

Protected Species Report for Bats and Nesting Birds

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Springfield

Chapel Lane

Ebley

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GL5 4TD

December 2020



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Report Author:		
Report Reviewer:		
Document Number:	CE00579	



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1 INTRODUCTION

- 1.1 Cotswold Environmental was instructed to carry out a Preliminary Roost Assessment (PRA) for bats and nesting birds at Springfield, Chapel Lane, Stroud GL5 4TD. The site is located at approximate National Grid Reference (NGR): SO 82825 04908.
- 1.2 Development proposals are described as the renovation of a residential dwelling and outbuilding located on the site grounds (See Fig 2. Site Map). A planning application will be submitted to Stroud District Council in due course.
- 1.3 This report provides survey data based on a field visit that was carried out during December 2020. The purpose of the survey was to assess the building for its suitability to support roosting bats and to ascertain evidence of any bats roosting. During the daytime assessment the buildings were also surveyed for nesting birds. The field visit results provide information to determine the potential ecological impact the proposed development may have on roosting bats and nesting birds, and to inform the level of further survey effort and mitigation required to comply with relevant nature conservation policies and legislation. The evaluation and findings in this report can be used by Stroud District Council in their view of the planning application.
- 1.4 The National Planning Policy Framework (NPPF) (February 2019) sets out the government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, is of particular relevance to this report as it relates to ecology and biodiversity. The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.
- 1.1 Springfield is situated in an suburban setting within the village of Ebley. The site is located approximately 2.5km west of Stroud town centre and 1.9 km east of Stonehouse. The site location is shown in Fig. 1.
- 1.5 Three buildings were surveyed as part of the assessment. For the purpose of this report, a residential dwelling is referred to as Building 1 (B1), outbuilding as Building 2 (B2) and single detached garage and Building 3 (B3) (see Fig. 2: Site Map).



Survey Objectives

- To establish suitability for bats.
- Ascertain evidence of bats.
- Determine the potential ecological impact the proposed development will have on bats.
- Inform the level of further survey effort that is required.

2 METHODOLOGY

Desk Study

2.1 A records search was undertaken using desktop resources including the Multi-Agency Geographic Information for the Countryside ¹ (MAGIC) resource. MAGIC was used to search for records of designated sites, habitats and granted European Protected Species Licenses (EPSLs) within a 2km radius. Google Earth² was also used to study the nearby landscape.

Preliminary Bat Roost Assessment

- 2.2 Ecological consultant Tom Charlton (Natural England Class 2 Bat Survey licence number 2018-34622-CLS-CLS) carried out the PRA on Thursday 10th December 2020.
- 2.3 Survey effort was completed in line with official assessment guidelines³ and largely followed that recommended by the Chartered Institute for Ecology and Environmental Management (CIEEM)⁴ and British Standard Code of Practice⁵. The assessment followed the standard methodology. The site was searched using visual encounter survey techniques. Potential bat movement corridors and movement barriers were assessed and noted. During the site visit, where possible, all areas of the building were internally and externally examined for evidence of bats. The building survey included an internal and external assessment using a powerful torch and endoscope where required.

¹ Multi-Agency Geographical Information for the Countryside (MAGIC). Crown Copyright and database rights [2015]. Ordnance Survey 100022861. Available at: http://www.magic.gov.uk/

² https://www.google.co.uk/intl/en_uk/earth/

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

⁴ CIEEM (2015) Guidelines for Ecological Report Writing. CIEEM, Winchester.

⁵ British Standards Institution (2013) BS 42020:2013. Biodiversity – Code of practice for planning and development. British Standards Institution, London.



- 2.4 Internally, the building was assessed using a powerful torch beam to scan the walls and flat surfaces for droppings and other signs of bat activity. Feeding remains such as moth and butterfly wing concentrations were also surveyed for. All holes and crevices considered by the surveyor as likely to be used as a bat roost were examined to ascertain presence or absence of bats.
- 2.5 Externally, visual ground inspections of all elevations were undertaken using binoculars and a telephoto lens. Photographs were taken to capture likely features of ecological value to bats and birds i.e. missing tiles, damaged or missing mortar, exposed gable ends, gaps within soffit board, rotten timber and other potential entry points. Other external aspects of the building were surveyed, including windows, windowsills, external doors and the ground within close proximity of the structure was thoroughly inspected for bat droppings and feeding remains.

