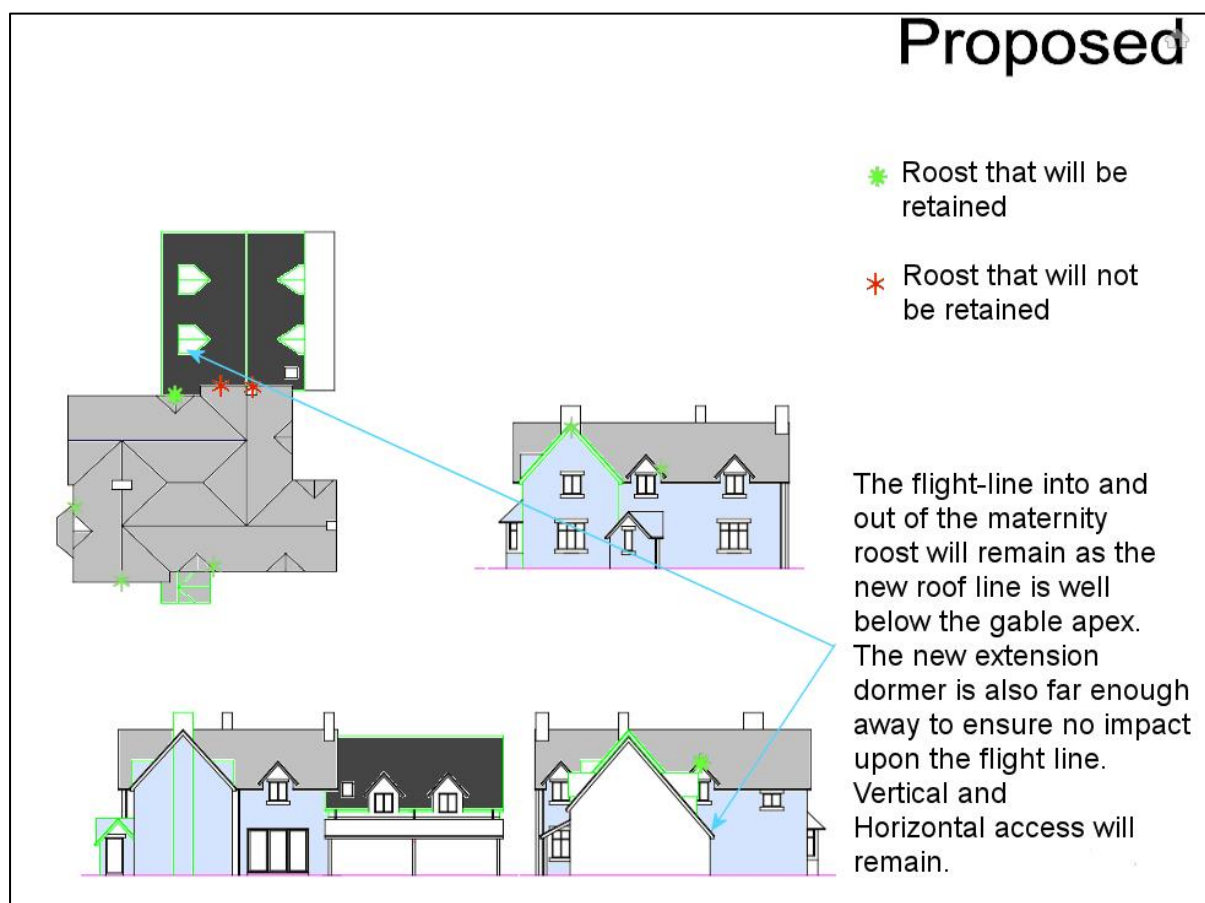
- 3.5.8 To summarise, 19x soprano pipistrelle were seen to exit a roost on the northwest face during the October survey and 41x soprano pipistrelle were seen to enter the same roost in the June survey. Elsewhere on the house, 4x pipistrelle were seen enter 4x further roosts in the roof of the house (See Plan 7). The range of species encountered was moderate, with only 3x species identified but the general activity levels observed on site were high with up to 10x bats seen at any one time.
- 3.5.9 **Overall, a maximum of 41x soprano pipistrelles were recorded using a maternity roost on the small gable (northwestern aspect) of the building during the survey. 5x other roosts were seen to be used by individual or very small numbers of bats (6 bats in total in these other roosts). The locations of the roosts are detailed below in Plan 7.**



Plan 7: Flight-lines and roost locations of the soprano pipistrelles.

