

Clwydian Ecology

Arosfa, Rhes y Cae, Holywell, Flintshire, CH8 8JG

T: 01352 780787 M: 07891 802 653

www.clwydianecology.co.uk

PROTECTED SPECIES SURVEY

PARKSIDE

ROSSETT, WREXHAM

NORTH WALES

LL12 0BN

FOR

Mr Ben Parry

16th May 2021

Contents

- 1. Introduction**
- 2. Bat biology**
- 3. Legislation**
- 4. Aims**
- 5. Study area**
- 6. Methodology**
- 7. Results**
- 8. Conclusions, Recommendations & Mitigation for Bats**
- 9. Nesting birds**
- 10. References**

Appendix 1 – Site plan

Appendix 2 – Site photos

Appendix 3 – Mitigation diagrams

1. INTRODUCTION

A preliminary protected species survey (bats and nesting birds) was undertaken on the 13th May 2021. The survey was carried out by David Bennett, a licensed and experienced bat surveyor and ecologist (Natural Resource Wales & Natural England licenses) following a request by the current owners of the property. The survey was requested to satisfy planning requirements in respect of any protected species issues for numbers 1 & 2, Parkside, Rossett, North Wales. A planning consent is being sought to permit the removal of the rear extensions and some other alterations to combine the two cottages into a single dwelling.

2. BAT BIOLOGY

There are now 17 species of bat (breeding) in the UK, many of which can be found within this part of Wales. Each bat gives birth just once a year, early in summer, the females tending to gather together in a communal roost to give birth and bring up their young. This is the time when they are most likely to use buildings. By the end of the summer the roosts are often vacated for other more suitable hibernation sites such as caves, mines or trees. Hibernation sites are usually characterised by stable temperatures with a high level of humidity. When temperatures fall and food becomes scarce they hibernate and live off body fat stored during the autumn. During mild winters bats can still often be seen on an evening flying and looking for food. Bats use a variety of different structures for the purposes of roosting, these can include mature trees, caves, mines, buildings (old and new), bridges and tunnels.

Bats will generally cause no harm to buildings or the people that occupy the buildings. They can be very discreet and are often not noticed because of their preference to occupy tiny spaces, cracks and crevices in roof voids. Some species such as the brown long eared bat will utilise open loft areas for flying and moving around in. They will roost on bare exposed timber beams, typically beneath the ridge beam. The droppings produced are harmless (largely made up of insect fragments) and do not carry any disease although a very large roost can sometimes produce large quantities of droppings.

3. LEGISLATION

All of our species of domestic bat are protected under both UK and European legislation. In the UK they are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation (Natural Habitats &c.) Regulations 1994. The Habitats Directive has been superseded by The Conservation of Habitats and Species Regulations 2017.

To summarise it is illegal not only to intentionally kill, injure or take any bat but also too recklessly or intentionally damage, destroy or obstruct access to any place that a bat uses for shelter or protection, or to disturb a bat while it is occupying such a place. A roost is protected whether or not bats are present at the time. The reason for this is that bats tend to remain loyal to certain roost sites, often over a long period of time.

The presence of a species protected under European or UK legislation is a material consideration when a planning authority is considering a development proposal which, if carried out would be likely to result in disturbance or harm to the species or its habitat. The Environment (Wales) Act 2016 (Section 6) Biodiversity and resilience of ecosystems duty states that “A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions”.

4. AIMS

The aims of the survey were:

1. To describe any evidence of protected species in the study area.
2. To assess the impact of carrying out the proposed works.
3. To suggest mitigation measures as appropriate.

5. STUDY AREA

The site consists of the two semi-detached cottages, a single timber frame garage (number 2) and areas of garden with lawn, trees and shrubs. The cottages are located in a semi-rural location surrounded by improved, cattle grazed farmland and hedgerows with trees.

The cottages have been constructed in a traditional manner with brick walls supporting a pitched and timber framed roof covered with slate. There are some single storey outrigger extensions/sheds/garage at the rear with a mix of slate/tin and asbestos roof areas.