Table 1: Guidelines summary for assessing potential bat roost suitability

Suitability	Description of building, tree or structure				
Negligible	Negligible habitat features on site likely to be used by roosting bats				
Low	A structure or tree with one or more potential roost sites that could be used by				
	individual bats opportunistically. However, potential roost sites not suitable for				
	larger numbers or regular use (i.e. maternity or hibernation).				
Moderate	A structure or tree 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 or tree 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.				

Inspection for Birds

2.6 The survey also included an inspection for evidence of common nesting birds. Inside the building, artificial light was used to search for birds, dead birds, dead chicks, nesting material and eggs.

Limitations

 Bat droppings deposited in or around the exterior degrade quickly due to weather. The presence of bats or their roost must not be disregarded in the absence of droppings.



- For Health & Safety purposes ladders were not used to gain close views of the external roof structure. All external aspects of the building were assessed from ground level.
- Many bat species in the UK are crevice-dwelling bats and as such, are difficult to find during PRAs.
- Local biological records were not obtained.

3 RESULTS

Desk Study

Designated Sites

3.1 According to the MAGIC database, one statutory site exists within a 2km radius. Further to this, no none-statutory sites exist within the same radius. Information pertaining to the site can be found in Table 2.

Table 2: Site Designations

Site Name	Designation	Distance	Direction	Relevant Information
Selsley Common	SSSI	1.2 km	South	A 39-hectare site
				comprised of lowland
				calcareous grassland

SSSI = Site of Special Scientific Interest

Local Habitats

3.2 The proposed development site is located within a suburban setting immediately surrounded by housing development and residential gardens. A scattering of mature trees is present within the surrounding environment, and small blocks of woodland surround the site within a 2 km radius, the closest of which is 680 m to the south west. A substantial woodland block known as Standish Wood is located 1.9 km north. Furthermore, a large expanse of Lowland Calcareous grassland lies 1.2 km south and Wood Pasture and Parkland 490 m south. Notably, a railway line runs adjacent to the site at a distance of 170 m north, and the Stroud canal 270 m to the south.

Granted European Protected Species Licences (EPSLs) within a 2km Radius

3.3 According to the Magic website, four EPS licences for bats have been granted within a 2km radius of the survey site. The closest, for common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared *Plecotus auritus* and whiskered *Myotis mystacinus*, was



granted in 2010 at a site located 504 m to the north. Further licences were granted for common pipistrelle, brown long-eared, Natterer's *Myotis nattereri* and lesser horseshoe *Rhinolophus hipposideros* in 2011 (530 m south-west), greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe and serotine *Eptesicus serotinus* in 2015 (1.1 km south) and common pipistrelle in 2017 (1.7 km south-east).

Preliminary Bat Roost Assessment Results

3.4 The grounds of Springfield comprise a detached residential dwelling, detached outbuilding and a single garage with associated garden. For the purpose of this report, the residential dwelling is referred to as Building 1 (B1), outbuilding as Building 2 (B2) and single garage as Building 2 (B3). The PRA and all subsequent information pertain to these buildings only (see Fig. 2: Site Map).

Building 1

- 3.5 Building One is a two-storey residential dwelling supporting a pitched timber-framed roof clad with clay roof tiles. Adjoining the eastern gable wall is a single-storey element supporting a shallow-pitched roof clad with slate roof tiles. Two sperate loft voids are present: a large loft above the main residential dwelling, and a small loft void within the shallow-pitched roof of the single-storey element.
- 3.6 Externally, the roof of both elements is in excellent condition without any slipped or raised roof tiles, and ridge-capping appears to be securely fitted without any obvious gaps. Lead flashing surrounding a chimney was flattened and without raised areas, and no cracking or gaps were present within the external brickwork. Timber-framed windows are fitted throughout, all of which were closed and tightly-fitted at the time of the survey.
- 3.7 Internally, both loft voids were accessed via traditional loft hatches for thorough assessment. The floors are lined with a thick layer of loft insulation, and roof of the main loft was underlined with bitumen felt that was in good condition without gaps or tears. No areas of daylight or further entry points that would allow bats to gain entry into the building were noted during the assessment. The roof of the smaller loft above the single-storey element is not underlined, though no gaps were present within the roof and no daylight was visible at eaves level. Timber joists and purlins of the roof structure within both loft voids are exposed.
- 3.8 No bats, droppings, feeding remains or further evidence of bat activity were discovered in B1 during the assessment



