David Leach Ecology Ltd

Ecological Consultants

7 Fisherton Island

Salisbury

Wiltshire

Bat surveys and Construction Method Statement.

August 2023

Report compiled by D. V. Leach. M.C.I.E.E.M.

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1.0 Executive Summary

- A preliminary roost assessment was commissioned to check for signs of bats, or potential for bats, to accompany an application for renovation and extension works to the property. A large area of hanging tiles and the roof and roof void will be affected.
- **Due to finding bat droppings in the roof void during the initial visit, further surveys (three emergence/re-entry surveys) were undertaken in 2023 to determine the number and species of bats and the type of roost present.**
- The property has **confirmed roosts** of common and soprano pipistrelle bats. The number of soprano bats observed indicates **a maternity roost.**
- **All bats and bat roosts are protected by law and it is an offence to harm or disturb bats or damage or destroy a bat roost without a licence.**
- **As a bat roost will be impacted by the works, a European Protected Species licence (EPS) is required to destroy/disturb the roosts. EPS licenses can be applied for only after full planning permission (or listed building consents) has been granted. Natural England aim to give a decision within 30 working days of registering the application but it can take longer.**
- **It should be conditioned that a copy of the licence should be sent to the LPA before work starts.**
- **If bats, or signs of bats, or other protected species are found during construction when a licensed ecologist is not present, work must stop and David Leach or Natural England contacted who will advise on how to proceed.**
- **This report should be considered valid for 12 months from the date of the survey.**
- Works have been carried out the building which included removing the ceilings and soffits to remove asbestos. The ceilings have been temporarily reinstated using OSB which allows any returning bats to continue to use the roof void. Once the activity surveys have been carried out and a licence granted, work can continue under the mitigation licence.
- Due to the proximity of the site to the River Avon Special Area of Conservation (SAC) a Construction Method Statement has been produced which will be followed to protect the SAC form any adverse effects of construction

2.0 Introduction.

2.1 Background

Client: c/o Brimble Lea

Property Surveyed: 7 Fisherton Island,
Salisbury,
Wiltshire
SP2 7TG

Grid reference: SU136300

Date of Survey: 28th February 2023

Lead Surveyor: David Leach BSc. (Hon), CBiol., M.R.S.B., M.C.I.E.E.M.
(Natural England WML CL18 registered bat worker).

2.2.1 Aims of the Survey.

- A preliminary ecological survey was commissioned to check for signs of bats, or potential for bats, to accompany a planning application for renovation and extension works to the property. A large area of hanging tiles and the roof and roof void will be affected.

2.3 Site Description.

- The property is on a private road with residential properties development at the south west edge of Salisbury.
- The site comprises a single house with a double garage linked to the adjoining property.
- The surrounding area is flood meadows to the south and west and urban, residential and commercial properties to the north and east.
- The River Avon flows 30m to the north of the site and a small flood drain feeding water meadows runs along the south west perimeter if the site

3.0 Methodology

3.1 Desk Study

- The Magic.gov web site and the Partnership for Biodiversity in Planning web sites were accessed to determine whether there were any nature reserves or protected areas local to the site that would be affected by the proposed works.

3.2 Site Survey

The external and internal areas of any building or structure on site were inspected following guidelines set out in the BCT Bat Surveys for Professional Ecologists Good Practice Guidelines 3rd edn. Collins. J (2016) and the JNCC Bat Workers' Manual (Mitchell-Jones A. J). The presence of bats or signs of bats and possible entry points into buildings were looked for.

External signs of bats or potential use by bats were looked for. These included: -

- Bat droppings on walls, floors, and window sills and in covered areas such as porches.
- Gaps in the woodwork of the eaves, soffits, fascia's etc. and behind barge boards.
- Gaps in the brickwork and between door and window frames.
- Gaps around lead flashing and loose, slipped or missing hanging and roof tiles.
- Urine stains or grease marks around any gaps mentioned above.

All accessible areas of any internal space were carefully inspected for bats (live or dead) or signs of bats such as droppings, urine stains, signs of feeding such as moth wings, etc. Equipment available included 3.8m telescopic ladder, Leica 8x42 binoculars, digital camera, head torch and Clulite CB2 high powered torches, See snake inspection camera.

The bat roosting potential of buildings was assessed according to the scale negligible, low, moderate or high:

Negligible: This category describes buildings of a simple structure where all structural features can easily be surveyed with a visual inspection or investigated with an endoscope. For example, a simple wooden garden shed, a corrugated iron barn or precast concrete modular garage may fit this category.

Low: This category is used to describe simple structure buildings that have very few potential bat roosting features but all areas cannot be surveyed visually or investigated with an endoscope.

Moderate: This category is used to describe buildings that have some potential to support roosting bats but is considered to be less than ideal in some way. Some but not all modern

industrial and agricultural buildings may fit this category if they are of a simple structure with single layer walls and unlined roof areas.