The site plan is shown in Appendix 1 and the photos are shown in Appendix 2.

6. METHODOLOGY

The buildings were subjected to an internal and external survey on the 13th May 2021, the weather conditions were dry and clear. As much of the buildings as possible was searched (health and safety and access permitting) using a Cluson rechargeable lamp, a Seesnake endoscope (paying particular attention to the roof sections, ledges and any gaps or cavities). A search was made for bat droppings, staining, odour, old skeletons and feeding signs (such as wing casings etc). Other evidence such as bird's nests and other signs of nesting birds was also looked for both internally and externally.

7. RESULTS

No visible evidence of bats was found anywhere within either of the two cottages, no droppings were apparent and there were no signs of feeding, staining, marking etc. Each cottage had its own separate roof space, both were inspected, there was no interconnection between the two roof voids due to an internal brick wall. The ridge and side roof timbers are covered with dense cobwebs suggesting no movement by bats or any other species for a long period of time.

Externally, the roof slates on both cottages are all intact and secure with no gaps or raised areas, all the ridge tiles are also intact and secure with intact mortar. The gable end of each cottage is very well sealed and there is no access to the tops of the wall or the inner roof structure. The mortar below the slate edge is intact on both ends with no gaps, holes or missing sections.

The soffits to the front and rear of both cottages are made of timber and they have been well maintained. They are completely sealed on both elevations fitting tight to the wall, there are no holes, gaps, areas of decay and no visible access to the wall plate or inner roof structure.

The outrigger extensions at the rear of the cottages are all single storey with a mixture of tin, asbestos and a small area of slate (number 2 side only). These small sections form part of the rear kitchen in cottage followed by a coal shed/store and another store with a small garage for number 2. No evidence of bats was found anywhere within these buildings and they are not really very suitable, they are also kept closed/locked and they have been well maintained.

Overall, there does not appear to be any evidence of use by bats and nothing that would appear to cause any issues with the current proposals. The overall potential for the cottages to support roosting bats is negligible due to there being no points of access into the internal structure of the roof or other dark space. The outriggers at the rear are not very suitable and they also have no access due to everything being maintained and sealed (apart from the small end garage and a coal store). The small detached, timber garage (garden of number 2) is well sealed and is not really suitable for roosting bats.

8. CONCLUSIONS, IMPACTS AND MITIGATION FOR BATS

No evidence suggesting bat use has been found during this survey and for the reasons suggested is thought unlikely and no further survey work is required. It therefore appears that there are no apparent issues relating to the proposed works in respect of bats at the present time. As outlined above it is often difficult to inspect every crevice or hidden section in a building (due to access or health and safety issues). In addition bats tend to be nomadic, which reduces the chances of finding bats on one or even several visits. This situation arises frequently when carrying out this type of survey. However, the survey has been completed to a good standard and it is not anticipated that any problems will occur. Carrying out the survey also puts in place demonstrable safeguards regarding the avoidance of illegal activities.

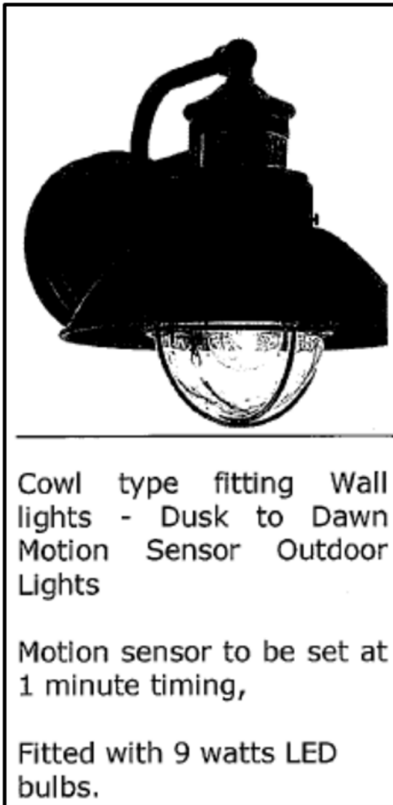
As a general note, most buildings offer potential for over-wintering and seasonal occupancy for individual bats. This use can be sporadic during the season and actual presence through emergence surveys cannot be fully confirmed. It is therefore recommended that the following precautionary recommendations should be undertaken as good working practice during the construction/demolition phase.