4.0 IMPACT ASSESSMENT

- 4.1.1 The key consideration with respect of the proposed extension is that the maternity roost will not be directly impacted by the works. This is exceedingly important for retention of this locally valuable roost for the species.
- 4.1.2 A careful consideration of the new roof line and the position of the new dormer shows that there is both vertical and horizontal space retained around the roost. After watching the bats exit and return to the roost, it is the ecologist's professional opinion that the maternity roost will be retained and will not be adversely affected by the extension.
- 4.1.3 In relation to the other two small roosts on the northern side of the building, retention will also be possible in theory. This is because the new roof line will be slightly lower than existing. However, whilst there will be no direct loss of the roosts, there will certainly be an impact upon possible flight lines in and out of the roost. It is considered therefore that the extension will result in the loss of 2x soprano pipistrelle day roosts (See Plan 8).
- 4.1.4 In summary, the maternity roost will be retained, as will 3 out of the 5 small roosts. Without mitigation, it is likely that the proposed extension would result in impacts upon bat roosts for 2x soprano pipistrelles (See Section 6.o).



Plan 8: Roost impacts and retention.

5.0 CONCLUSIONS AND RECOMMENDATIONS

- 5.1.1 In October 2019, Simply Ecology Limited was commissioned by Planit Design Ltd to undertake a bat building inspection survey of Siddows Hall, Henthorn road, Clitheroe, Lancashire, BB7 3BY. It is understood that planning permission is to be sought for an extension along the northwest side of the building (See Plan 3 and Plan 5).
- 5.1.2 The inspection found signs of bats in the form of droppings within the loft, and bats were heard on top of the roof lining. Given this evidence of bat presence, further night-time surveys were required in order to find out the species of bat and their numbers. This would be required to see if any impacts upon the roosting areas would arise from the proposed extension.
- 5.1.3 In October 2019, a night time emergence survey followed by further surveys in May 2020 and June 2020 were conducted and identified a maternity roost for 41x soprano pipistrelle and a further 5x day roosts for soprano pipistrelle bats.
- 5.1.4 It is understood that the plan is to build an extension to the northwestern gable wall, with the new extension pitched roof sitting below the current line of barge boards on the gable. Given the known location of the roosts it is believed that this extension
- **will not** impact the maternity roost on the northwest facing dormer gable and
 - **will not** impact the day roosts on the southwest or southeast faces
 - **has the potential to impact** the flight lines to the 3x day roosts on the northwest gable
- 5.1.5 It is anticipated that, without mitigation, the proposed extension works could result in impacts upon a 2x day roosts for soprano pipistrelles.
- **It is recommended** that a Natural England licence will be necessary in this instance as there will be a small impact upon known bat roosts within the building. Appropriate working methods and mitigation will be necessary and these are detailed in Section 5: Mitigation and Compensation. It is **ESSENTIAL** that the client understands the obligations placed upon them to only carry out these works **AFTER** planning permission has been granted and **WORKING JOINTLY WITH THE APPOINTED ECOLOGIST** once the necessary Natural England licence has been granted. **Reason:** This will deliver compliance with: Section 9 (1 & 4) of The Wildlife & Countryside Act 1981 (as amended), Part 3 (43; 1 & 2) of The Conservation of Habitats and Species Regulations 2017 and Section 11 (109 & 118) of the National Planning Policy Framework (2018).
- 5.1.6 It should be noted by the owners and residents of the property that whilst the current proposals are not expected to impact the other roosts, particularly the maternity roost in the dormer gable on the northwest, these roosts are protected and maternity roosts have the highest status of roost due to the presence of females and juveniles and their role in the functioning of the local bat population. This, therefore, is a roost of high conservation concern and therefore key recommendations is advised:
- **It is ESSENTIAL** that prior to any future works on the roof or around the roost in the northwest dormer gable that further bat activity surveys are conducted during the bat survey season (from May-September) in order to establish the status of the roost and