High: This category is used to describe buildings with multiple internal and external structural features suitable for roosting bats. Most brick dwelling houses and timber or stone barns will be covered by this category. Features that may be used by bats are e.g. loft spaces and other smaller roof voids, gaps between overlapping clay tiles, gaps in-between the tiles or slates and the roofing felt, cavities under ridge tiles, under soffits fascia and barge boards, by the brickwork of chimney stacks, under lead flashing, inside cavities of flat roofs, under wall hanging tiles, behind wooden cladding or other wooden structures, inside cavity walls or other smaller wall cavities, in gaps and cracks of stone walls and inside wooden beam mortise and tenon joints.

Confirmed: This category is used where evidence of bats such as live or dead bats or bat droppings are present, or where there are records of a bat roost in the building within the last 5 years.

The survey was conducted by David Leach an experienced ecological surveyor who is a Natural England WML CL18 registered bat worker, a full member of the Chartered Institute of Ecology and Environmental Management and a Chartered Biologist.

David Leach is a Registered Consultant under the Bat Mitigation Class Licence - WML-CL21 annexes B, C & D.

3.3 Activity Surveys

- Emergence activity surveys were carried out following guidelines set out in the BCT Bat Surveys for Professional Ecologists Good Practice Guidelines 3rd edn. Collins. J (2016) and the JNCC Bat Workers' Manual (Mitchell-Jones A. J).
- The activity surveys were carried out by R. Iacoban, M. Haines and K. Hillam who are experienced in activity surveys using bat detectors.
- Surveyors were positioned around the building to give full coverage of all aspects of the roof and potential access points.
- Surveyors used Elekon Batlogger M,EMT pro and Baton XD, detectors. All recordings were analysed using BatSound, BatExplorer or Kaleidoscope software.
- A Canon XA11 cameras with rayTEC VAR2-i8-1 illuminator and IR floodlights was used on the last survey.

4.0 Results.

4.1 Desk Study

- The site is bordered by the River Avon system SSSI and SAC.
- A search for bat records in the area has been requested from the local records centre.

4.2 Site Survey.

Weather for initial survey: Sunny at time of survey 12:00

The external temperature was 9.0°C.

Table 1. Site survey results

Structure	Feature	Materials.	Potential roosting features	Evidence found
House	Walls.	Brick walls with large areas of hanging tiles.	Gaps around hanging tiles.	No
	Doors/ Windows etc.	Wooden soffits, fascia's and plastic window frames,	Gaps around soffits etc. may have been lost where work has been carried out and the fascia's/soffits removed.	No.
	Roof exterior.	Gable Roof. Interlocking concrete roof tiles, concrete ridge tiles.	None seen.	No
	Roof interior.	Large roof void which has been exposed when the ceilings were removed. Traditional felt under roof tiles. All insulation has been removed .	Gaps and crevices around the roof timbers and under roofing membrane.	A few dozen bat droppings were found on the gable walls and caught in cobwebs. Some droppings appeared old but some were more recent, probably from last year. No bats found. **Confirmed roost.**

- No signs of nesting birds were found around the house.

4.3 Activity Surveys

- Due to the building having a confirmed roost, and following recognised good practice guidelines, dusk surveys were carried out under good weather conditions.

Table 1. Survey weather conditions

Date	13th May 2023	27th May 2023	12th June 2023
Sunset	20:47	21:06	21:22
Start Time	20:30	20:56	21:07
End Time	22:17	22:36	22:52
Start Temperature	14°C	17°C	20°C
End Temperature	12°C	13°C	17°C
Cloud (1-8)	2	0	1
Wind (1/12)	1	1	0
Precipitation	0	0	0

Dusk emergence survey – 13th May 2023

- Common and soprano pipistrelle, serotine and noctule bats were seen or recorded foraging or commuting around the site.
- No bats were seen emerging from the building.

Dusk emergence survey – 27th May 2023

- Common and soprano pipistrelle, noctule and lesser horseshoe bats were seen or recorded foraging or commuting around the site.
- No bats were seen emerging from the building.

Dusk emergence survey – 12th June 2023

- Common and soprano pipistrelle, serotine, myotis and noctule bats were seen or recorded foraging or commuting around the site.
- Between 21:38 and 21:52 eighteen bats were seen emerging from the apex of the east

gable of the building. Most did not call but a few soprano pipistrelle bat calls were heard immediately after emerging bats appeared.

- Between 21:47 and 21:50 three common pipistrelle bats emerged from the apex of the west gable wall.

5.0 Conclusions.

5.1 Site assessment.

- **The property has a confirmed day roost of common pipistrelle bats and a maternity roost of soprano bats.**
- Bat droppings collected from the roof void walls that were sent for DNA analysis confirmed the species present as soprano pipistrelle bats.
- Potential access points around the soffits and bargeboards etc. would have been damaged when these were removed during recent works.
- The proposed works will result in the destruction of, or damage/disturbance to, a bat roost which is an offence under current legislation. Work to destroy a bat roost or disturb bats can be conducted under a European Protected Species Licence issued by Natural England.
    - All bats and bat roosts are protected by law. It is an offence to:
        - Intentionally or recklessly kill or injure or take any bat.
        - Intentionally or recklessly damage or destroy any bat roost and obstruct access to that roost.
        - Intentionally or recklessly disturb any bat using a structure as a roost.
- **As the proposed works will result in the destruction/disturbance of a bat roost a European Protected Species (EPS) Mitigation Licence is required to damage or destroy a bat roost or disturb bats.**
- **EPS licenses can be applied for only after all necessary permissions or listed building consents have been granted.**
- Natural England aim to give a decision within 30 working days once the application has been registered but it may take longer.
- No signs of other protected species were found on site or adjacent to the site but there is potential for nesting birds, low numbers of reptiles and hedgehogs to be present around the site.