- **All slates (where removal is required) should be carefully removed by hand to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.**
- **Door and window frames should be removed with care to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.**
- **Structural members, lintel bearings, purlins or wall plates should be removed with care to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.**
- **In the unlikely event that bats were found during the construction/demolition process then all work should cease and Natural Resource Wales Species Officer 0300 065 3000 and/or a licensed bat worker should be contacted for further advice.**

The alterations to the cottages offer the opportunity to create some bat friendly features. *Pipistrelle sp.* and other crevice dwellers such as *Myotis* bats will readily take to new and/or converted buildings as long as suitable access points and features are retained or created. The following features should be included to improve and try to encourage bats to use any suitable areas of the house post construction.

Pictures of the examples are shown in Appendix 3.

- **Two Beaumaris “midi” bat boxes will be secured to the new side (west facing wall). They should be secured high up the wall near the ridge away from disturbance, light and predation.**
- **All external lighting will be of a low luminance and directional towards the ground (lighting type as shown below). There will be no high-level illumination or halogen lighting which will discourage bats and there will be no direct external lighting on the west side elevation where the bat boxes will be located. All external lighting will include a motion sensor and a one-minute timer to avoid them being left on continually.**
- **A warm white spectrum (ideally <2700 Kelvin) should be adopted to reduce blue light component. Lights should feature peak wave lengths higher than 550nm to avoid the component of light most disturbing to bats. This will be achieved by using LED light bulbs.**
- **Any external lighting should be on a short timer with a cowling to prevent any up-lighting or light spread.**



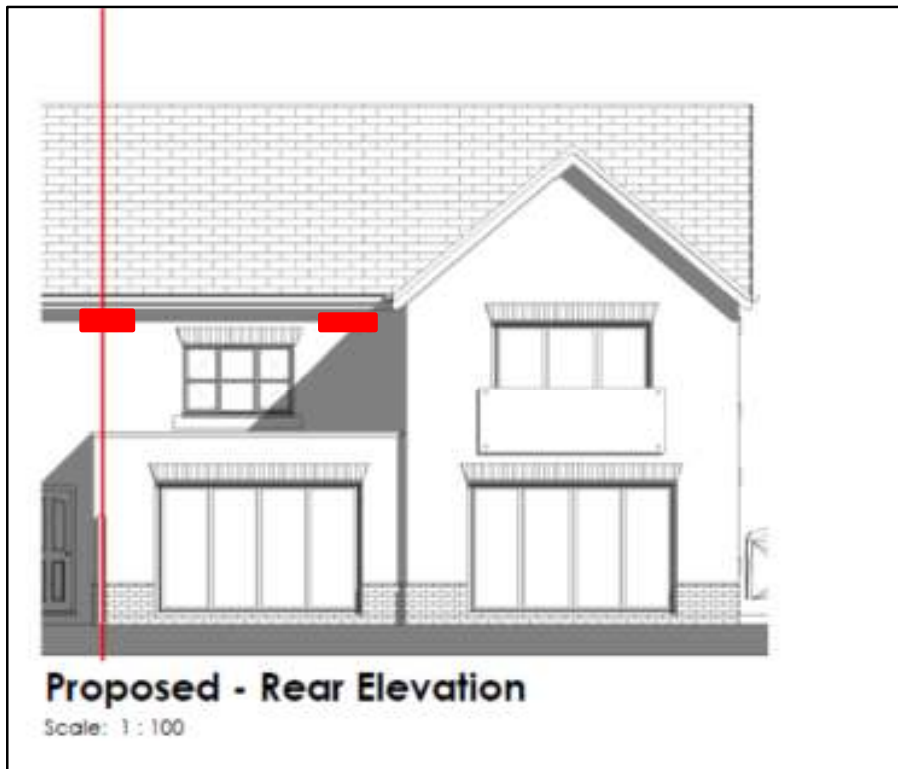
Approximate location for the two bat boxes on the west elevation



9. NESTING BIRDS

There was no evidence of nesting birds anywhere in or around the roof structure of the cottages. There is some limited potential for nesting birds within some of the rear outrigger sections such as the old garage and the coal shed. However, nothing was found at the time of the survey and no old nests were evident.

