



Preliminary Ecological Appraisal & Nocturnal Bat Survey Report

Spring Cottage, Greatgate Road
Winnothdale, Tean
Staffordshire, ST10 4HB

Prepared for Alistair Whiston

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Methods used to prepare this report, including those carried out in the field, followed The Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

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SITE PLANS & MAPS

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1 INTRODUCTION

- 1.1 This report has been prepared by Fauna Forest Ecology Limited on behalf of Alistar Whiston. It provides the results of a Preliminary Ecological Appraisal (PEA), a Preliminary Roost Assessment (PRA), and three follow-up nocturnal bat surveys undertaken on land at Spring Cottage, Greatgate Road, Winnothdale, Tean, Staffordshire, (the application site) (grid reference SK 03390 40306).
- 1.2 The PEA was undertaken following good practice¹ to identify the ecological value of the application site, considering both habitats and protected species. The results of a desk study and field survey are included in this report, and in context to the proposed development, they have been used to inform the need for further survey effort or mitigation required to comply with relevant nature conservation policies and legislation.
- 1.3 A previous bat and bird survey was carried out in 2017 by ecologist Christopher Smith, which found a relatively small number of droppings in the building onsite.
- 1.4 The bat surveys completed by Fauna Forest Ecology Limited were undertaken in accordance with industry guidelines². The PRA was completed to check the building for evidence of bat activity and its potential to support roosting, alongside an evaluation of the surrounding habitats for their ecological value to bats. Follow-up nocturnal surveys were then conducted with a view to confirm the presence or absence of bats.
- 1.5 The survey findings are set out in this report, together with details of any ecological constraints in relation to bats and the proposed development. The report also identifies where a bat mitigation licence will be required and provides recommendations for mitigation, compensation, and enhancements where necessary.
- 1.6 The evaluation and findings in this report can be used by the local planning authority (LPA) in their view of the planning application.
- 1.7 The proposals are to convert the building into a residential property and to manage the grassland as a vegetated garden.
- 1.8 The site is located approximately 3.9km southeast of Cheadle and 16.5km southeast of Stoke-on-Trent. It is surrounded by arable habitat with a mix of tree lines and hedgerow margins leading to a number of woodland compartments and other semi-natural habitats in the wider countryside.

¹ UKHab Ltd (2023) UK Habitat Classification version 2.0 (at <https://www.ukhab.org>)

² Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edn. Bat Conservation Trust, London.

2 LEGISLATION SUMMARY

Bats

2.1 In England and Wales, bats and their roosts are protected under the Conservation of Species and Habitats Regulations 2017 (as amended) and the Wildlife & Countryside Act 1981 (as amended). Taken together, this legislation makes it an offence to:

- Deliberately capture (or take), injure or kill a bat
- Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly affect the ability of the animals to survive, breed, or nurture their young or likely to significantly affect the local distribution or abundance of the species whether in a roost or not
- Damage or destroy the breeding or resting place of a bat
- Possess a bat (alive or dead) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost
- Sell (or offer for sale) or exchange bats (alive or dead) or parts of bats

A roost is defined as being 'any structure or place that is used for shelter or protection' and since bats regularly move roost site throughout the year, a roost retains such designation whether or not bats are present at the time.

Badger

2.2 Badger *Meles meles* is protected in Britain under the *Protection of Badgers Act 1992* and *Schedule 6 of the Wildlife and Countryside Act 1981* (as amended).

The legislation affords protection to Badgers and Badger setts and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

Hedgehog

2.3 Hedgehog *Erinaceus europaeus* does have legal protection in the UK.

- they are listed on schedule 6 of the Wildlife and Countryside Act (1981) which makes it illegal to kill or capture wild hedgehogs, with certain methods listed.
- they are also listed under the Wild Mammals Protection Act (1996), which prohibits cruel treatment of hedgehogs.
- a species of 'principal importance' under the NERC Act, which is meant to confer a 'duty of responsibility' to public bodies.

Water Vole

- 2.4 Water voles *Arvicola amphibius* are fully protected under Section 9 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take water voles
- Possess or control live or dead water voles or derivatives
- Damage, destroy and obstruct access to any structure or place used by water voles for shelter or protection; and/or
- Disturb water voles whilst they are using such a place

Water voles are listed as a species of principal importance under the provisions of the Natural Environment and Rural Communities (NERC) Act 2006. The Peak District Biodiversity Action Plan identifies water vole as a UKBAP species that occurs in the area.

Otter

- 2.5 The European otter *Lutra lutra* is the only native UK otter species. It's a European protected species (EPS) and is also fully protected under Schedule 5 of the Wildlife and Countryside Act 1981.

You're breaking the law if you:

- Capture, kill, disturb or injure otters (on purpose or by not taking enough care)
- Damage or destroy a breeding or resting place (deliberately or by not taking enough care)
- Obstruct access to their resting or sheltering places (deliberately or by not taking enough care)

Possess, sell, control or transport live or dead otters, or parts of otters

Birds

- 2.6 All common wild birds are protected under The Wildlife and Countryside Act 1981 (and as amended). Under this legislation it is an offence to:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird while it is in use or being built
- Take or destroy the egg of any wild bird

Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

Reptiles

- 2.7 All native British species of reptile (of which there are 6) are listed in Schedule Five of the Wildlife and Countryside Act (1981) and as such are protected from deliberate killing, injury or trade. Therefore, where development is permitted and there will be a significant change in land use, a reasonable effort

must be undertaken to remove reptiles off site to avoid committing an offence. The same act makes the trading of native reptile species a criminal offence without an appropriate licence.

Great Crested Newts

- 2.8 Great crested newts *Triturus cristatus* are a European Protected Species, listed on Annex II and IV of the EEC Directive on the Conservation of Natural Habitats and Wild Fauna and Flora, receiving protection under The Conservation of Habitats and Species Regulations 2017. This species is also afforded full protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (WCA 1981) and Schedule 2 of the Conservation (Natural Habitats etc.) Regulations 1994 (Regulation 38). Under such legislation it is an offence to:

- Intentionally or recklessly kill, injure or capture a great crested newt;
- Possess or control any live or dead specimen or anything derived from a great crested newt;
- Intentionally or recklessly* damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- Intentionally or recklessly* disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.
- Damage or destroy a breeding site or resting place.
- Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.

*Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales.

White-clawed crayfish

- 2.9 White-clawed crayfish *Austropotamobius pallipes* are protected under the Wildlife and Countryside Act 1981. It is an offence to intentionally take them.

WCC are also listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006). You must have regard for the conservation of Section 41 species as part of your planning decision. Find out more about your biodiversity duty. The developer must comply with the legal protection of WCC. You should consider if the developer has taken appropriate measures to avoid, mitigate or compensate (as a last resort) for any negative effects on WCC in their development proposal. The developer may need a licence for activities that affect WCC. The developer may need permission from the Environment Agency to trap crayfish as part of their proposal.

3 METHODOLOGY

Desk study

- 3.1 A search was undertaken using desktop resources including the Multi-Agency Geographic Information for the Countryside³ (MAGIC) website. MAGIC was used to search for records of designated sites and ecologically important habitats within a 1km radius of the application site. Google Earth⁴ was also used to study the nearby landscape. In addition to this, records of non-statutory sites and notable animal species (from within 1km of the application site) relevant to the site and the proposed development were provided by Staffordshire Ecological Record (SER).

Preliminary Ecological Appraisal

- 3.2 The field survey was carried out by ecologists Frances Horsford BSc (Hons) MSc and David Nixon MSc MCIEEM MRSB (Natural England bat licence number (level 2) 2015-18322-CLS-CLS) on 6th June 2025. A UKHabs assessment was undertaken, during which time the surveyors carried out a walking transect of the application site following guidelines from the UK Habitat Classification (UKHabs) system (note* for the purpose of this report habitat codes are shown on the habitat map (Figure 1))⁵. Key habitats present within the boundaries were mapped and broad habitats were categorised. During the walked transect, consideration was given in regard to the potential presence of protected species and where possible the surveyors searched for evidence of protected species.

Preliminary Roost Assessment

- 3.3 The PRA was completed by David Nixon on 6th June following the PEA. During the survey, where possible, all areas of the building were internally and externally examined for evidence of bats and birds. The survey included an assessment using a powerful torch and endoscope. All accessible holes and crevices suitable for use as a bat roost or nest site were examined. Visual ground inspections were undertaken using binoculars, and photographs were taken to capture notable features such as missing tiles, damaged or missing mortar, exposed gable ends, gaps within soffit boards, rotten timbers and other potential entry points. Other aspects of the building were surveyed, including windows, window sills, external doors, and the ground within close proximity of the structure was thoroughly inspected for bat droppings and feeding remains.
- 3.4 Following a detailed assessment of the building, it was classified according to its roosting suitability based on the presence of features and the surrounding landscape (Table 1).

³ Multi-Agency Geographical Information for the Countryside (MAGIC). Crown Copyright and database rights [2015]. Ordnance Survey 100022861. Available at: <http://www.magic.gov.uk/>

⁴ https://www.google.co.uk/intl/en_uk/earth/

⁵ UKHab Ltd (2023) UK Habitat Classification version 2.0 (at <https://www.ukhab.org>)

Table 1: Guidelines summary for assessing potential bat roost suitability

Suitability	Description of building or structure
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitats to be used on a regular basis or by larger numbers of bats (i.e. maternity or hibernation).
Moderate	A structure with one or more potential roost sites that could be used by bats, but unlikely to support a roost of high conservation status.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time.
Confirmed roost	Evidence of bats or use by bats found.

Nocturnal bat surveys

- 3.5 Three nocturnal bat surveys were completed using two surveyors per survey (see Figure 2 for surveyor positioning). All surveyors are appropriately experienced in bat surveying. Surveyors included Dan Cliffe BSc and Sean Vaux BSc (Hons). Surveys were carried out on the following dates (survey one was split over two dates):
- survey 1a: 14th June 2025.
 - survey 1b: 16th June 2025.
 - survey 2: 11th July 2025.
 - survey 3: 6th August 2025.
- 3.6 Surveyors took up separate positions surrounding the building for 15 minutes prior to and for two hours after sunset. At any one time between surveyors, roof aspects deemed to hold risk of bat emergence were being observed. Visual observations of bat activity were noted and bat species were identified using bat detectors. Information recorded included weather, timings, whether bats emerged from or entered the building, direction of travel, species and activity (e.g. foraging or commuting). Equipment used during nocturnal surveys included EM Touch 2 Pro devices coupled to Android and Apple tablets. NVAs included Nightfox Whiskers as well as Pixfra thermal scopes.
- 3.7 Use of NVAs is vital for nocturnal surveys to give confidence in results. During the surveys, a photograph of the darkest part of the survey was taken to show the field of view and that appropriate illumination by infrared or thermal imaging was used. All NVA footage was watched the following day to ensure bats were not missed while watching screens in the field.

- 3.8 All hand-held bat detectors are calibrated annually as per industry guidelines and in accordance with the manufacturer's instructions to ensure they remain accurate and fully functional.

4 RESULTS

Desk study

- 4.1 Results from SER indicate there are no statutory designated sites within 1km of the application site and there are two non-statutory designated sites within 1km of the application site, which include Ferneyhill Biodiversity Alert Site (BAS) - Several neglected heathy fields, probably semi-improved, and Lord's Coppice Ancient and Semi-Natural Woodland – Ancient Woodland inventory.
- 4.2 Notable animal records returned by SER relating to species that could *potentially* be affected by work onsite are listed below:
- Bats: two records of common pipistrelle *Pipistrellus pipistrellus* from 2018, including one associated with the onsite building, and one record of a brown long-eared *Plecotus auritus* from 2018, also linked to the building on site.
 - Badger: 47 records (all details are confidential).
 - Water vole: two records, the most recent is from 2003, 796m from the site.
 - Birds: a variety of bird species have been recorded in recent years.
 - Great crested newt: two records have been returned, the most recent in 2018.

Preliminary Ecological Appraisal field visit

- 4.3 The application site is in a rural setting in Winnothdale, Staffordshire Moorlands, approximately 3.9km southeast of Cheadle and 16.5km southeast of Stoke-on-Trent. It is one of several properties in the local area, surrounded by a mix of arable and grazed pasture fields, many of which are edged by mature tree lines and hedgerow networks leading to the wider landscape.