the numbers of individuals. This will inform the need for application for a Natural England European Protected Species Licence which may be required prior to any future development works at the site. Only then can the development be carried out in a way that the developers can be sure they are not negatively impacting on local bat populations. **Reason:** To carry out appropriate survey in accordance with the Bat Conservation Trust guidelines in order to deliver legal compliance. All UK bat species are protected by The Wildlife and Countryside Act (1981) (as amended) and the Conservation of Habitats and Species Regulations (2017).

6.0 MITIGATION AND COMPENSATION

6.1 Mitigation

6.1.1 The mitigation strategy for this site has been designed to meet the test of there being no adverse effect on the favourable conservation status of the bat population affected by the proposed work. National Planning Policy and legislation 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.

6.1.2 As it is an offence to destroy or disturb a bat roost it is advised that this work must take place under the terms of a derogation licence issued by Natural England and the mitigation measures to provide alternative roosting sites to replace those destroyed and **MUST** be implemented to ensure legal compliance.

6.1.3 The mitigation measures recommended to the client are as follows:

- The development proposed for this site includes construction of an extension to the northwest gable. This could result impact on several small day bat roosts in the gable end, impacting day roosts for 2x soprano pipistrelle. Therefore, mitigation measures will be required to address associated impacts. Mitigation and compensation strategies are laid out below to enable the planning application to be determined without having a detrimental impact upon bats.

6.2 *In-situ* retention of roosts

6.2.1 The extension roof line is due to sit below the position of 2x known soprano pipistrelle day roosts and, therefore, *in-situ* retention of the roosts is possible. However, the extension is considered almost certain to destroy the flight lines into and out of the roosts. *In situ* retention will therefore be rendered impossible as a result. All of the other roosts on the site can be retained and will be unaffected (See Plan 8).

6.3 Impacts on existing roosts

6.3.1 Without mitigation, the re-development of the building will result in loss of the 2 x roosts for low numbers of soprano pipistrelle bats. This would have a detrimental impact on small numbers of common protected bat species.

6.4 Mitigation - Planned timing of works

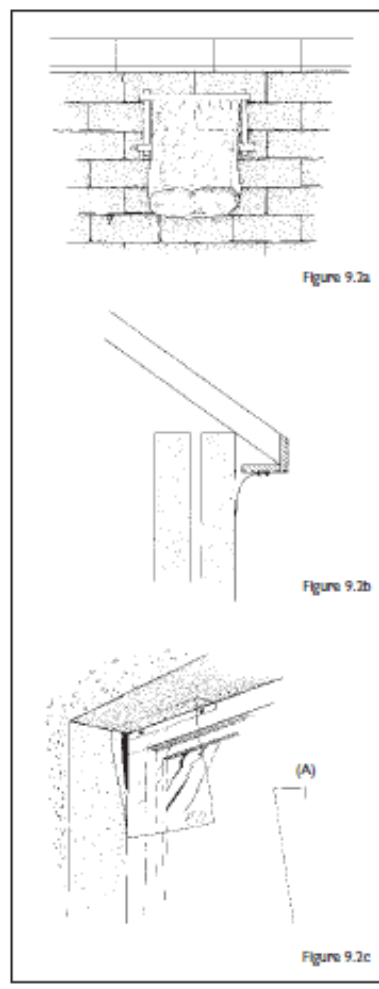
6.4.1 It is considered that the building had suitable features for hibernating bats, therefore the work should avoid taking place during the winter time (November to February inclusive).

- 6.4.2 Due to the small number of bats and the possibility of carrying out exclusion, no capture or direct disturbance of bats will be required at this site. Instead the careful planning and timing of the works to occur between March and April or September and October (inclusive) will ensure that direct impacts upon bats will be avoided. Other times of year are avoided for the exclusion due to the close proximity of the maternity roost.