Building Two

- 3.9 Building Two is a detached single-storey brick-built outbuilding supporting a pitched timber-framed roof clad with clay tiles. It is divided into three elements, each with its own timber access door, and no loft void is present. A small and open-top basement is located within the southerly element, accessible via internal ladder. The building is currently utilised for storage.
- 3.10 Externally, brick walls of the building were in good condition without cracking of openings that could be exploited by bats for roosting. Numerous raised tiles were present on both the east and west-facing roof aspects, as well as dislodged and absent tiles that would provide access points for bats into the building. Furthermore, ridge-capping was dislodged and raised in areas, and failed mortar was present at ridge-cap ends. Timber doors leading into each element were tightly fitted when closed.
- 3.11 Internally, all three elements are separated by brick dividing walls. The roof is not underlined and a number of openings within the roof structure are visible that would allow bat gain entry into the building. Timber joists and purlins of the roof structure are exposed, offering value to perch feeding bats. An open-top basement area is present within the most southerly-element, which could be easily accessed for assessment via a timber stairway. The internal walls of the basement were in good condition without cracking or gaps that could be exploited by bats.
- 3.12 No bats, droppings, feeding remains or further evidence of bat activity were discovered within Building Two during the survey effort.

Building Three

- 3.13 Building Three is a detached concrete-built single garage supporting a shallow-pitched metal-framed roof structure clad with timber board. The building is absent of a garage door and is in a poor state of repair. Externally, the concrete block walls were securely fitted without gaps or crevices that could be exploited by bats. Timber cladding the roof is in poor condition and features a number of open holes caused by damage and rot. Internally, the roof is not underlined, and daylight is visible through gaps throughout much of the roof structure. The open doorway located on the east-facing wall leaves the building largely open to the elements.
- 3.14 No bats, droppings, feeding remains or further evidence of bat activity were discovered in Building Three during the survey effort.



Table 3: Weather conditions during the preliminary roost assessment

Date	Start	Finish	Temp °C	Wind	Cloud	Rain	Notes
10/12/2020	10:00	11:30	9	Calm	0 %	Dry	N/A

Bird Inspection Results

3.15 No evidence of nesting birds was discovered within any of the surveyed elements during the daytime assessment.

4 INTERPRETATION AND RECOMMENDATIONS

- 4.1 A daytime assessment was commissioned with a view to assess three buildings located on the grounds of Springfield, Ebley, Gloucestershire for their potential to support roosting bats and nesting birds.
- 4.2 As part of the desk study, online resource MAGIC was checked for granted EPS licences and statutory and non-statutory designated sites within a 2km radius. Results from the online desk study indicated that four EPSLs have been granted within a 2 km radius of the site boundary. Furthermore, according to the MAGIC website, one statutory site and no non-statutory designated sites occur within a 2km radius (see limitations). The proposals are considered small-scale and therefore, provided that the surrounding habitats are not subjected to the inappropriate use of lighting, no impacts to nearby habitats beyond the site boundary are anticipated as a result of the development proposals.
- 4.3 The site is located within a suburban setting, largely surrounded by housing development and residential gardens which are considered to hold low value to bats. Small blocks of deciduous woodland surrounding the survey site within a 2km radius may support a variety wildlife including bat populations of various species. A scattering of mature trees as well as linear features of the surrounding environment including roads, a railway line and mature hedges would provide a level of connectivity for bats between the site and wider landscape. Additionally, Stroud canal, located 270 m to the south of the site, would provide foraging opportunities for bats.

Building Assessments

4.4 Whilst two loft voids are present within Building 1, both were found to be very well sealed and without any obvious entry points noted that would allow bats to gain entry into the internal aspect of the building. Additionally, the external roofs were in excellent condition without any slipped or raised tiles, and no features suitable for roosting by bats were identified. Building 2 has a number of Potential Roosting



Features (PRFs) including exposed timbers joists and purlins of the internal roof structure throughout all three elements, which would provide value to perch-feeding bats. Bats could achieve entry into the building through openings within the roof structure caused by slipped and raised roof tiles, and loose ridge-tiles provide further roosting value for crevice-dwelling bats. Building 3 is left largely open to the elements due to an open doorway and damage to the roof, and no PRFs were noted within this structure.

- 4.5 No bats or evidence of their presence was discovered within any of the buildings during the assessment.
- 4.6 Taking the above into consideration, Building 1 and Building 3 are considered to hold negligible roosting potential. Whilst no bats or further evidence of their activity was discovered within Building 2, due to the presence of PRFs this structure is considered to hold low roosting potential for bats. In the absence of appropriate mitigation and compensation, any bats which may be utilising Building 2 for roosting could be disturbed, injured or killed during the proposed works and any roosts would be destroyed.
- 4.7 It is recommended that prior to any works commencing on Building Two, one nocturnal survey should be undertaken to ascertain presence/absence of bats. Following national guidelines, the survey should take place between the optimal nocturnal bat survey period between May and August. Two surveyors would be required to cover the survey area. Should bats be found to be utilising the building during nocturnal survey effort, further surveys may be recommended, and a European Protected Species Licence obtained from Natural England in order for the development to lawfully proceed.