General site description

- 4.4 The application site comprises a stable block, static caravan, relatively large area of artificial unvegetated, unsealed surface used for parking, and mown lawn (grassland). Much of the application site is bound by hedgerows and over to the northwestern extent is a stream that passes through a culvert.

Grassland 1 – modified grassland – g4

- 4.5 The grassland on the western half of the site is regularly mown and managed as a vegetated garden. Aerial and street-view images show this change occurred in 2024. It has not been seeded and continues to support similar species that were present before the area was used as a garden.

- 4.6 Grass species recorded in the sward were: rough-stalked meadow-grass *Poa trivialis* (D), creeping bent *Agrostis stolonifera* (F), Yorkshire fog *Holcus lanatus* (F), red fescue *Festuca rubra* (F), perennial rye-grass *Lolium perenne* (R), meadow foxtail *Alopecurus pratensis* (R), and annual meadow-grass *P. annua* (R).
- 4.7 Herbs and ferns recorded were: American willowherb *Epilobium ciliatum* (O), bramble *Rubus fruticosus* agg. (O), broad-leaved dock *Rumex obtusifolius* (O), broad-leaved plantain *Plantago major* (O), cleavers *Galium aparine* (O), coltsfoot *Tussilago farfara* (R), common hogweed *Heracleum sphondylium* (O), common knapweed *Centaurea nigra* (R), common mouse-ear *Cerastium fontanum* (R), creeping buttercup *Ranunculus repens* (D), creeping cinquefoil *Potentilla reptans* (R), cuckooflower *Cardamine pratensis* (R), dandelion *Taraxacum officinale* agg. (F), field horsetail *Equisetum arvense* (O), garlic mustard *Alliaria petiolata* (R), ground elder *Aegopodium podagraria* (R), hairy sedge *Carex hirta* (O), ivy-leaved speedwell *Veronica hederifolia* (R), marsh thistle *Cirsium palustre* (R), meadow buttercup *R. acris* (R), montbretia *Crocasmia* spp. (R), common nettle *Urtica dioica* (R), ribwort plantain *Plantago lanceolata* (R), scaly male-fern *Dryopteris affinis* (R), selfheal *Prunella vulgaris* (R), wavy bitter-cress *Cardamine flexuosa* (O), and white clover *Trifolium repens* (O).

Buildings – u1b6

- 4.8 One building is present onsite (along with a static caravan), which was a brick-built single-storey stable block with a pitched roof (described in more detail below in paragraph 4.25).

Artificial, unvegetated, unsealed surface – u1c

- 4.9 Around the stable block and beneath the static caravan is an area of loose stone. Within the stone, and along the edges where it meets the hedgerows, vegetation recorded includes: scaly male-fern *Dryopteris affinis* (O), herb-Robert *Geranium robertianum* (O), broad-leaved willowherb *Epilobium montanum* (O), broad-leaved dock *Rumex obtusifolius* (O), garlic mustard *Alliaria petiolata* (O), white clover *Trifolium repens* (O), creeping buttercup *Ranunculus repens* (O), coltsfoot *Tussilago farfara* (O), smooth sow-thistle *Sonchus oleraceus* (O), brooklime *Veronica beccabunga* (O), cleavers *Galium aparine* (O), common nettle *Urtica dioica* (O), and cut-leaved crane's-bill *Geranium dissectum* (O). Grass species present were: Yorkshire fog *Holcus lanatus* (O), annual meadow-grass *Poa annua* (O), rough-stalked meadow-grass *P. trivialis* (O), and wavy hair-grass *Deschampsia flexuosa* (R).

Watercourse – Additional secondary code: 851

- 4.10 The stream enters the property and is culverted for much of the length of the site. There is marginal stream vegetation which includes American willowherb (O), broad-leaved dock (O), brooklime (R), creeping buttercup (F), false oatgrass *Arrhenatherum elatius* (O), false water cress *Helosciadium nodiflorum* (O), *Glyceria* (R), meadow foxtail (O), soft rush *Juncus effusus* (R), woody nightshade *Solanum dulcamara* (F).

Hedgerows

H1 – Non-native ornamental hedgerow – h2b

- 4.11 H1 is a manged hedgerow, approximately 2.5-3m tall and 1.5m wide. Primary species within its structure include Laurel *Prunus* species (A), beech *Fagus sylvatica* (R) and *leylandii* Cupressaceae *leylandii*(A). ground species include colt's-foot (O), scaley male fern (R), nettle (F), ground elder (F), cow parsley *Anthriscus sylvestris* (R), hedge bindweed *Calystegia sepium* (O), cleavers (F) and hybrid bluebell *Hyacinthoides x massartiana* (R).

H2 – Native hedgerow – h2a

- 4.12 H2 is relatively tall and wide, and generally described as undamaged by human activity, but in areas has plants indicating nutrient enrichment for ~20% of the ground area. Species in its main structure include *Prunus* sp. (F), hawthorn *Crataegus monogyna* (F), ash *Fraxinus excelsior* (O), bramble (O), holly *Ilex aquifolium* (R), oak *Quercus species* (R), *leylandii* (F), crab apple *Malus sylvestris* (R). Ground flora comprises wood avens *Geum urbanum* (R), herb-Robert, nettle (F), hedge woundwort *Stachys sylvatica* (R), nipplewort *Lapsana communis* (R), cleavers (F), American willowherb (O), foxglove *Digitalis purpurea* (R), and common hogweed (O).

H3 – Native hedgerow – h2a

- 4.13 This relatively tall and wide hedgerow is gappy along the base and canopy. Some of the shrubs have been cut back and the ground flora at the time of the survey indicated nutrient enrichment. The hedgerow consists of hawthorn (D), garden privet *Ligustrum ovalifolium* (O), holly (R), ash (O), bramble (O), laurel (O), willow species *Salix* sp. (R), elder *Sambucus nigra* (R). Ground vegetation included scaley male fern (R), nettle (F), cleavers (F), herb Robert (F), colt's-foot (R), creeping buttercup (F) and broad-leaved dock (O).

H4 – Non-native ornamental hedgerow – h2b

- 4.14 H4 is an unmanaged hedgerow positioned along the far northern extent of the site, consisting of only laurel and *leylandii*, which were both abundant throughout.