Two Schwegler 1SP sparrow terrace nest boxes should be secured to the rear, north facing elevation at eaves level as shown below.



Any removal of trees, shrubs, hedgerow or other vegetation should only be carried out between September and February inclusive to avoid any potential disturbance to nesting birds.

All breeding birds are protected under Section 1(1) and 1(2) of the Wildlife and Countryside Act 1981, as amended. This makes it an offence to damage, disturb, or obstruct access to nests during the bird breeding season (generally March to September).

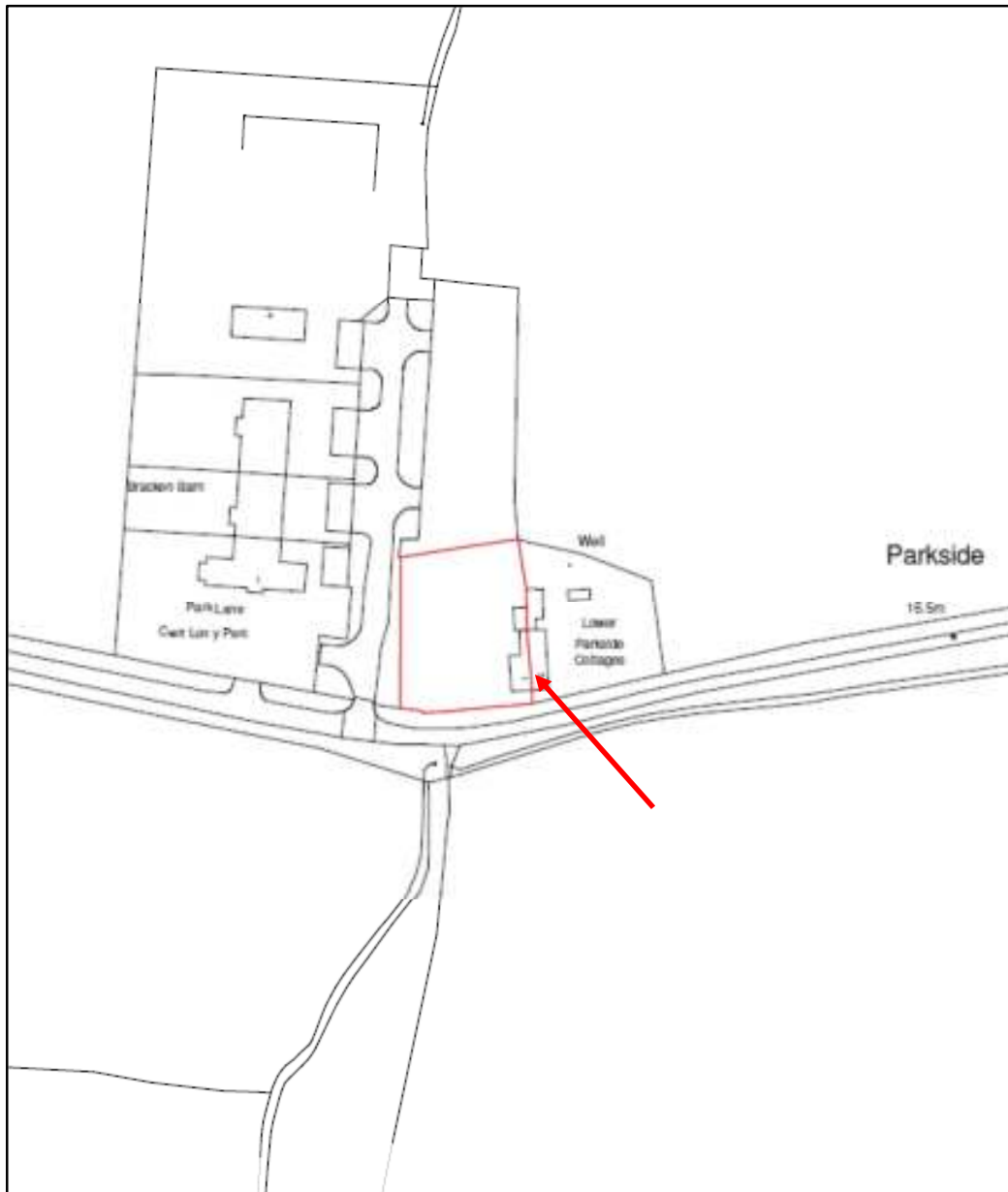
10. REFERENCES

BCT 2016 Good Practice Guidelines 2nd Edition 2016 BCT

Joint Nature Conservation Committee 2004 *Bat Workers Manual* JNCC Peterborough

Mitchell-Jones A J 2004 *Bat Mitigation Guidelines* English Nature Peterborough UK

Appendix 1 – Site location plan



Appendix 2 – Site Photos

Front elevation



Side elevation number 1



Side elevation number 1



Side elevation number 2



Side elevation number 2



Rear elevation



Gable end is well sealed with no gaps



