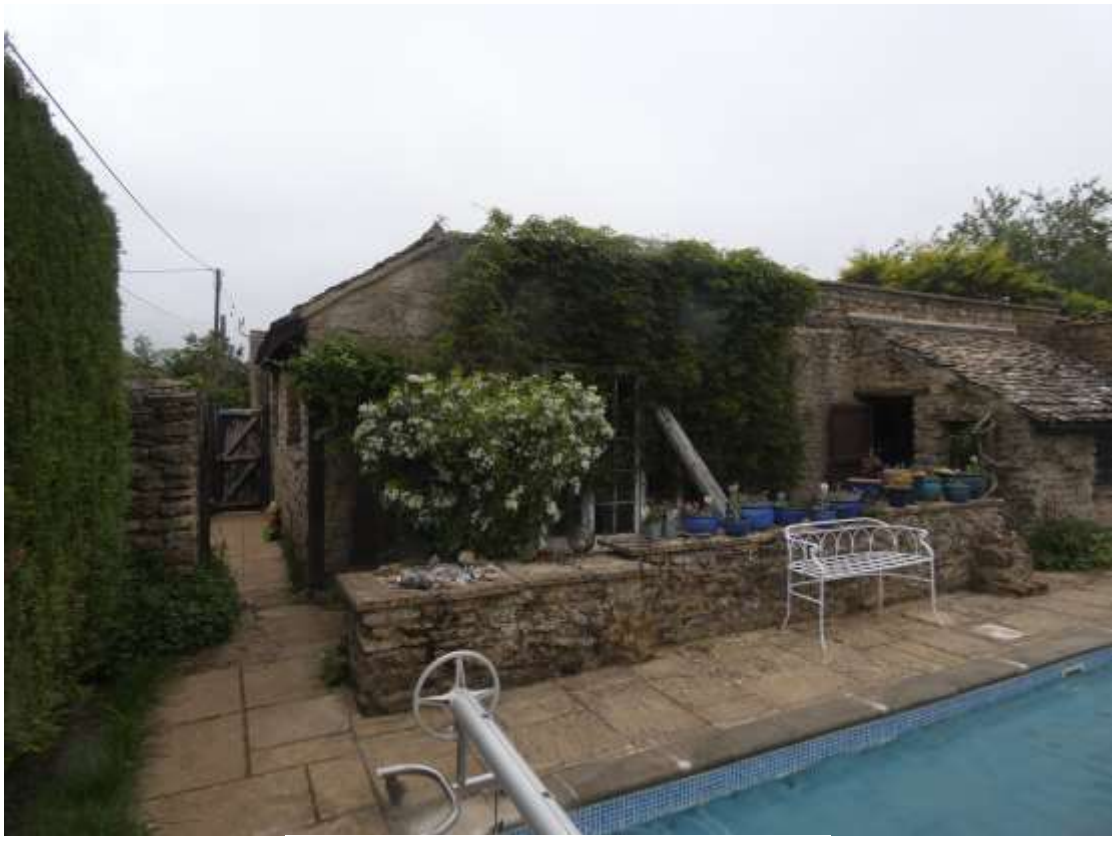
Bat Survey Report for Lane Head, Sibford Gower, Oxfordshire, OX15 5RT



Cotswold Wildlife Surveys

3rd June 2021

QUALITY CONTROL

Date	Version	Name
03.06.21	Daytime inspection	Andy Warren – BSc (Hons), MA (LM), Tech Cert (Arbor A), MCIEEM, TechArborA Director
10.07.21	Report prepared	Andy Warren – BSc (Hons), MA (LM), Tech Cert (Arbor A), MCIEEM, TechArborA Director
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The information in this report has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. The conclusions and recommendations expressed are reasoned judgements based on the evidence.

Every reasonable attempt has been made to comply with BS42020:2013 *Biodiversity – Code of practice for planning and development, CIEEM Guidelines for Ecological Report Writing* (CIEEM, 2017) and Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edition, Collins, 2016). If there has been deviation from recognised practice, justification/explanation has been given.