Schedule 9 invasive plants

- 4.15 Montbretia is listed on Schedule 9 of the Wildlife and Countryside Act 1982 and is therefore classed as an invasive plant 6.

⁶ <https://www.legislation.gov.uk/ukpga/1981/69/schedule/9>

Fauna

Mammals - Bats

- 4.16 The application site and wider landscape offer good foraging and commuting opportunity for a range of bat species due to the presence of various semi-natural habitats and connectivity. In addition to the building onsite (see paragraphs 4.25 – 4.28), bats are likely to roost in nearby buildings and trees.

Mammals - Badger

- 4.17 There is potential for badgers to use the application site and the wider landscape. The species could commute and forage across the grassland onsite and establish setts within nearby fields, hedgerows, and woodlands. No badger evidence was found during the survey.

Hedgehog

- 4.18 Hedgehog will potentially utilise local habitats on and offsite, which may include hedgerows, gardens, woodland margins and scrub thickets, where the species may commute, forage or shelter.

Water vole

- 4.19 The watercourse onsite is culverted so lacks burrowing opportunity for water vole although the species may use other sections of the stream adjacent and therefore commute and forage along the section that passes through the application site.

Otter

- 4.20 There was little in the way of suitable habitat for otters or holts along the section of watercourse that passes through the application site as it is culverted. There may be potential for the species to utilise it along other stretches further beyond the application site.

Common Nesting Birds

- 4.21 Much of the surrounding landscape provides suitable habitat for nesting birds. At site and local level, the building, hedgerow, trees, scrub thickets and ruderal stands would most likely be used for nesting between February and September (inclusive).

Reptiles

- 4.22 No evidence of reptiles was encountered during the site visit, however since the application site is well-connected to the wider landscape, species such as grass snake *Natrix helvetica* could potentially utilise nearby open sections of the watercourse and surrounding vegetation for commuting, foraging and basking/shelter.

Amphibians

- 4.23 No aquatic waterbodies suitable for use by amphibians were present within the grounds. Three relatively small ponds were identified on MAGIC, located at the following grid references:

- SK 1967 8231.
- SK 1977 8234.
- SK 1984 8228.

White-clawed crayfish

- 4.24 White-clawed crayfish may utilise the watercourse locally, though the section that passes through the site is culverted so lacks the typical rocky bed and soft earthy embankments the species tends to use for shelter and burrowing.

Preliminary Roost Assessment Results

General building description

- 4.25 The building onsite is a detached single-storey brick-built stable with a timber-framed pitched roof that is clad with clay tiles and underlined with traditional bitumen felt. The building supports a single ridge line that is covered with concrete ridge tiles, and two gable walls, one facing north, the other south. Along the western side aspect are three access points, each with timber doors that are usually locked. There is also evidence of previous windows in the gable walls which have been bricked-up over time. Internally, the brickwork has been covered by a layer of concrete blocks and there is no loft void, therefore the roof timbers are exposed and visible from ground level.

Bat roosting potential

- 4.26 Roof tiles in places were slipped and had become dislodged over time, offering potential access either between the tiles and felt or directly inside the building. Gaps large enough for bats to access the building were also noted above the bricked-up windows between brickwork and small timber sections.

Bird nesting potential

- 4.27 Many of the features described above have the potential to be used by relatively small common birds during the nesting season. Species such as house sparrow *Passer domesticus* for example may gain access and build nests in secure locations to raise their chicks.

Evidence

- 4.28 A small concentration of *fairly* fresh bat droppings (~10) was identified inside the building near the north gable wall. No other evidence such as feeding remains, urine strains or bats was found during the survey. Additionally, no evidence relating to nesting birds was found inside the building during the survey.

Nocturnal Bat Survey Results

Table 2: Nocturnal survey weather conditions

Date	Start	Finish	Sunset	Temp °C	Wind 0-5	Cloud %	Rain Yes/No/Note
14/06/2025	21:19	23:34	21:34	14	1	100	No
16/06/2025	21:20	23:35	21:35	17	1	10	No
11/07/2025	21:14	23:29	21:29	18	0	60	No
06/08/2025	20:36	23:00	22:51	22	0	15	No

Dusk Survey (1a) – 14th June 2025

- 4.29 Bat activity was moderate during the survey. Species recorded included common pipistrelle and *Myotis* sp. At 22:03, a common pipistrelle was observed flying over the building from a northerly direction before flying over the road beyond the southern boundary, where it vanished without further trace. Soon after at 22:06, a single common pipistrelle proceeded to forage along H1 and H2 for approximately one minute, before eventually passing over the caravan in an easterly direction. Common pipistrelle commuting and foraging activity was then periodically observed between 22:25 through to 22:34, most of which involved bats flying along H1 and occasionally high above the site in various directions. The *Myotis* was recorded only once at 22:28 as it flew between the building and caravan in a westerly direction across the grass. NVA footage was reviewed the following day, confirming no bats emerged from or entered the building.

16th June 2025 (1b) – 16th June 2025

- 4.30 Despite warm conditions (compared to 14th), activity was much lower, with only six bat passes during the survey. Species recorded included common pipistrelle, noctule *Nyctalus noctula* and *Myotis* sp. At 22:10 the first bat (a common pipistrelle) was recorded, followed by another at 22:12, both of which were not seen. Following this at 22:15, a single noctule pass was recorded, presumably that of commuting individual high above the site. Another common pipistrelle was then observed flying high above the site in a southerly direction (this was the only bat visually observed during the survey), followed by a brief *Myotis* call at 22:24, and finally a common pipistrelle pass at 22:28. NVA footage was reviewed the following day, confirming no bats emerged from or entered the building.

Dusk Survey (2) – 11th July 2025

- 4.31 Bat activity was moderate during the survey. Species recorded included common pipistrelle noctule and *Myotis* sp. Initially, a single noctule commuting pass was recorded at 21:50. The individual was not visually observed and was considered to likely be some distance from the site. After this, infrequent common pipistrelle activity began from 22:08 to 22:18, involving individuals briefly commuting and foraging along H1 and over the grass onsite for short periods of time. *Myotis* was recorded on two occasions, at 22:20 and 22:48, foraging briefly over H1 and the area in which the caravan is positioned. Common pipistrelle activity between 22:48 until the end of the survey was reduced, with only two distant

registrations noted. NVA footage was reviewed the following day, confirming no bats emerged from or entered the building.