Gable ends are both completely sealed with no gaps or points of access



Sealed gable end



Timber soffits are all well sealed with no holes or cavities



Fascia on the rear extension is tight to the wall



All the roof slates are intact and secure with no gaps or raised sections



Outrigger extensions at the rear are well sealed



House roof and ridge tiles are all very secure and sealed



Timber box soffits are all very well sealed



Gable end is well sealed with no gaps to access the wall top



Sealed box soffits



Sealed gable end



All the mortar below the slate edge is intact on both gable ends (1 & 2) with no gaps or cavities



All well sealed on the gable ends



Soffits are very well sealed



Tin roof at the rear of number 1



Asbestos roof sections at the rear of number 1



Rear house roof elevations are all intact and sealed



End elevation of the rear outrigger extensions is sealed



Mortar in and around the rear section all well sealed



Rear extension of number 1



Gable is well sealed, no access to the wall top



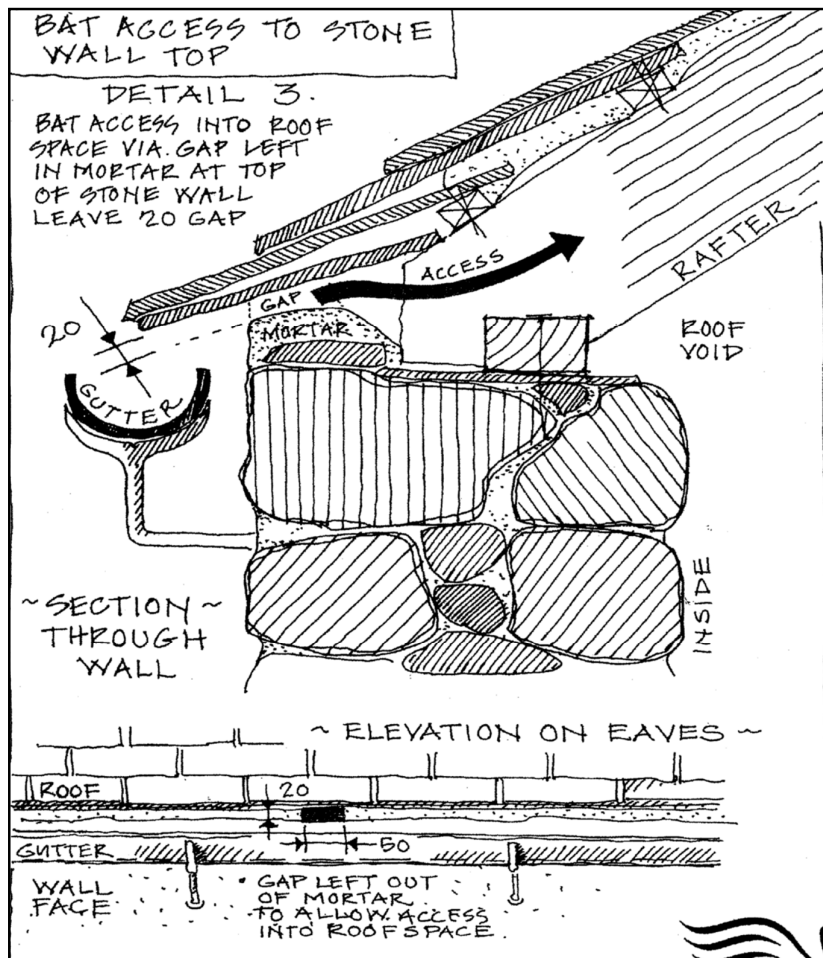
Large fruit tree side garden of number 2