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SUMMARY

At Lane Head in Sibford Gower, Oxfordshire, planning permission is being sought to re-develop the existing garage and store. On 3rd June 2021, a daytime inspection of the buildings was undertaken to check for signs of bat occupation.

All the external and internal structures, especially those associated with the roofs and walls of the buildings were examined.

No evidence of bat activity or occupation was found, and the suitability for roosting pipistrelles *Pipistrellus sp* or other bat species was considered to be negligible.

At the time of the survey, the garage and store were not identified as bat roosts, and no further surveys or mitigation measures are considered necessary.

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There were no birds' nests in or on the buildings.

1. INTRODUCTION

In late May 2021, Cotswold Wildlife Surveys was instructed by Mr Tony More, to undertake a bat survey of a garage and store at Lane Head in Sibford Gower. On 3rd June 2021, a visit was made to the property to carry out a diurnal inspection of the buildings to check for signs of bat occupation.

The result of the survey is contained in this report.

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- *Intentionally or deliberately kill, injure or capture (or take) bats*
- *Deliberately disturb bats (whether in a roost or not)*
- *Recklessly disturb roosting bats or obstruct access to their roosts*
- *Damage or destroy roosts*
- *Possess or transport a bat or any part of a part of a bat, unless acquired legally*
- *Sell (or offer for sale) or exchange bats, or parts of bats*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording is 'any structure or place which any wild animal…uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

2. METHODOLOGY

In order to fully assess bat occupation of a particular site, the Bat Conservation Trust (2016) recommends that information gathered from a desk study of known bat records, and a daytime site walkover, is used to inform the type and extent of future bat survey work, potentially including nocturnal surveys.

The diurnal walkover provides an opportunity to check for signs of occupancy, such as droppings, scratch marks, feeding remains, carcasses, or even animals in residence, whilst nocturnal surveys (if required) allow numbers and species of bats to be confirmed. The latter are also used to determine the presence or absence of bats, where signs of bat activity are indeterminate or absent but suitability of roosting is considered to be medium to high.

Roosting places vary depending on the species. Pipistrelles usually inhabit narrow cracks or cavities around the outside of buildings, but they will roost in similar niches inside larger barns. Typical sites include soffit spaces, gaps behind fascia boards and end rafters, crevices around the ends of projecting purlins, under warped or lifted roof and ridge tiles, or in gaps in stone and brickwork where mortar has dropped out.

Larger species such as Brown Long-eared Bats *Plecotus auritus*, Myotis bats (Natterer's *Myotis nattereri* and Whiskered/Brandt's *M. mystacinus/M. brandtii*), and Lesser Horseshoes *Rhinolophus hipposideros*, like to roost in the roof voids of buildings, and can often be found hanging singly or in small groups from ridge boards or roof timbers, especially where these butt up against gable walls or chimney breasts. They especially favour older structures with timber frames. Here they squeeze into tight crevices making them difficult to observe.

Diurnal walkovers can be carried out at any time of the year, but nocturnal surveys should only be undertaken when bats are out of hibernation and in their summer roosts. The recommended period is from May to September inclusive, with May to August optimum and September sub-optimum. The season can be extended into October, although particularly cold weather will render this inadvisable. Indeed, the air temperature at the start of each survey must be at least 10°C or above.

Visits will be a minimum of two weeks apart, and the number of surveys is dependent on the evidence found or the suitability of the site to bats.

Where bats are found, or there is evidence of bat occupation or activity, i.e. that bat use is confirmed, the number and timing of visits will be decided by the ecologist, and will be appropriate for the type of roost. In general at least two nocturnal surveys will be carried out, both of which can be emergence surveys, or one emergence and one dawn re-entry.

Where there is no evidence of bat presence, and no suitability for roosting, no nocturnal surveys will be needed.

For a site with no evidence but low suitability, just one nocturnal emergence survey is required, this to be in the optimum period.

For medium suitability a minimum of two visits are needed, of which one must be in the optimum period, and one must be a dawn re-entry survey. With high suitability, three visits will be necessary, of which two must be in the optimum period. At least one of these must be a dawn re-entry survey, with the third visit either an emergence or a dawn re-entry.