Dusk Survey (3) – 6th August 2025

- 4.32 Bat activity was moderate during the survey. Species recorded included common pipistrelle, noctule and *Myotis* sp. The first bat recorded was a *Myotis* at 21:16 and like previously, it flew through over near the caravan and along H1 in a westerly direction. *Myotis* was also briefly observed at 21:18 and 21:20, during which times the species flew over the site in a southwesterly direction (potentially the same bat). Foraging and commuting common pipistrelles were occasionally recorded during the survey, initially at 21:17, then more frequently at 21:20 – 21:30. Activity was then reduced until 21:40, during which time five commuting passes were noted, all but one being audio-only. NVA footage was reviewed the following day, confirming no bats emerged from or entered the building.

Limitations

- 4.33 The far eastern roof pitch of the building is close to the hedgerow (H3), so it was difficult to fully cover it during the nocturnal bat surveys.

5 DISCUSSION & RECOMMENDATIONS

- 5.1 The proposed development is relatively small-scale and will not extend beyond the footprint of the building onsite. As such, habitats beyond the boundaries of the application site will not be affected by the proposals on the condition nocturnal lighting is controlled to prevent unnecessary spill over semi-natural habitats that may be utilised by wildlife. Overall, the proposals will have negligible effect on biodiversity.
- 5.2 As the proposals are to convert the application site for residential use, the grassland will eventually become a garden area. From an ecological perspective, it would be beneficial to adopt a sensitive approach when gardening by allowing the grass to grow longer for much of the year, cutting it once in spring, then allowing it to grow through summer so plants can flower and set seed, followed by a late August or early September cut. In both cases, all arisings should be removed to prevent a build-up of nutrients. The spring cut will also help to limit the spread of rank grasses. If it is not feasible to adopt the cutting regimes detailed above, another option is to create semi-natural buffer zones along the margins of the application site which could also be managed in the same way as detailed above.
- 5.3 Montbretia is listed on Schedule 9 of the Wildlife and Countryside Act 1982 and is therefore classed as an invasive plant⁷. Best practice would be to have it removed by a specialist company to prevent it spreading and causing harm to native species and habitats.

⁷ <https://www.legislation.gov.uk/ukpga/1981/69/schedule/9>

- 5.4 Ecologist Christopher Smith discovered a number of bat droppings in the building in 2017. Following his assessment, he concluded the droppings were probably deposited by pipistrelle and brown long-eared, although no DNA was taken for confirmation.
- 5.5 SER returned the bat records submitted by Christopher Smith, along with records of badger, water vole, birds and GCN. Specific locations relating to badger and GCN records were not provided.
- 5.6 Results of the PRA in 2025 (Fauna Forest Ecology Limited) reflected those of 2017, although the droppings found in 2025 resembled those of brown long-eared bat rather than pipistrelle. However, the appearance of droppings may be misleading, so they should be sent to a lab for DNA analysis to confirm which species they were deposited by. Consideration was given with respect to placing a static bat detector in the building for a week (or longer), but in many cases bats commuting or foraging above or near buildings like the one onsite are often recorded, which consequently leads to false positive results.
- 5.7 During the nocturnal bat surveys, no evidence of bats emerging from or entering the building was observed. Whilst views across the eastern roof pitch were restricted to some degree, confidence is given bats did not emerge from it during the surveys based on flight paths and general activity patterns. Based on the presence of low numbers of bat droppings and lack of discarded feeding remains (such as wings of moths and butterflies), it is clear the roost is an infrequently used day roost.
- 5.8 According to industry guidance, the surveyed building meets some of the criteria for hibernation surveys, as it contains suitable roosting features, it is well connected to the wider landscape and is associated with a roost. However, these criteria can be rigid and do not fully consider environmental factors that significantly reduce the likelihood of hibernating bats. Hibernation sites require stable, cool temperatures and relatively high humidity. The building onsite is gappy in areas, potentially draughty, and most notably, it is complex and would not be easy or safe to fully assess over the winter months. Moreover, and as detailed above, deploying static bat detectors over winter would likely only record bats flying past on milder nights rather than confirm hibernation use⁸. Hibernation surveys are not recommended but care should be taken if working on the building during winter and preferably, works will not take place in temperatures below 10 deg. C.
- 5.9 In summary, an ecological constraint relating to roosting bats and the proposed development has been identified because bats and their roosts are protected by law. If a bat roost exists in a structure, it would be a criminal offence to impact the roost without a bat mitigation licence which would be issued by Natural England prior to works commencing and after planning permission and/or other relevant consents have been granted. All survey work must be complete before a licence application can be made. Natural England expect three tests to be satisfied before a bat mitigation licence can be issued. These tests are as follows:

⁸Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edn. Bat Conservation Trust, London.

- there is no satisfactory alternative.
- 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.
- the action authorised preserved public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.

- 5.10 Outline mitigation will involve providing bats with alternative roosting opportunity with adequate and proportionate measures. As the roost is used infrequently by day-roosting bats, a Bat Mitigation Class Licence (BMCL) can be used to allow the works to be legally carried out. It will be a requirement of Natural England for the developer to fit at least one bat box onsite before works commence to provide a receptor site for any bats encountered while the work is carried out. The bat box will be installed before work commences and will be fitted approximately 4m above ground level and not face north or south.
- 5.11 Any work that will affect the roost will not commence until a bat mitigation licence has been granted by Natural England. There will be no timing constraints in relation to when works may be carried out under the licence because hibernating and breeding bats will not be impacted. If in the unlikely event a bat is discovered in winter and it is considered to be hibernating, works will halt and Natural England will be contacted for advice.
- 5.12 Prior to the commencement of the proposed works and once the licence has been granted, a bat-licensed ecologist will carry out a final inspection inside the building to check for the presence of bats.
- 5.13 All contractors working on the proposed development will be briefed on the legal protection afforded to bats and their places of shelter and on how to proceed if a bat is discovered during the course of the work. A bat ecologist must carry out a watching brief while tiles and other key roofing components are removed. The developer will provide secure scaffolding or a cherry picker in order for the ecologist to safely inspect the roof.
- 5.14 The supervising ecologist will continue the watching brief until the building is declared free of bats. Any bats found during this period will be safely removed by the ecologist and placed in a bat box. If in the unlikely event a bat is discovered after the ecologist is no longer supervising, works should halt immediately and Fauna Forest Ecology Limited should be contacted for advice. If you are not able to reach the ecologist, then contact The Bat Conservation Trust: 0845 1300 228. Never handle bats for legal and Health & Safety purposes.
- 5.15 Based on the survey results, it is apparent bats utilise the local area for commuting and foraging purposes (especially common pipistrelle and *Myotis* sp.), so inappropriate use of nocturnal lighting may cause them to seek alternative flight routes. As such, lighting mitigation must be considered and should involve shielding semi-natural habitats onsite along with the peripheral margins where bats were