6.5 Mitigation – Exclusion

- 6.5.1 Prior to works being carried out on a given area of the building, bats should be excluded from the known roost locations. This should comprise the following elements:

- A tool-box talk will be delivered to the contractors by the ecologist for this project, so any queries can be fully answered prior to the commencement of work on areas where bats are and could be roosting.
- No capture of bats is likely to be necessary at this site. Good information on the presence of roosting bats and activity patterns was gathered during the night time survey. We consider it possible to exclude bats entirely from the working area due to the discrete locations where 2x affected bat roosts were observed and the simple nature of the roost entrances.
- The licensed ecology personnel will undertake a program of excluding any bats from the roost to be affected.
- For the ridge tile, the exclusion will consist of using a small and light weight one-way plastic bag type exclusion device, pinned over the roost entrance as detailed in the Bat Workers Manual Page 89 (see right; JNCC, 2004)..
- The exclusion apparatus will be left in situ for a minimum of 3 nights of suitable weather conditions (night temperatures above 6° Celsius). Following this period, a repeat emergence survey and endoscopic examination will confirm the absence of bats.
- Since bats will have been effectively excluded, any bats present will have been able to move to the newly installed bat boxes or to roosts off-site. **Therefore, with this effective strategy in place, any demolition or works around the roost area can take place without having a detrimental impact on local bat populations.**
- Once the bats have been excluded, any subsequent works will commence immediately in the presence of a licensed bat surveyor. The licensed bat handler or suitably experienced person (Accredited Agent) will remain on site as the works takes place and for the duration of the period that the roosting area is exposed. In the unlikely event that bats are found during work, (which must then continue in order to weather proof the building), then bats will be removed by hand by the licensed bat handler or suitably experience person (Accredited Agent) and



kept in a suitably secure dark box until they can be relocated by hand into the newly installed roosts.

- If bats are found elsewhere during the course of the remaining works, all work will stop and the ecological consultant for this project Jason Reynolds Tel: 07754 538437 will be informed prior to work re-commencing. Bats may be removed from high risk areas by hand, kept in a secure cardboard box with coverings in a quiet area of the site then released at night at the site on warm.
- Any injured/sick bats that need treatment for will be delivered to a well-known bat carer, Gail Armstrong, 1 Bottoms Lane, Silverdale, Carnforth, Lancashire. Gail has several bats in her care at any one time and regularly deals with sick and injured bats. Any bats found which are sick and or injured and it is judged that they need external care will be assessed on site and if necessary, taken to Gail Armstrong for treatment. The risk of sick or injured bats being found at the site is however considered to be negligible.

6.6 Compensation/New roost provision – a strategy for the short and long term

- 6.6.1 In order to compensate for any loss of the small bat roosts in the building, it is advised that roost provision is built in to the building redevelopment. This can be incorporated into the design of the new building in the form of gaps in the eaves or underneath the ridge tiles of the roof.
- 6.6.2 It will be straightforward to incorporate crevice roosts behind the fascia boards of the new extension (see Plate 13). These should be a gap 15mm-20mm from the wall and their creation will be overseen by the Appointed Ecologist. It is anticipated that these roost locations will ensure long term provision for year-round roosting bats. The gaps under new fascia will compensate for the loss of the 2x individual pipistrelle roosts.



Plate 13: During construction, gaps can be incorporated under fascia that are suitable for crevice dwelling species.