5.2 Impact Assessment

Potential Impacts of Development on Bats

Short-term Impacts: Noise, Dust and Vibration During Construction Phase

Potential indirect impacts on bats during the construction phase include noise, dust and vibration disturbance or obstruction of access points due to the possible installation of scaffolding, particularly if it is combined with netting, sheeting or boarding.

Long-term Impacts: Roost Loss and Modification

In the absence of mitigation, the works would lead to the destruction/disturbance of roosting areas and access points used as day roosts by common pipistrelle bats and a maternity roost of soprano pipistrelle bats.

Long-term Impacts: Increased Levels of Lighting

Any artificial lighting used after the development from both external lighting sources and light spill via windows has the potential to disturb bats roosting within the building and have a detrimental effect on bats foraging and commuting through the area if the light spill is not controlled.

Potential impacts to roosts can include:

- Delayed emergence time (Downs et al. 2003), which can impact on the amount of time to hunt for food (greatest insect activity is around dusk); and
- Bats abandoning or even become entombed within the roost (Packman et al. 2015).

Potential impacts of lighting commuting routes or feeding grounds can include:

- Bats abandoning certain feeding areas by creating a barrier to movement along the commuting route (Stone et al. 2013).
- Attracting insects to be attracted to certain types of light (with UV content), providing a feeding advantage for light opportunistic bats (such as the faster flying *Pipistrellus* species), as well as drawing insects from adjacent areas, so that light-sensitive species have fewer insects to feed on, creating a 'vacuum effect;' and
- Reducing juvenile growth rates reducing the chances of survival (Duvergé et al. 2000).

A sensitive lighting strategy must be formulated and incorporated into the architectural plans, as detailed in Section 5.5.

Summary of Impacts and Predicted and Residual Impact of the Works on Bats

The development proposals (without mitigation and compensation) would result in the permanent loss of day roosts of common pipistrelle and soprano pipistrelle bats.

Suitable avoidance, mitigation compensation and enhancement measures are described in Section 5.5 to minimise and avoid impacts mentioned above and ensure that residual bat roosting opportunities are broadly equivalent to that currently present. The conservation status of bats is predicted to be maintained or enhanced after completion of the development.

- **Works have been carried out the building which included removing the ceilings and soffits to remove asbestos. The ceilings have been temporarily reinstated using OSB which allows any returning bats to continue to use the roof void. Once a licence has been granted, work can continue under the conditions of the mitigation licence**.

5.3 Limitations of the survey.

- A survey of this type only provides a snapshot of what was found at the time of the survey. The absence of protected species on the day does not mean there may not be protected species on the site in the future.
- Due to the recent removal of the ceilings and of the insulation within the void, the presence of other bat droppings may have been missing.
- **If bats, or signs of bats, or other protected species are found during construction, work must stop and David Leach or Natural England contacted who will advise on how to proceed.**
- **The report should be considered valid for 12 months from the date of the survey.**

5.4 Legislation.

5.4.1 Bats.

Under the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CroW) Act 2000 and under EU law by the Conservation of Habitats and Species Regulations 2010 (commonly referred to as the Habitats Regulations) all bats have legal protection. In addition any structure which shows signs of use by bats either currently or in the past, for shelter or protection, is classed as a bat roost and both the roost and any bats using it are protected by law which makes it an offence to:

- Intentionally **or recklessly** kill or injure or take any bat.
- Intentionally **or recklessly** damage or destroy any bat roost and obstruct access to that roost.
- Intentionally **or recklessly** disturb any bat using a structure as a roost.

Protection is also afforded to bats under the Conservation (Natural Habitats & c.) Regulations 1994 (the Habitats Regulations) Amended 2007

Annex IV lists all bats.

Regulation 39 makes it an offence to:

- Deliberately kill or capture a bat.
- Deliberately disturb a bat.
- Damage or destroy a resting place or breeding site of any bat.

5.4.2 Where a development is proposed within the vicinity (usually 4km) of a Special Area of Conservation (SAC) that has been designated for bats, the developer has an obligation to assess the potential impact of the development on the SAC. Should unacceptable detrimental impacts on the SAC that cannot be offset by appropriate mitigation be likely then it is conceivable that planning permission may not be granted.

5.4.3 Where works will affect a bat roost, a European Protected Species licence is likely to be required to undertake any works lawfully. To inform the licence application, detailed surveys would need to establish the species, type and size of roost to ensure appropriate mitigation measures. Licence applications will only be considered when accompanied by full planning permission.

5.4.4 In determining whether to grant a licence Natural England must apply the requirements of Regulation 535 of the Regulations and in particular the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b).

1) Regulation 53(2) (e) states: a licence can be granted for the purposes of "preserving public health or public safety or other imperative reasons of overriding public including those of a social or economic nature and beneficial consequences of primary importance for the environment".