For sites < 5 ha in size, and/or regularly shaped structures, at least two surveyors must be present, with more surveyors at larger sites and more complex buildings, e.g. those with multiple elevations and/or roof structures.

On 3rd June 2021, a thorough inspection of the garage and store was made by Andy Warren (Natural England bat licence No. CL18-2015-16489-CLS-CLS), including the exterior and interior walls, roof coverings, roof spaces, eaves, gables, window casements and door frames.

10x42 binoculars and a Fenix TK75 torch were used for the inaccessible/unreachable areas. On this occasion an endoscope was not used, as there were no crevices and cavities that could not be inspected with a torch or by use of binoculars from a ladder.

The result of the survey is detailed in Section 3.

3. RESULTS

3.1 Desk Study

In view of the small scale of the proposed works, the likely low impact on bats, and in line with current guidance on accessing and using biodiversity data (CIEEM, 2016), a background data search was not carried out in this case.

However, personal observations of bats in the area over the last 15 years have included Common and Soprano Pipistrelles *Pipistrellus pipistrellus* and *P. pygmaeus*, Brown Long-eared, Whiskered/Brandt's, Natterer's, Lesser Horseshoe and Noctule *Nyctalus noctula*.

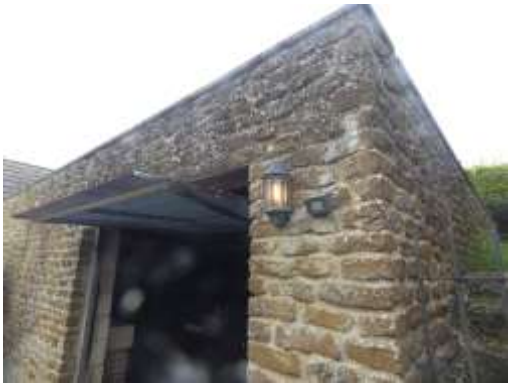
3.2 Location

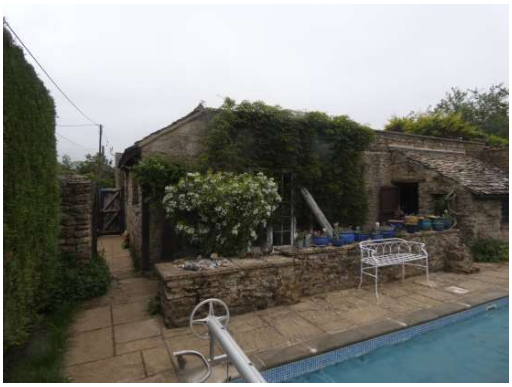
Sibford Gower is a small village located approximately 4.0 km to the north of Hook Norton, in Oxfordshire. Lane Head is situated on the west side of the village off Main Street, 100 m west of the junction with Bonds End Lane. The Ordnance Survey Grid Reference of the garage/store is SP 34959 37874 (Appendix 1).

3.3 Site Description

The survey site comprised a large, flat roofed garage (Fig. 1) and an adjacent flat roofed store. Part of the latter included a short section of mono-pitched roof covered by stone tiles.

A small, stone lean-to with a mono-pitched stone tiled roof adjoined the east elevation of the store (Fig. 2).



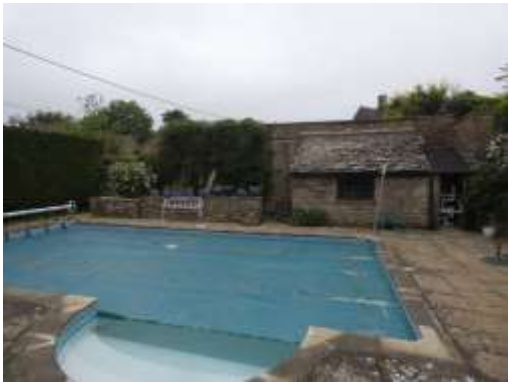
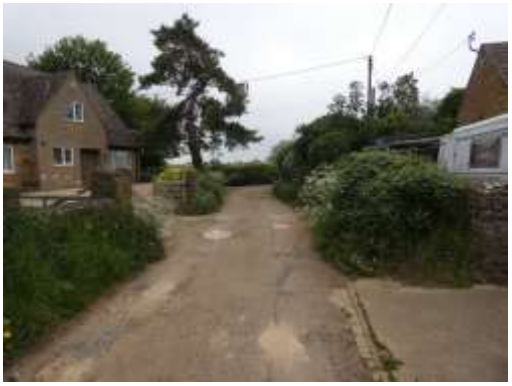