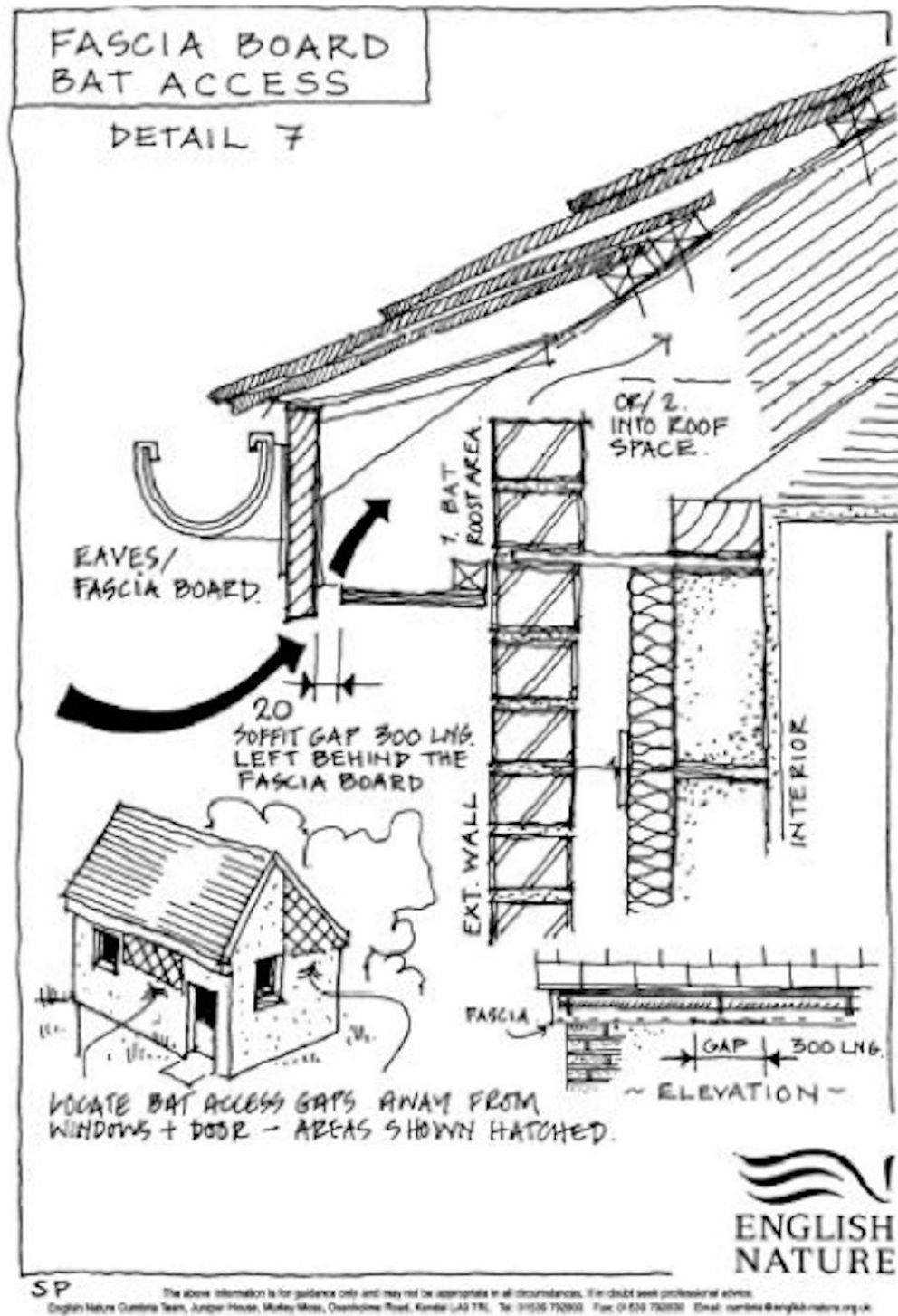


Figure 1: Gaps will be left to enable bat access under the fascia.

- 6.6.3 It is essential that temporary bat roost accommodation is provided on site prior to redevelopment of the building (see Plate 14). This would be in the form of 1x traditional wooden bat boxes, to be fitted at least 4m above ground on to trees on site. This should face south-west, south or south-east. If any bats are found during the commencement of slate stripping, then they would be put into the bat box.



Plate 14: The 1x wall mounted bat roosts will be installed prior to any redevelopment works.