2) Regulation 53(9) (a) states: the appropriate authority shall not grant a licence unless they are satisfied "that there is no satisfactory alternative".

3) Regulation 53(9) (b) states: the appropriate authority shall not grant a licence unless they are satisfied "that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range."

5.5 Bat mitigation.

A1.1 **No works to the building that will affect the bat roosts or access points can be carried out until a European protected species licence has been issued and then only in the presence of the licensed ecologist.**

A1.2 **Roofing works to the roost areas will take place during the months of March – April or October to November to avoid the core hibernation period and maternity period and to minimise the likelihood of bat being present when works are undertaken.**

A1.3 **The landowner will make the contractors aware of bats and bat roosts in the building and ensure they have read and understood the mitigation plan with respect to not undertaking any work to the roof or roost areas highlighted in the report without a licensed ecologist being present.**

A1.4 Before works to the roost areas start two suitable bat boxes, one for each species found, will be erected on a mature tree or building on site to provide a roost area for bats until the work is completed and to have a safe location to relocate any bats found. These will remain in place and not be moved unless checked by a licensed bat worker beforehand. If it is found the box has been occupied by bats a protected species licence will be required before the box can be moved.

A1.5 A pre-works survey of the building will be undertaken by the named ecologist to check for the presence of bats. It is anticipated that individual bats may be present due to timing of the works and any found will be moved individually using gloves and cloth bags and relocated to a bat box of the site. Once the building is deemed clear of bats then roof deconstruction works will proceed using a 'soft' approach.

A1.6 The soft stripping of the roof will be undertaken in dry, mild weather conditions under the supervision of the named consultant.

A1.7 Prior to soft deconstruction works on the roof of the building commencing, a demonstration will be given to all site operatives and contractors to explain bat biology, their responsibilities and the required work methods. The site operatives will be informed that they need to be continually aware of potential bat presence during the work. In addition, all contractors on site will be made aware of their responsibilities under the Wildlife and Countryside Act 1981 (as amended) and will be required to adhere to advice given in this method statement.

A1.8 The access points and roost areas identified during the surveys will be dismantled by hand under a watching brief by the named ecologist. The external soft strip will only be undertaken in dry, mild conditions to prevent any bats which are discovered from getting cold and wet.

A1.9 If, during the remaining works, the building is found to contain solitary bats, work will be halted until the bat(s) vacate the building or until a licensed bat handler removes the bat(s). Once the area is clear of bats then works will proceed. If any bats are discovered they will be removed by a licensed bat handler using gloves and a cloth bag and relocated to one of the newly erected bat boxes.

A1.10 Builders and contractors are explicitly forbidden from handling bats.

A1.11 In the unlikely event that a sick or injured bat is found it will be carefully placed in a small, ventilated box with a secure lid and with a rough cloth along one side and the bottom. The bat will then be taken to a Local Bat Care worker who will look after it. When the bat is fully recovered, they will arrange for its release at the site when weather conditions are suitable.

A1.12 To allow bats to continue to use the existing roof space there will be bat access into the roof void in the form of two 50mm x 20mm gaps through the soffits, new cladding and the gable walls in the location of the existing access points. .

- There will be two wooden Kent type bat boxes in the roof void to provide sheltered roosting areas for the bats.
- The floor should be boarded or covered with polythene to allow easy cleaning up of bat droppings during the winter period.
- There must be no fixed lighting in the bat loft.

A1.13 Extra care will be taken to ensure that external lights are kept to a minimum and will not illuminate bat access points or flight paths around the buildings with bat features or the trees and shrubs on site. A suitable lighting scheme and regime in accordance with Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the built environment series, Bat Conservation Trust (London) & Institution of Lighting Professionals (Rugby) (2018) must be approved by the LPA. This will include:

- Any lights will be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. A shield or hood will be used to control or

restrict the area to be lit and limit “light spillage” on the site.

- Security lights will be on motion sensors and on for a maximum of 1 minute.
- Lighting units will be of low intensity - up to 15 watts, and red, amber or warm light with a maximum lighting colour temperature of 2700 K.
- White, blue and green light sources including metal halide, mercury and CDO / CPO Ceramic Outdoor Lamps bulbs have a significant effect on bats and will not be used.

5.6 Construction Method Statement (CMS).

- The CMS below will be followed by the contractors before and during construction, which details how works will be undertaken. The CEMP details how contaminants will be kept on site and out of the river and ensure all surface water is filtered before leaving the site to maintain water quality. This is especially important for contaminants such as silt.
- Environmental pollution prevention guidelines will be followed e.g. machinery and fuel etc. will be stored in areas which can be contained in the event of spillage.

Run off into the river

1. Contractors will be made aware of the sensitivity of the site.
2. Any chemicals or fuel that are to be stored on site will be in a locked compound.
3. A bund will be created to the south west of the construction zone to prevent silt run-off and to avoid accidental spillages into the stream. This will be a row of straw bales and a Heras fence between the construction zone and the river bank (minimum of 5m from the river bank) see figure 1.
4. All construction materials will be stored in lifting sacks to prevent accidental spillage or run-off into the river.
5. Concrete will be mixed off site and poured in a controlled manner.
6. Materials will not be left lying loose anywhere on site.
7. No off-loaded or pumping of any potential pollutant will be undertaken, at any time.
8. Washing or cleaning of equipment will occur in a controlled manner to prevent run off into the stream.
9. All waste materials on site will be put immediately into a skip, or vehicle, for removal from the site.
10. Extra care will be taken to ensure that external lights are kept to a minimum and will not illuminate bat access points or flight paths around the building with bat features or the

trees and shrubs on site.