Figs. 1 & 2 Garage (L) and store (R)

The buildings lay in the grounds to the west of Lane Head, this consisting of formally landscaped garden with swimming pool (Fig. 3).

In front of the garage was a small lane leading off Main Street (Fig. 4). There were other dwellings nearby.

The layout of the site is shown in the aerial photograph in Appendix 2.

Figs. 3 & 4 Adjacent dwelling (L) and barn to the south (R)

3.4 Building Survey

3.4.1 Bats

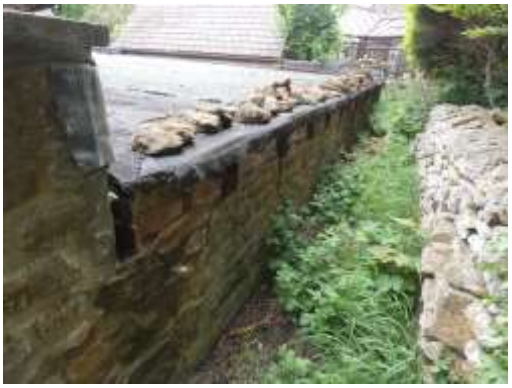
The daytime inspection was carried out on 3rd June 2021 commencing at 09:30. The weather conditions during the time of the survey were recorded and are presented in Table 1 below.

Parameter	Value
Temperature (ºC)	16.5
Cloud cover (%)	100
Precipitation	None
Wind speed (Beaufort scale)	0

Table 1 Weather conditions during the diurnal survey

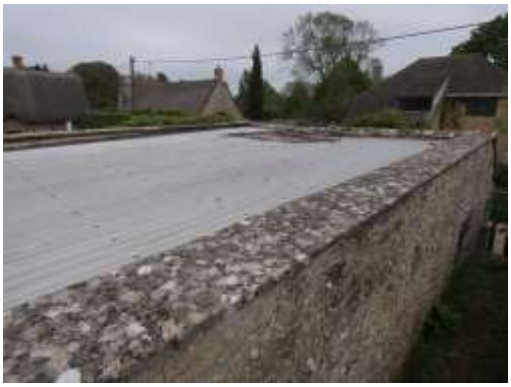
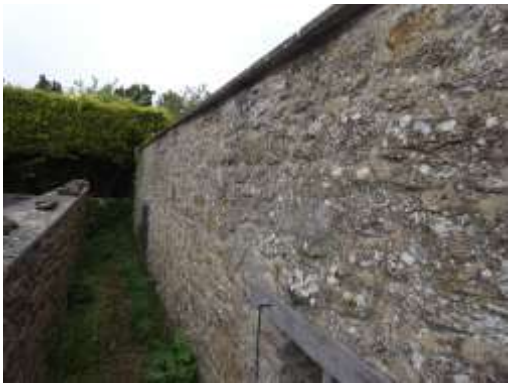
The flat roof of the garage was covered by tarred felt (Fig. 5). This was in poor condition, with a hole in one corner and various tears across the rest.

The rear edge of the felt was held down by a row of stones (Fig. 6), whilst the rest was sealed to a small parapet