6.7 A notice for contractors

6.7.1 In order to cover any residual risk that bats could be present, the following precautionary actions are advised:

- The contractors should be observant during the work for bats. Bats are opportunistic and may make use of gaps opened up during the work.
- In the event that any bats are found during the remainder of the works, the client (and any sub-contractor) is reminded of their protected legal status. All works must cease immediately until advice on how to proceed has been sought from the Appointed Ecologist.
- If it is absolutely 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. THIS MUST ONLY BE DONE FOR WELFARE CIRCUMSTANCES. The legal protection afforded to bats does not make this an admissible way to destroy a bat roost. The Appointed Ecologist will advise on steps necessary to ensure legal compliance and working under license if a bat roost is found.

6.8 Post development site maintenance and management

6.8.1 Any bat roost locations provided shall not be altered or destroyed without the appropriate statutory mechanisms being followed. Maintenance will not be required as the purpose-built compensation measures stated above are designed for the long term.

6.8.2 The site will remain in the management control of the current owners who will be responsible for site management.

6.9 Population monitoring

- 6.9.1 Due to the small number of bats and the limited impact predicted, in line with Natural England Low Impact Class Licence Guidelines, no monitoring is planned.

6.10 Mechanism for ensuring site safeguard of mitigation/compensation and post-development management and monitoring works

- 6.10.1 On the basis of survey information, specialist knowledge of the species concerned and understanding of the planning and legal system, we consider that there is no requirement for the use of a mechanism to ensure delivery of the recommendations of this report other than that which is already required under a Natural England licence.

7.0 REFERENCES

BAT CONSERVATION TRUST (2016). *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust, London.

DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (2018) National Planning Policy Framework. HMSO. London

National Planning Policy Framework 2018:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728643/Revised_NPPF_2018.pdf

Natural Environment and Rural Communities Act 2006:

http://www.opsi.gov.uk/acts/acts2006/ukpga_20060016_en_1

The Conservation of Habitats and Species Regulations 2017:

https://www.legislation.gov.uk/uksi/2017/1012/pdfs/uksi_20171012_en.pdf

Wildlife and Countryside Act 1981:

<http://www.legislation.gov.uk/ukpga/1981/69/contents>

ANNEX A: STATUTORY AND PLANNING CONTEXT

A.o.1 The client is advised that many species of British wildlife are legally protected. The following section provides a brief overview of the protection afforded to species commonly encountered during development. The Recommendations at the end of this report will advise as necessary, but it is also useful for the client to have an understanding of the legal protection as this helps to ensure that the law is complied with.

A.1 Badgers

A.1.1 Badgers are protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) (WCA), and the Protection of Badgers Act 1992. It is illegal to:

- Kill, injure, take, possess or cruelly ill-treat a badger or to attempt to do so;
- Interfere with a badger sett by damaging or destroying it;
- Obstruct access to or any entrance of a badger sett;
- Disturb a badger when it is occupying a sett

A.1.2 A badger sett is “any structure or place that displays signs indicating current use by a badger”. Natural England, the Government’s statutory nature conservation body, classifies a sett as active if it has been occupied within the last 12 months.

A.1.3 Operations that might cause disturbance of an active sett entrance can be carried out under licence from Natural England. If any badgers are found during the course of the survey, this will be highlighted in this report.

A.2 Birds

A.2.1 All wild birds are protected against killing or injury under The WCA 1981 (as amended). This protection extends to bird’s nests during the breeding season, which makes it an offence to damage or destroy nests or eggs. Birds that are listed on Schedule 1 of the Act receive additional protection against intentional or reckless disturbance during the breeding season. This makes it an offence to disturb these species at or near to their nesting site.

A.3 European Protected Species (includes bats, otter, hazel dormouse, great crested newts, and others)

A.3.1 The client is advised that all bats and great crested newts are European Protected Species (EPS). These EPS are protected under European legislation that is implemented in England via The Conservation of Habitats and Species Regulations 2010 (Regulation 41). A full list of EPS is provided in Schedule 2 of the Regulations. In addition, these EPS also receive the protection of the Wildlife and Countryside Act 1981 (as amended) in respect of Section 9 (4)(b & c) and (5).

A.3.2 If both national and international legislation are taken together, the legislative protection afforded to these species makes it an offence to:

- Intentionally/ deliberately kill, disturb, injure or capture them.
- Intentionally or recklessly damage, destroy or obstruct access to any breeding site or resting place.
- Possess or control any live or dead specimen or anything derived from a European Protected Species.