11.There will be no light spill from the house onto the river or the 2m section of the garden along the river bank. A suitable lighting scheme and regime in accordance with Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the built environment series, Bat Conservation Trust (London) & Institution of Lighting Professionals (Rugby) (2018) must be approved by the LPA. This will include the measures in A1.13 of the bat mitigation above.

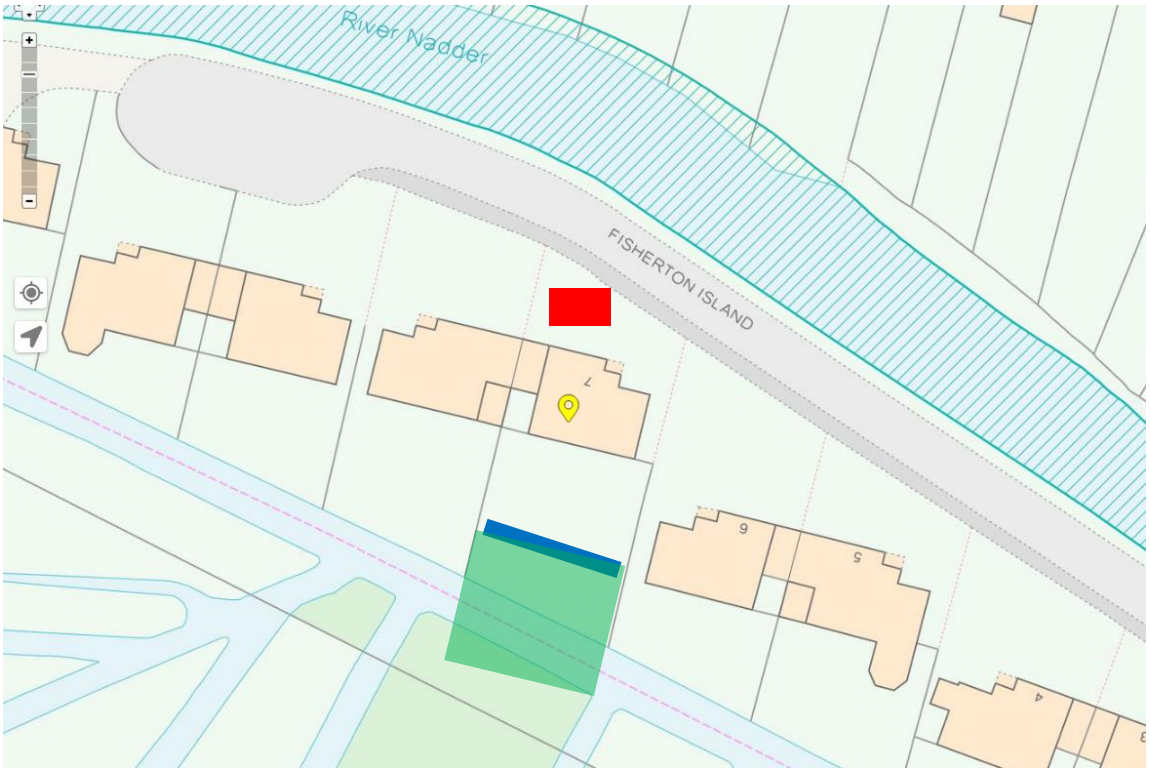

Figure 1. Mitigation measures

River protection fence

Materials compound

Light free zone

Appendices.

Appendix 1. References

- **Bat Conservation Trust (London) & Institution of Lighting Professionals (Rugby) (2018)** Guidance Note 08/18 Bats and Artificial Lighting in the UK Bats and the built environment series.

- **Collins, J. (Ed.) 2016. Bat Surveys for Professional Ecologists - Good Practice Guidelines: 3rd** *edition.* Bat Conservation Trust, London, United Kingdom.

- **English Nature 2004.** *Bat Mitigation Guidelines.*

- **IEEM 2006**. Guidelines for Ecological Impact Assessment in the United Kingdom (version 7 July 2006), Institute of Ecology and Environmental Management [online]. Available: http://www.ieem.org.uk/ecia/index.html [accessed February 2011].

- **Institute of Lighting Professionals (2012)** Guidance for the reduction of obtrusive light.

- **JNCC 2004**. *Common Standards Monitoring Guidance for Mammals*. Joint Nature Conservation Committee, Peterborough.

- **Mitchell-Jones A. J. & McLeish, 2004**. *Bat Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

- **Natural England and Countryside Council for Wales, 2007***. Disturbance and protected species: understanding and applying the law in England and Wales. – A view from Natural England and the Countryside Council for Wales.* United Kingdom

- **Stebbings R.E., 1986**. *Which bat is it?* The Mammal Society and the Vincent Wildlife Trust, London.

Appendix 2) Photographs



Plate 1. View of the front of the property.



Plate 2. View of rear of the property.