frequently observed. Where feasible, trees and other vegetative habitats should be retained for continued use by bats (note that trees have not been surveyed for bats. If they must be removed, they should be surveyed in the first instance). General good practice regarding use of nocturnal lighting is as follows:

- if external artificial lighting is required during or after the construction phase, a low-level/low lux lighting scheme should be implemented to avoid indirect disturbance to nocturnal animals that may utilise local habitats.
- during the construction phase, works will ideally not be carried out after dusk and should not commence until after dawn (it is also recommended that generators and machinery that emit significant noise levels are not left to run through the night).
- light spill should be controlled and if lighting is required at night, hooded shields should be fitted to prevent inappropriate light spill.

5.16 The possibility of badger using the application site should not be discounted, though it is important to note the application site is and has been for some time a residential property (the caravan is lived in) that is subject to regular disturbance (for instance, the grass is cut during summer on a weekly basis). Whilst the species may commute and forage over the grassland by night, sett creation within the boundaries is highly unlikely. No follow-up badger surveys are recommended.

5.17 Hedgehogs will commute through local gardens and often forage on lawns and other garden habitats. They are also known to take shelter in gardens, sometimes beneath rubble or in dense vegetation. The possibility of hedgehogs using the site should not be discounted and the species should be considered while development is taking place and after.

5.18 Ways to support local hedgehog populations would be to ensure appropriately sized hedgehog gaps are incorporated in the design of fences and gates (should they be installed in the garden). Consideration should be made so that in their commute, hedgehogs are able to pass freely through gardens and into the wider landscape without restrictions. A hedgehog friendly fence should have a gap measuring at least 130mm by 130mm in the gravel board. These gaps allow any hedgehogs to pass through but are they are too small for nearly all pets. At least one hedgehog friendly fence panel should be located on each side of a garden to provide unimpeded access. Almost all fencing materials can be made hedgehog friendly but may require DIY adaptations. Please note that some concrete gravel boards contain metal rods running along the length of the boards to provide strength and rigidity and cannot be cut. To overcome this, a gap can be left between the gravel board and post to provide the required gap.

5.19 Water vole is known to the local watercourses. In view of this it must be assumed they still occur nearby and may commute or forage along the watercourse section near the application site where it is not culverted. Regardless, the species will not be affected on the condition semi-natural habitats between the hard standing areas (such as parking area and paths), and watercourse are not disturbed or

developed. Critically, every attempt must be made to ensure the watercourse is not polluted. No follow-up water vole surveys are recommended.

- 5.20 Otter is not known in the area but the possibility of the species using the nearby watercourse or other nearby riparian corridors should not be discounted. Regardless, the site provides little opportunity for the species, and no follow-up otter surveys are recommended.
- 5.21 The application site provides birds with ample nesting opportunity, especially amongst the hedgerows which could be used by a variety of species during the nesting season which typically runs between February and September (inclusive). Although no evidence of birds was found during the PRA, the possibility of birds using it for nesting should not be discounted.
- 5.22 Any works carried out during the bird nesting period may lead to individuals being disturbed and/or nest damage or death of chicks before they have gained independence. Any impacts to nesting birds would lead to a breach of current legislation.
- 5.23 In the event works are carried out between February and September (inclusive), it is recommended that a suitably qualified ecologist is appointed to carry out an inspection for nesting activity ahead of works commencing. Works should not be initiated until the ecologist has confirmed that no nesting birds exist within the area of impact. If an active nest is discovered, an exclusion zone should be established, and works must be halted in that area until the nest is no longer active. Works should not commence without confirmation from a suitably qualified ecologist that no nesting birds exist within the area of impact. Irrespective of the time of year, if any nesting birds are discovered on site, an area around the nest site will be protected from disturbance with a suitable fence (not HERAs fencing) that would include an appropriate buffer zone, as determined by the suitably qualified supervising ecologist. Work will then be avoided in this area until the nest is no longer in use. Buffer zones in this respect will normally be 5m in diameter, and will be delineated by canes, cordon tape and signage.
- 5.24 The possibility of reptiles such as grass snake occurring nearby or onsite should not be discounted, especially along the open areas of the watercourse north and west of the site boundaries. The proposed work would not affect habitats typically associated with reptile use and therefore follow-up surveys are not recommended.
- 5.25 Whilst amphibians including GCN are recorded within a 1km radius of the application site, there are no ponds and other standing waterbodies onsite, and the three ponds found during the desk study are separated by roads that will most likely act as a barrier for newts. Moreover, the scope of works will impact only hard standing and the building. As such, it is unlikely amphibians (namely GCN) would be affected by such development. No follow-up amphibian surveys are recommended.
- 5.26 Although white-clawed crayfish may occur in the watercourse, the stretch that passes through the application site is not considered suitable for the species because it lacks the cobbly bed and soft banks

the species tends to favour. No impacts to white-clawed crayfish are anticipated and no follow-up surveys are recommended.

- 5.27 In terms of best practice, where possible, vehicles should use existing tracks onto and within the application site and it is advised that only building products to be used on the day are brought and stored on the site. If building products need to be stored onsite (e.g. overnight or for more than one day), they will be stored on pallets or retained in bags on pallets to ensure that refuges are not created that may attract animals. Building products should be placed on existing hard standing if possible. Additionally, all holes created during the construction period (e.g. to lay a concrete pad) will be filled in and finalised on the same day so as not to leave any pitfall traps. If this is unavoidable, they should be left with a sloping end or ramp to allow animals that may fall in to escape. Holes should also be covered over at night. Also, any pipes over 150mm in diameter should be capped off at night to prevent other animals from entering. Finally, any spoil resulting from excavations will either be spread and compacted within the area on the same day or be removed from the construction area on the same day. It will not be left in loose heaps overnight.