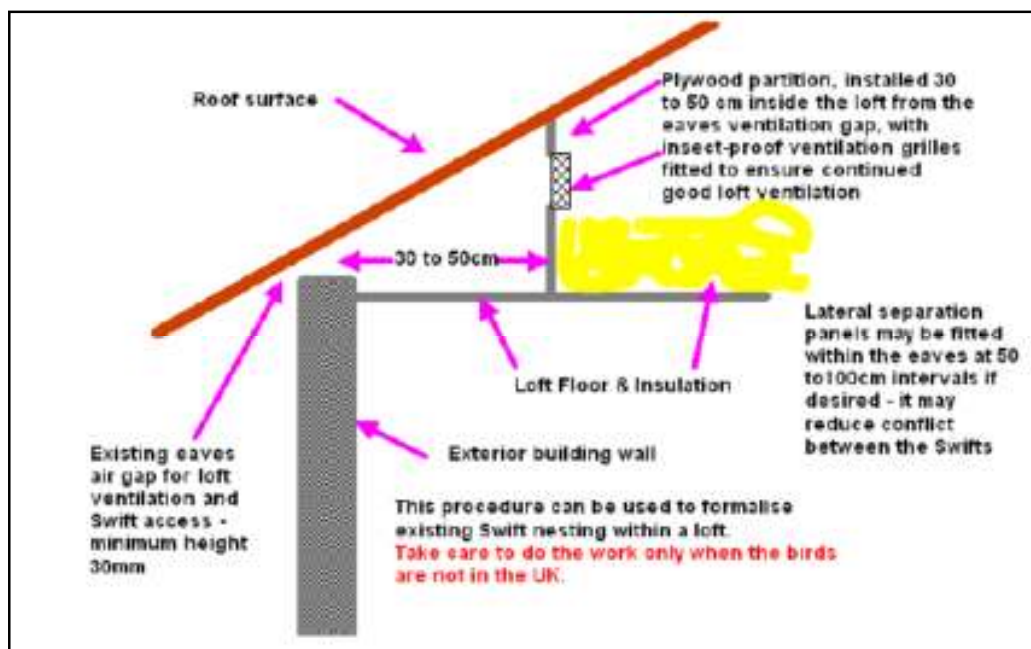
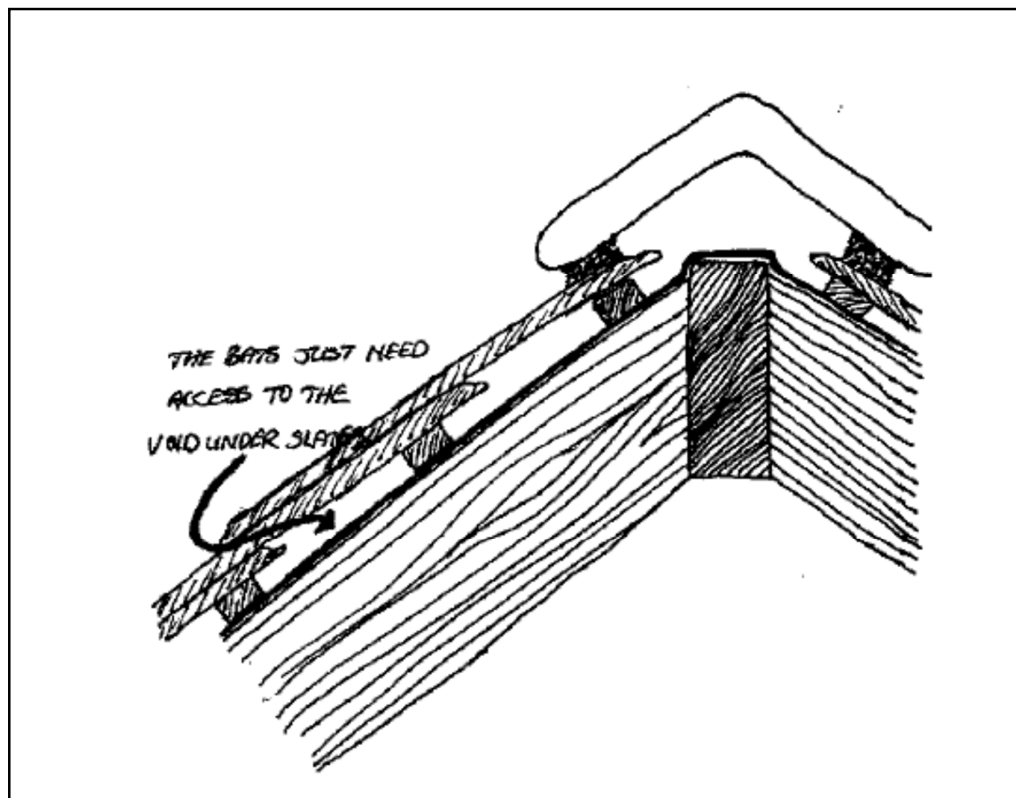