Plate 3. Potential access points/roosting areas under hanging tiles.



Plate 4. Potential access points/roosting areas under hanging tiles.



Plate 5. Potential access points/roosting areas under ridge tiles.

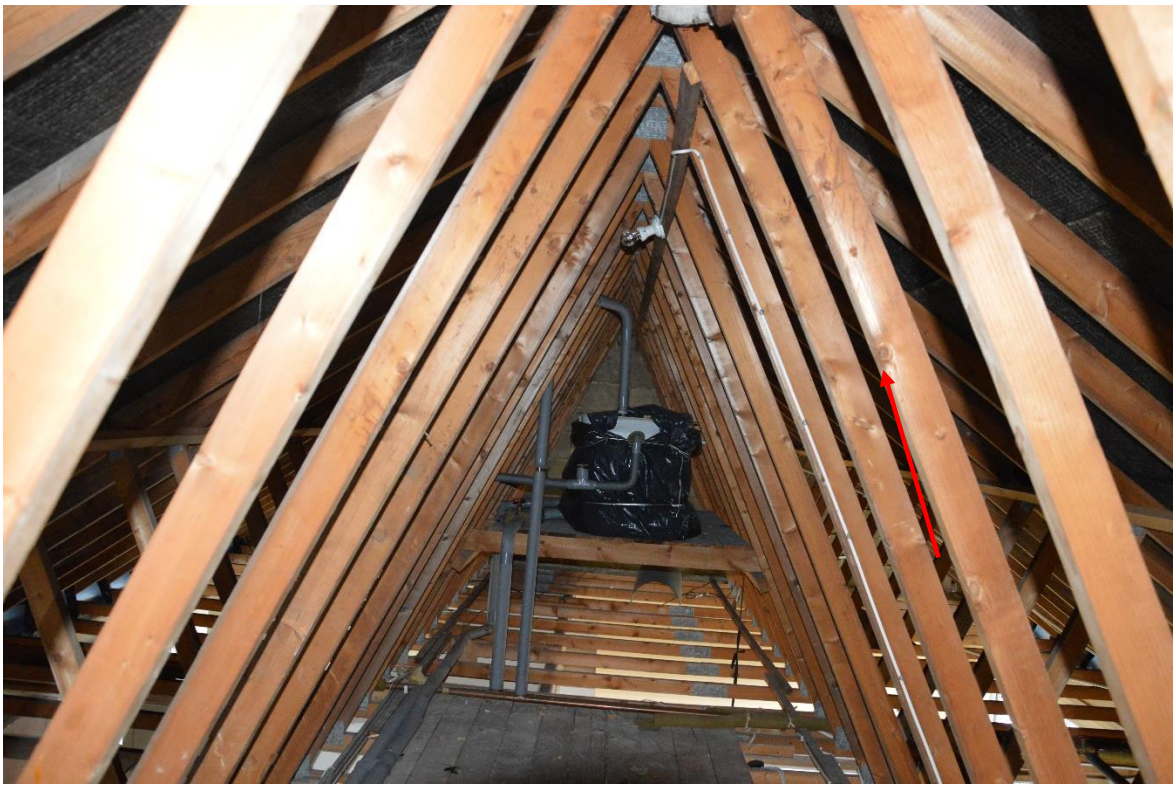

Plate 6. The north end of the roof void.



Plate 7. The south end of the roof void.



Plate 8. Bat droppings in the roof void.



Plate 9. Bat droppings in the roof void.



Plate 10. Bat droppings in the roof void.



Plate 11. Damage to fascia and hanging tiles.



Plate 12. Damaged soffits at east end of the house. Bats emerged from here.



Plate 13. Damaged soffits at west end of the house. Bats emerged from here.



Plate 14. Reinstated loft hatch and ceiling.



Plate 15. Reinstated ceiling.



Plate 16. Reinstated ceiling.

Appendix 3) DNA Result

WARWICK
THE UNIVERSITY OF WARWICK

CeoWarwicker
Ecological Forensics

17 March 23

Re: Identification Results for David Leach, David Leach Ecology Ltd.

Job number 19461, received 09 March 2023
Sample labelled: Fisherton Island
PCR amplification successful. DNA sequence:
ATGACCAACATTCGAAATCCCATCCCCTAATCAAAATTATTAACAGCTCATTCATTGA
CCTACCAGCTCCATCAAACATCTCAGCATGATGGAATTTTGGATCCCTATTAGGCATC
T
Phylogenetic analysis identification: *Pipistrellus pygmaeus*

Confirmed by maximum likelihood, maximum parsimony, bootstrap 100%.

Best regards,

Professor Robin Allaby

The results and conclusions in this report are based on an investigation of mtDNA sequence analysis. The results obtained have been reported with accuracy. The interpretation represents the most probable conclusion for the DNA sequence obtained rather than the sample provided given current levels of species data. It should be borne in mind that different circumstances might produce different results. Therefore, care must be taken with interpretation of the results especially if they are used as the basis for commercial recommendations.