APPENDIX A: MAPS & SITE PLANS

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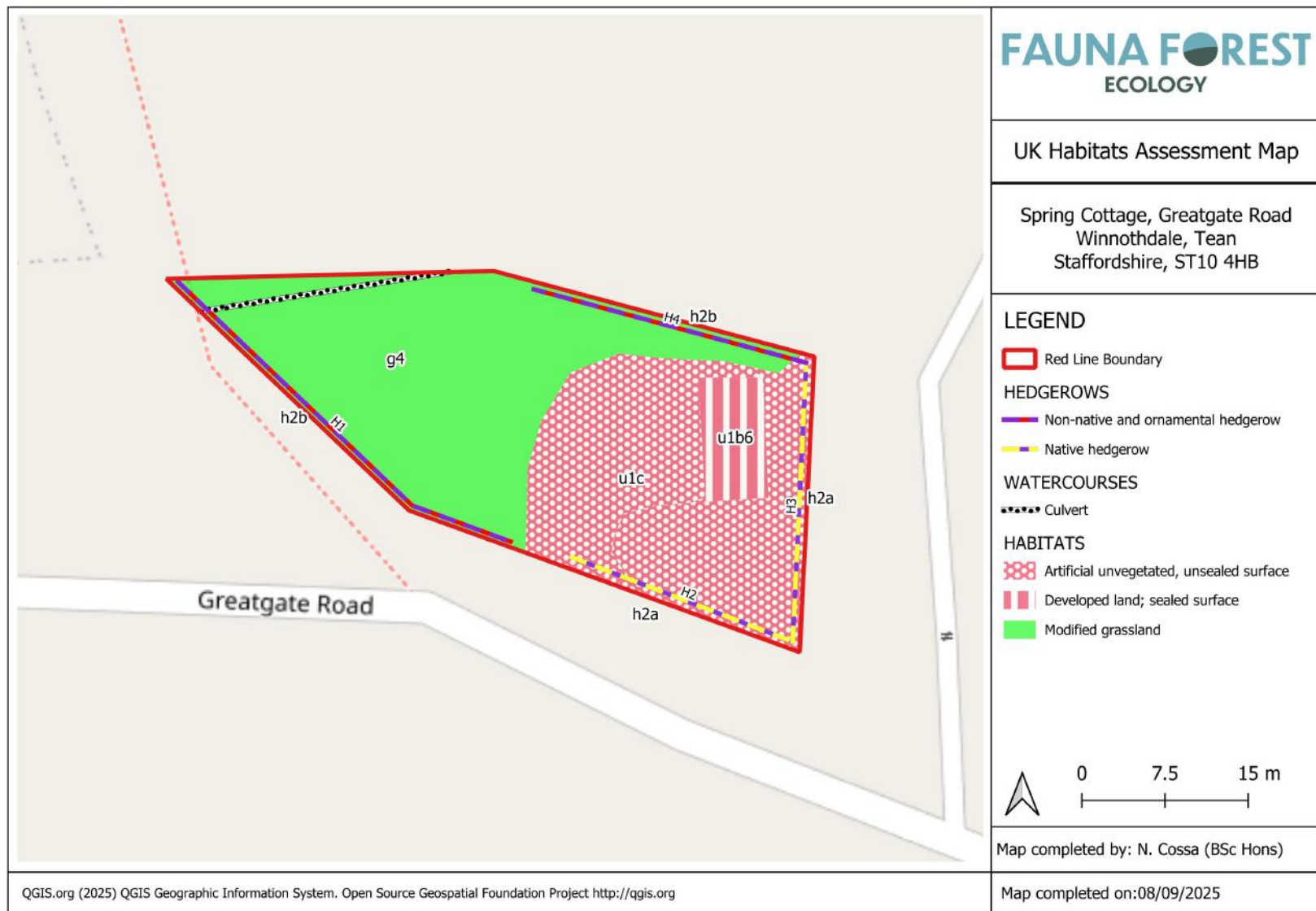