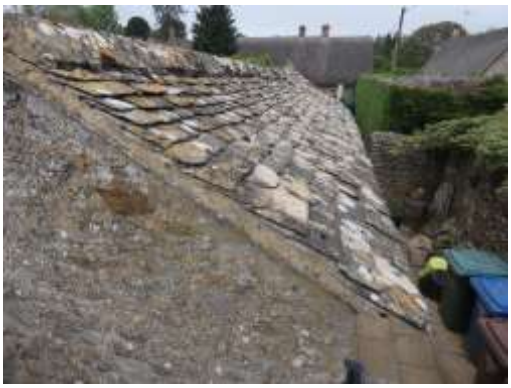
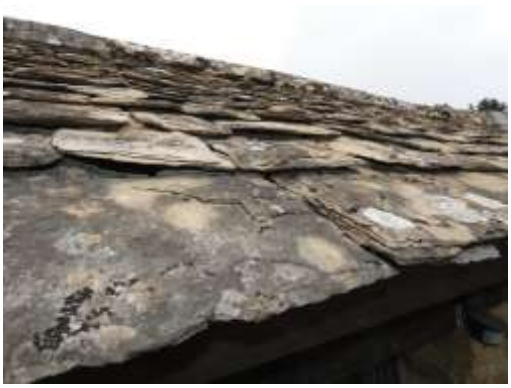
Figs. 5 & 6 Felt covered roof of garage

The flat roof of the store consisted of corrugated metal sheets sealed to a concrete parapet (Fig. 7). There were capping slabs on top of the parapet, these overhanging at the eaves (Fig. 8). The two structures were separated by a narrow gap, with both buildings built into the ground such that they were partially subterranean.

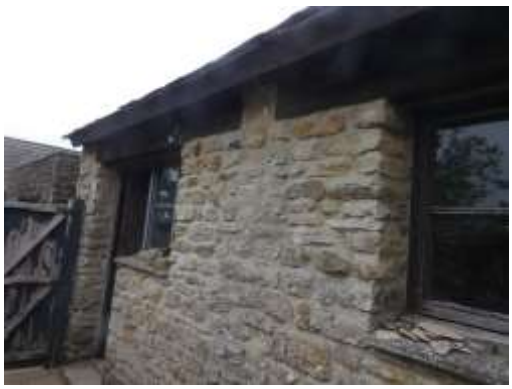
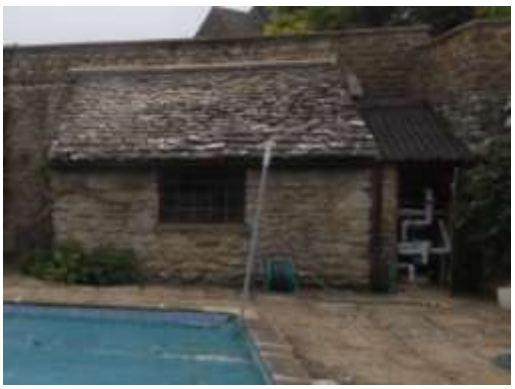
Figs. 7 & 8 Flat roof of store and gap between the buildings

At the front of the store (south elevation) there was a short section of mono-pitched roof covered by stone tiles (Figs. 9 and 10). The fronts of the tiles were slightly raised, but the back edges were touching, so there was no bat access into the roof structure itself.

Figs. 9 & 10 Stone tiled section at front of store

The eaves at the front were closed (Fig. 11), and there were no side or rear eaves.

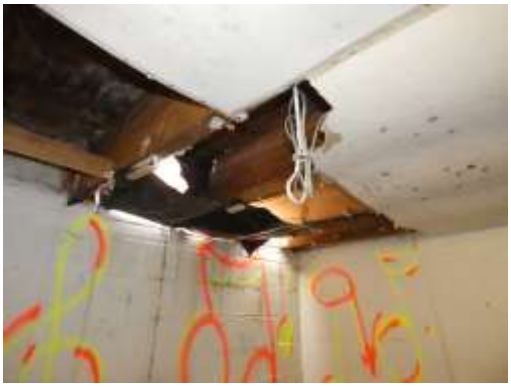
Figs. 11 & 12 Front section (L) and stone lean-to (R)

Adjoining the east elevation of the store was a small, stone lean-to (Fig. 12). This had a mono-pitched roof of stone tiles, these generally tightly overlapping. This structure is being retained as part of the scheme.

The stonework was sound throughout, whilst the window casements and door frames were all tightly fitting.

No signs of bat activity were found around the outside of the buildings.