- A.3.3 If an activity is likely to result in any of the above offences, derogation from the legal protection can be issued in the form of a European Protected Species licence issued by Natural England. Licences for development purposes are issued under The Conservation Of Habitats And Species Regulations (2010) and only allow what is permitted within the terms and conditions of the licence. If any EPS are found during the course of the survey, this will be highlighted in this report.

A.4 Protected Mammals and Reptiles (includes water vole, red squirrel, reptiles and others)

- A.4.1 All native reptiles and a variety of British mammals also receive protection under The WCA 1981 (as amended). Schedule 5 of The WCA lists animals that are protected. The degree of protection varies. Water voles and red squirrel are examples of species with full protection. The Act makes it an offence to intentionally kill, injure, take, possess, or trade in any wild animal listed in Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places.
- A.4.2 All native reptiles in the UK are protected. The commoner species such as grass snake, common lizard, slow worm and adder are protected only from unlawful killing and injuring. In practice this may require a reptile protection scheme before implementing a planning permission but no specific licence is required. Sand lizard and smooth snake listed as EPS (see A3.3 above).
- A.4.4 If any protected species are found during the course of the survey, this will be highlighted in this report.

A.5 Non-native invasive species

- A.5.1 A number of non-native plant species growing wild in the UK are listed on Schedule 9 of the WCA due to their invasive nature and the detrimental impact they can have on native habitats and wildlife. This legislation makes it an offence to plant or otherwise cause to grow in the wild any plant species which is included in Part II of Schedule 9.
- A.5.2 This legislation should be considered during site clearance works which could lead to the spread of Schedule 9 listed plant species from the site if plant material is not properly handled and disposed of. Development proposals should also consider the removal of invasive species from areas of site that would otherwise remain unaffected by works in order to avoid the risk of these invasive plants spreading from the site in the future and enhance habitats within the site. This would in turn free up space for wildlife friendly planting, prioritising use of native species within planting schemes where appropriate.

A.6 Planning Considerations

- A.6.1 When considering each planning application, the presence of protected species, such as those listed above, is a material consideration which must be fully considered by the Local Authority when granting planning permission. If a licence from Natural England is required, then prior to issuing any planning consent, the local planning authority will need to be satisfied that there is no reason why such a licence would not be issued. Therefore, in reaching the planning decision the local planning authority will need to have regard to the requirements of the Conservation of Habitats and Species Regulations 2010. The three licensing tests given in the Regulations must be considered. In summary, these are that:
1. The development is required for the purpose of:
 - Preserving public health or public safety;

- For 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;
 - For preventing serious damage to property.
2. There is no satisfactory alternative.
 3. The proposal will not be detrimental to the maintenance of the population of the species at a favourable conservation status.
- A.6.2 All necessary information would need to be provided to the planning authority as part of the planning application in order to address the above tests.
- A.6.3 The Natural Environment and Communities Act (NERC Act) 2006 extended the biodiversity duty set out in the Countryside and Rights of Way (CROW) Act to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity. The Duty is set out in Section 40 of the Act, and states that:
- "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity"
- A.6.4 The Duty applies to all local authorities, community, parish and town councils, police, fire and health authorities and utility companies. Section 41 (S41) of this Act (the 'England Biodiversity List') also requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. This list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40(1) of the Act.
- A.6.5 Also, Local Authorities must follow the National Planning Policy Framework (NPPF) which provides guidance on the interpretation of the law in relation to wildlife issues and development. For each development proposal considered by the Local Planning Authority the NPPF states that the authority must aim to conserve and enhance biodiversity. If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.
- UK Biodiversity Action Plan (UK BAP)**
- A.6.6 The UK BAP, which was first published in 1994, was the UK government response to the 1992 Convention on Biological Diversity. It sets priorities for nationally important 'priority species' and 'priority habitats'. Each species and habitat action plan has costed actions and targets, and is used to inform the compilation of national lists such as the Section 41 List described above.