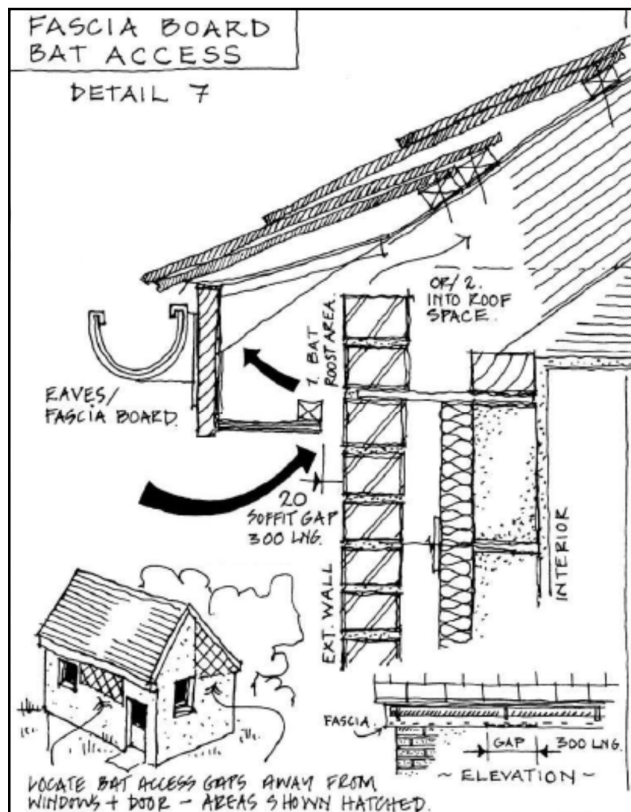
Timber garage in the garden of number 2



Appendix 3 – Some examples of bat mitigation







Beaumaris bat box



Schwegler 1SP sparrow terrace nest box