Figure 1: Habitat Map

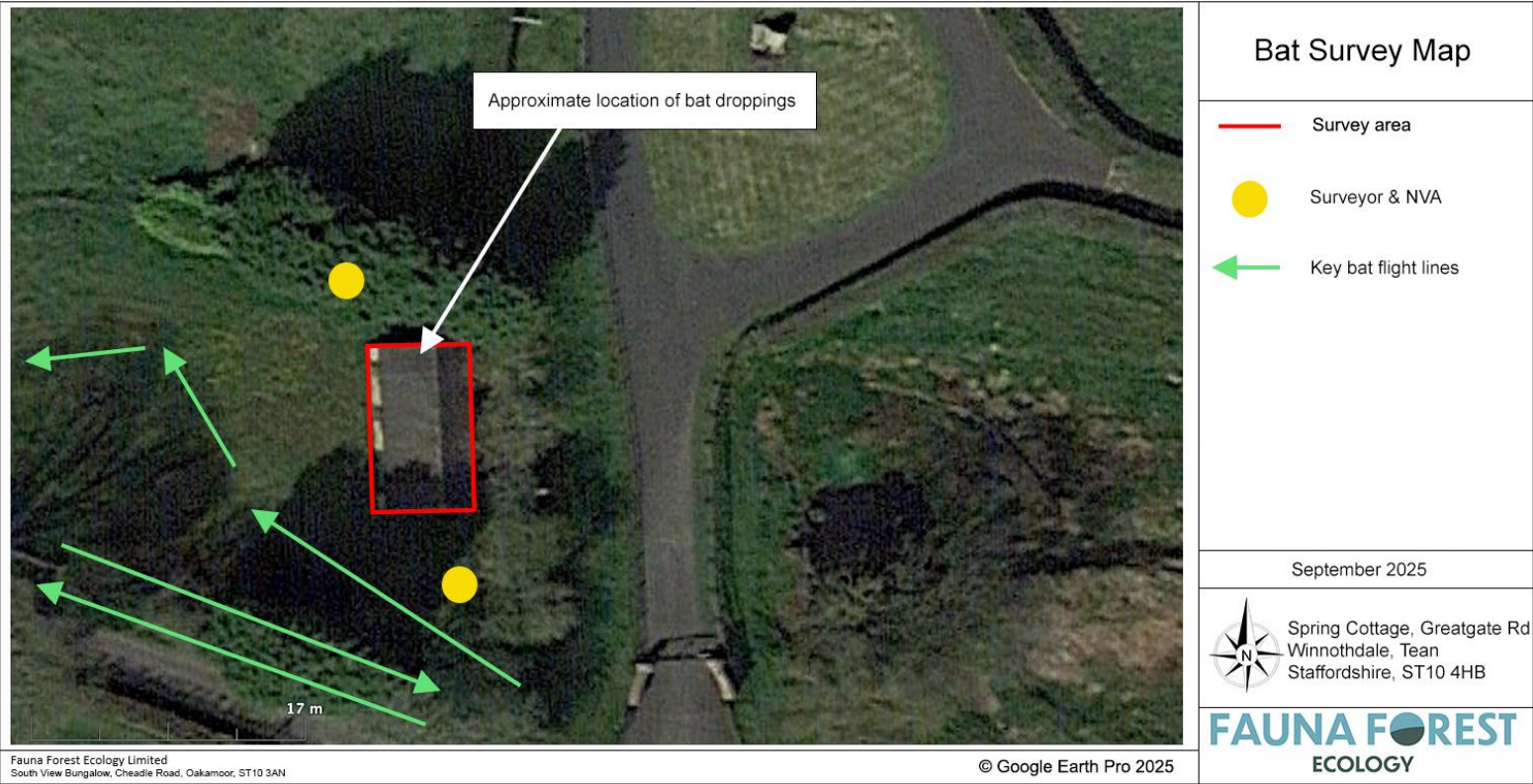


Figure 2: Bat Survey Map

APPENDIX B: SITE IMAGES



Image 1: easterly views of the grassland and driveway parking area



Image 2: southerly views towards the road of the grassland and the driveway parking area



Image 3: western side aspect of the building



Image 4: potential access points for bats in the gable wall of the building, above the bricked-up window



Image 5: small number of bat droppings behind the northern gable wall inside the building



Image 6: views inside the building



Image 7: infrared still image of southern gable wall taken at the darkest part of the survey on 14th June 2025. Note that views across the easterly roof pitch are somewhat restricted due to the hedgerow (right-hand side of the frame)



Image 8: infrared still image of the northwest corner of the building taken at the darkest part of the survey on 11th July 2025. The bright light towards the centre of the roof pitch is a consequence of the infrared security camera, so it could not be avoided

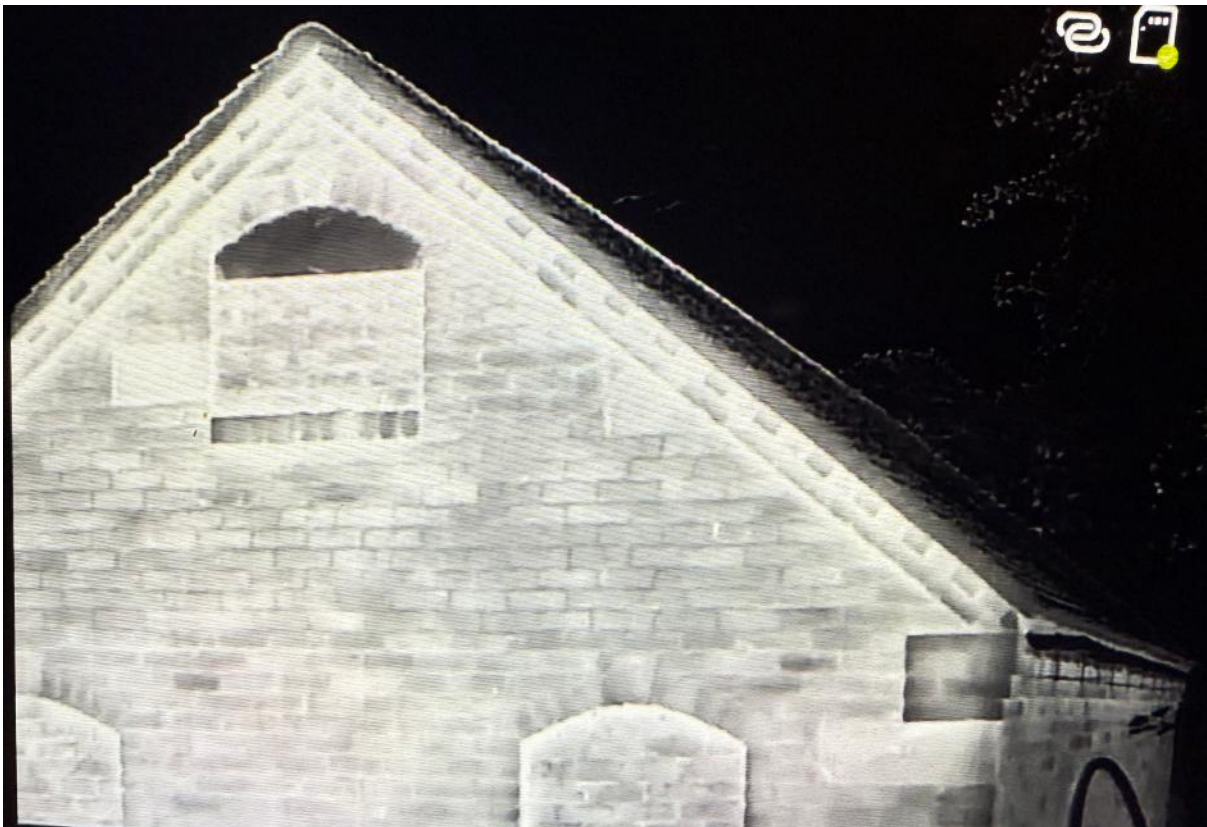


Image 9: thermal scope still image of the southern gable wall taken at the darkest part of the survey. Note that views across the easterly roof pitch are restricted due to the hedgerow (right-hand side of the frame), however during this survey on 6th August 2025, the surveyor managed to push back some of the hedgerow plants to achieve *some* views of the eastern roof pitch