Professor Robin Allaby

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Fax: 02476574500
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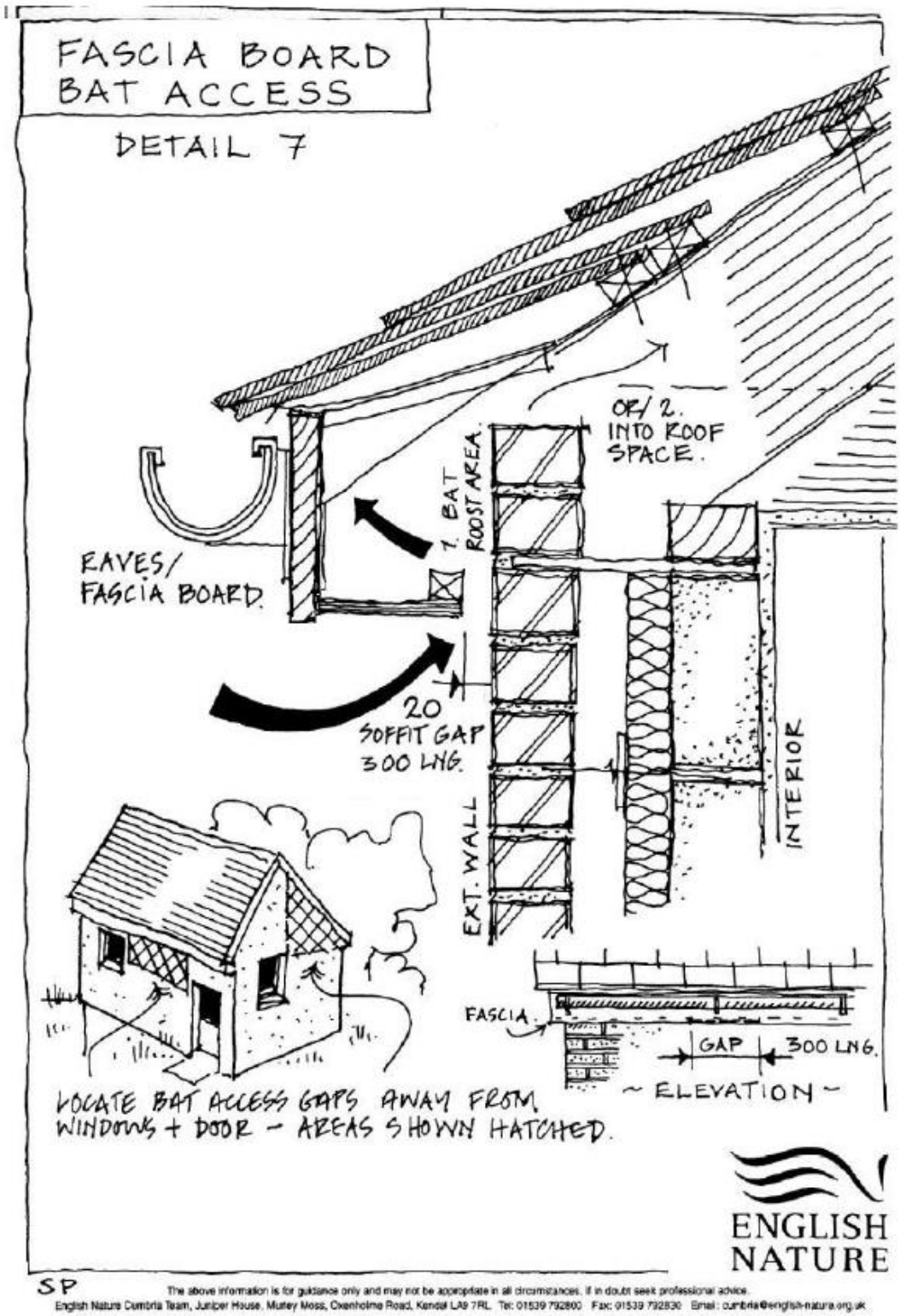
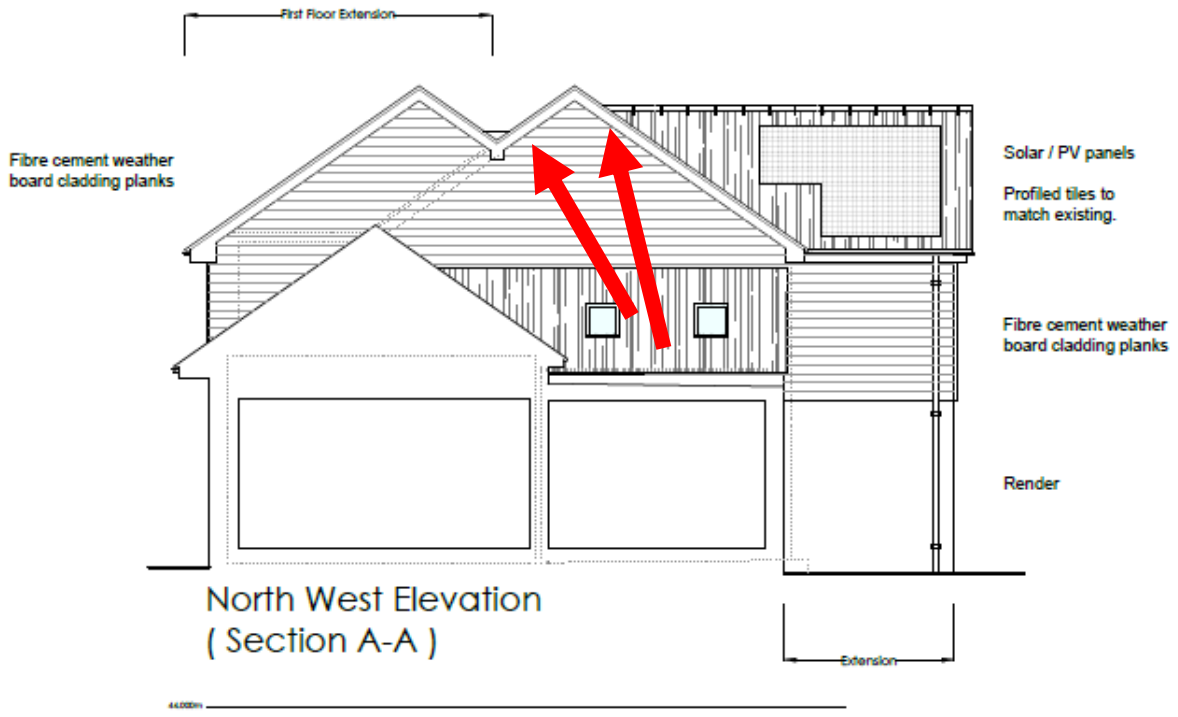
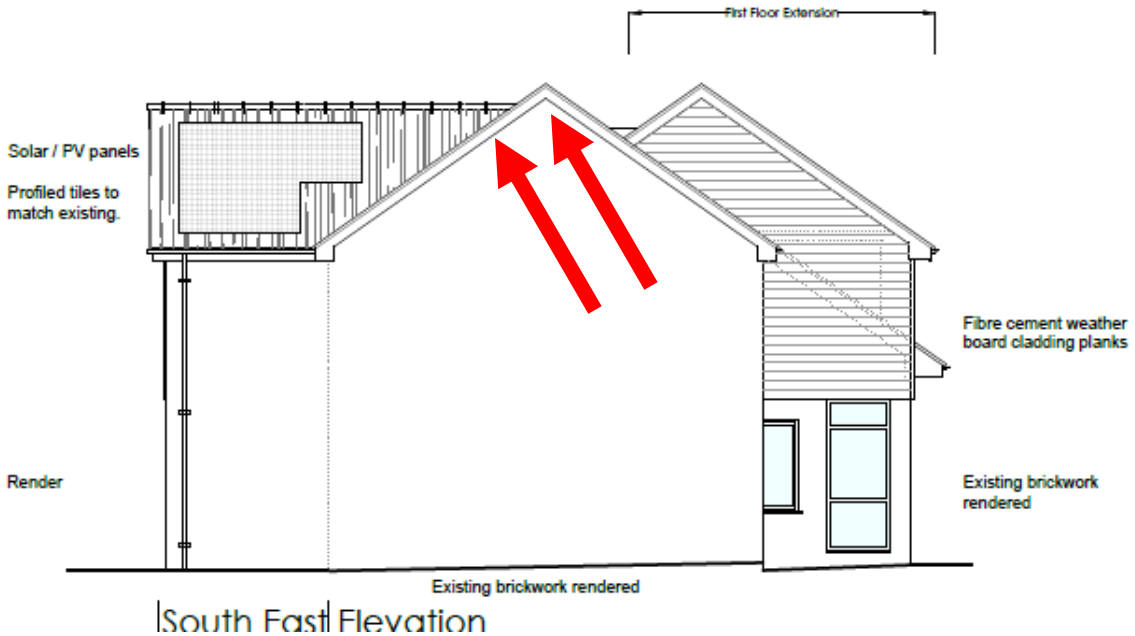
Appendix 4) Bat access design