Internally the garage roof was in poor condition, with holes in the ceiling where the dryboard had become waterlogged and dropped off (Figs. 13 and 14). The whole structure was damp and cobwebbed and not suitable for bat roosting.



Figs. 13 & 14 Interior of garage

Except for the stone tiled section at the front, which was lined with tarred felt, the roof of the store was unlined and open to the underside of the corrugated metal sheets (Figs. 15 and 16).

Figs. 15 & 16 Interior of store

Despite a thorough search, no evidence of bat activity was found, and the building was considered to be unsuitable for bat roosting.

The adjoining lean-to was open to the tarred felt lined roof, this intact and un-torn and quite heavily cobwebbed (Figs. 17 and 18). The eaves were closed and the window casements and door frame were tightly fitting. There was no bat access to the interior of the lean-to, and no evidence of bat use was found.

Figs. 17 & 18 Interior of stone lean-to

3.4.2 Other species

There were no old or in-use birds' nests in or on the buildings, and no evidence of the presence of other protected species.

4. CONCLUSIONS AND RECOMMENDATIONS

Bats tend to be seasonal visitors to properties, and are not usually in occupation all year round. The females normally form maternity colonies during May or June and then leave for adjacent trees and/or woodland during July or August once the young bats are able to fly and become independent. Here they will spend the winter months in hibernation before returning to the house or barn the following spring.

Male bats generally live alone and have a number of favoured roosts. During the summer they visit each of these for a few days at a time, before moving to their chosen hibernation site in mid-late October. Different species have different habits, but this seasonal movement is common to all.

Bats choose their roosts carefully. During the summer they look for sites which are warmed by the sun, and as a result are most often found on the south and western side of buildings.

Pipistrelles, our smallest and commonest bats, prefer to roost in very confined spaces around the outside of buildings, typical places being behind hanging tiles, weather boarding, soffit, barge and eave boarding, between roof felt and roof tiles or in cavity walls.

As such they can be difficult to find, so the suitability for roosting was also assessed.

This was considered to be negligible, as there were no suitable crevices or cavities.

Another bat frequently encountered in buildings is the Brown Long-eared. This is also a common species, but unlike pipistrelles, they prefer the dry, warm space of the loft or roof void, and can often be found hanging from roof timbers, especially rafters and the ridge board next to chimney breasts.

No signs of Brown Long-eared Bat activity were found, nor evidence of other species which typically use buildings.

At the time of the survey, the garage and store were not identified as bat roosts, and no further surveys or mitigation measures are considered necessary.

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There were no birds' nests in or on the buildings.

5. REFERENCES

Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines. (3rd edn).* Bat Conservation Trust, London.