Birds

4.8 No evidence of nesting birds was discovered during the survey effort, and no impacts to nesting birds are anticipated as a result of the development proposals. Should evidence of nesting activity be discovered at any point during development works, all works should cease and Cotswold Environmental Ltd contacted for further advice.



APPENDIX A: LEGISLATION SUMMARY

National Planning Policy Framework 2019

The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2019) states: Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also



important considerations in these areas and should be given great weight in National Parks and the Broads. The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 172), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

Wildlife & Countryside Act 1981 (as amended)

The Wildlife & Countryside Act 1981 (as amended) [WCA] is the primary legislation for England and Wales for the protection of flora, fauna and the countryside. Part I within the Act deals with the protection of wildlife. Most European Protected Species offences are now covered under the Conservation of Habitats and Species Regulations (see below), but some 'intentional' acts are still covered under the WCA, such as obstructing access to a bat roost.

The WCA prohibits the release to the wild of non-native animal species listed on Schedule 9 (e.g. Signal Crayfish and American Mink). It also prohibits planting in the wild of plants listed in Schedule 9 (e.g. Japanese Knotweed and *Rhododendron ponticum*) or otherwise deliberately causing them to grow in the wild. This is to prevent the release of invasive non-native species that could threaten our native wildlife.

The provisions relating to animals in the Act only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity. There are 'defences' provided by the WCA. These are cases where acts that would otherwise be prohibited by the legislation are permitted, such as the incidental result of a lawful operation which could not be reasonable avoided, or actions within the living areas of a dwelling house.



Licensing

Certain prohibited actions under the Wildlife and Countryside Act may be undertaken under licence by the proper authority. For example, scientific study that requires capturing or disturbing protected animals can be allowed by obtaining a licence – e.g. bat surveys.

Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 (which are the principal means by which the EC Habitats Directive is transposed in England and Wales) update the legislation and consolidate all the many amendments which have been made to the Regulations since they were first made in 1994. These regulations provide for the:

- protection of European Protected Species [EPS] (animals and plants listed in Annex IV Habitats
 Directive which are resident in the wild in Great Britain) including bats, dormice, great crested newts,
 and otters;
- designation and protection of domestic and European Sites e.g. Site of Special Scientific Interest
 [SSSI] and Special Area of Conservation [SAC]; and
- adaptation of planning controls for the protection of such sites and species.

Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in exercising their function – i.e. when determining a planning application. There is no defence that an act was the incidental and unavoidable result of a lawful activity.

It is possible for actions which would otherwise be an offence under the Regulations to be undertaken under licence issued by the proper authority. For example, where a European Protected Species has been identified and the development risks deliberately affecting an EPS, then a 'development licence' may be required.

Bats

In England and Wales, bats and their roosts are protected under the Conservation of Species and Habitats Regulations 2010 (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.

Birds

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.