Appendix 5) Bat access location.





50mm x 18mm gaps into the roof void.

David Leach BSc (Hons) CBiol. MSB MCIEEM. David is a professional ecologist with over forty years' research and fieldwork experience in many aspects of ecology and for the past 12 years in environmental consultancy work.

David is an experienced bat surveyor with competency in activity surveys, bat roost assessments, daytime surveys for bat field signs, assessments of trees as potential bat roosts and the production of reports providing advice on best practice, mitigation and compensation works relating to bats as may be required.

He holds a Natural England licence to disturb bats for the purposes of science and education or conservation and is also a **Registered Consultant** for the Bat Mitigation Class Licence. Registered Consultants are now able to apply to register individual sites to undertake licensable activities under this licence.

David has been involved in successfully obtaining over 160 Protected Species Licenses to permit development works affecting bats and badgers.

David also has experience in surveying for birds, reptiles, great crested newts, barn owls and badgers and conducting extended Phase 1 habitat surveys, BREEAM and Code for Sustainable Homes assessments.



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Disclaimer.

All reasonable effort has been made to provide accurate information at the time of the survey. However weather conditions and the timing of surveys can affect the results. Some species or signs of that species will only be visible at certain times of the year e.g. the nesting season for birds is usually between March and September. The absence of certain species or signs of use at the time of a survey does not mean that they are not present at other times of the year and does not imply that a species might not use the site at some time in the future.

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