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APPENDICES

Appendix 1: Location plan

Appendix 2: Site layout

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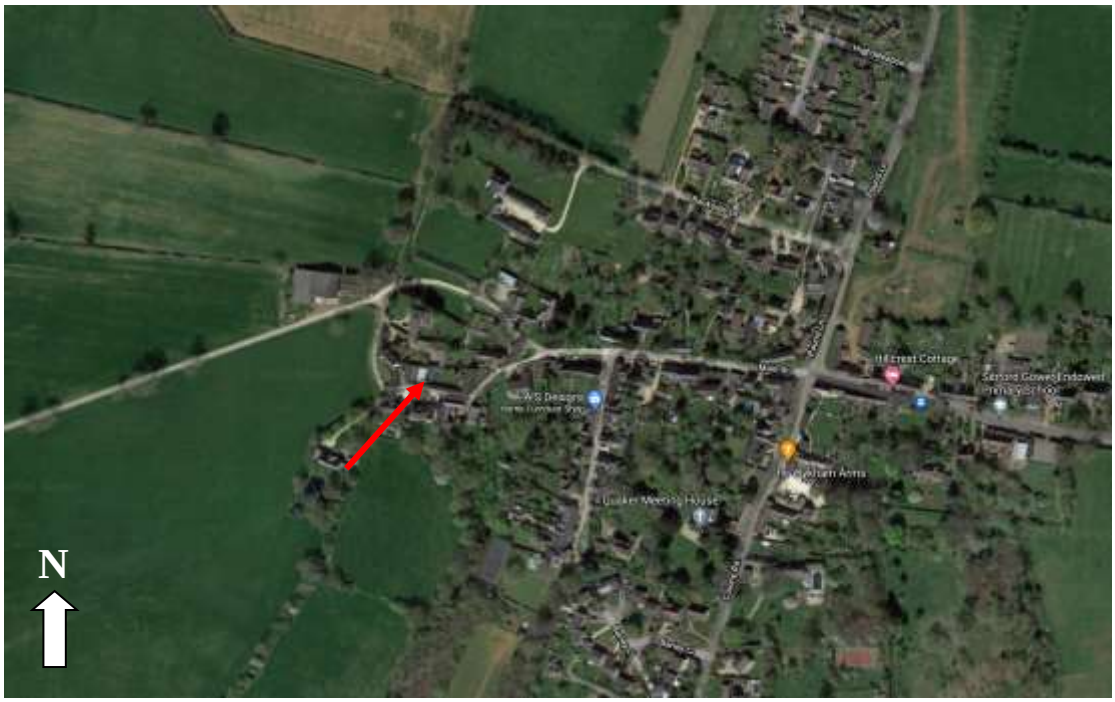
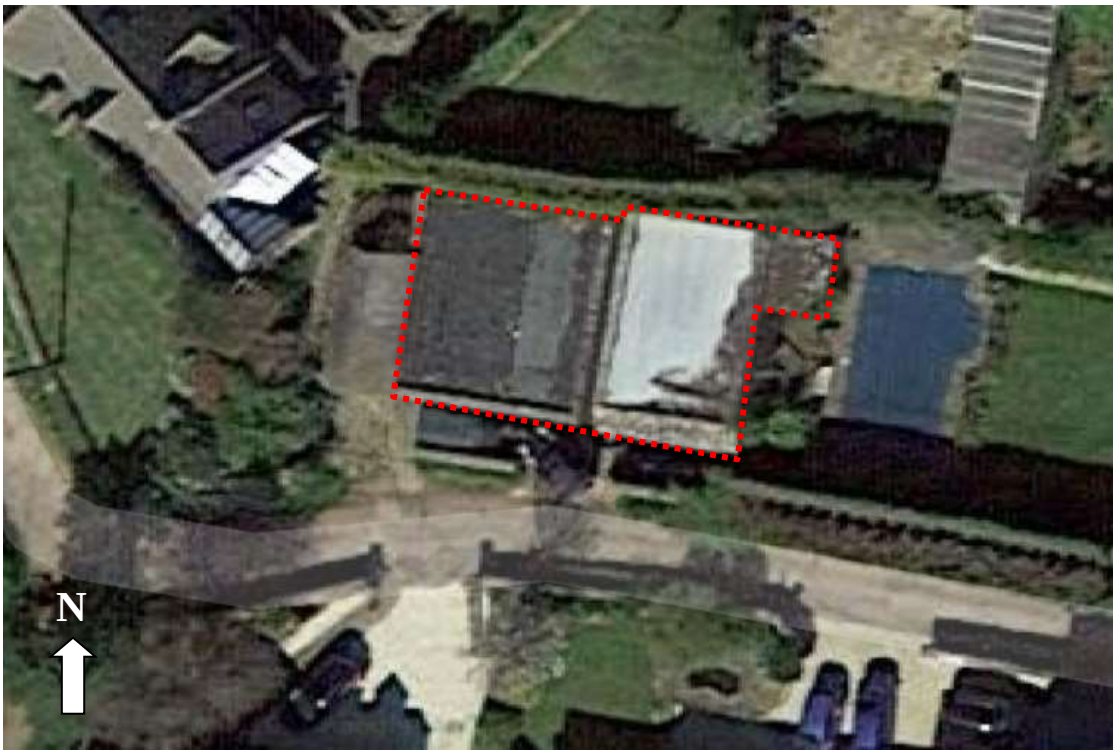


Lane Head, Sibford Gower

Appendix 2: Site layout



Lane Head garage and store – surveyed building in red outline

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Lane Head, Sibford Gower – Bat Survey Report

To: Mr T More

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