APPENDIX B: MAPS

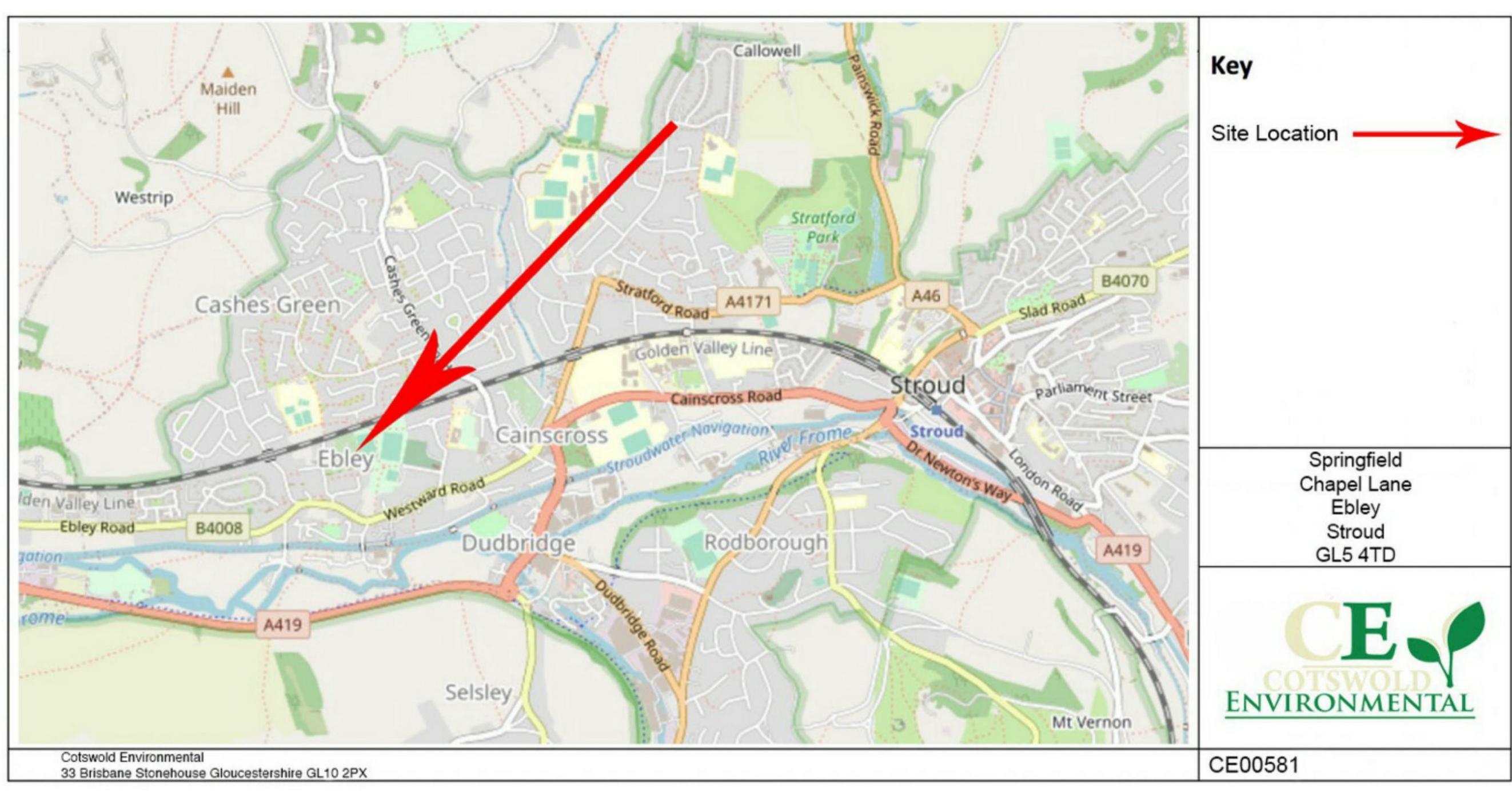


Figure 1: Site location map





Figure 2: Site Map

APPENDIX C: SITE IMAGES



Photo 1: Red line highlights Building One (B1).



Photo 2: External roof of B1, which was in good condition without any obvious slipped or raised roof tiles.



Photo 3: Single-storey element attached to Building 1.



Photo 4: Internal view of loft element above B1.



Photo 5: Internal view of small and shallow loft space above single-storey element of B1.



Photo 6: Red line highlights Building Two (B2).





Photo 7: Red arrows point to gaps beneath roof tiles and ridge tiles. B2.



Photo 9: View of open basement located within southerly element of B2.





Photo 9: Red line highlights Building 3.

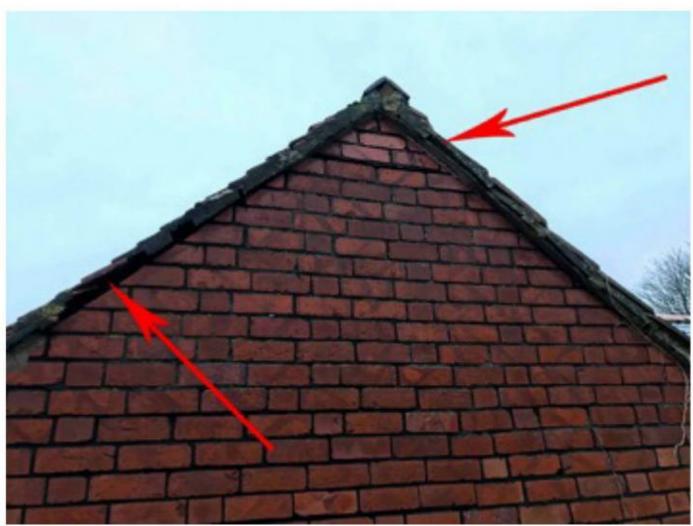


Photo 8: Red arrows point to gaps caused by failed mortar at southern gable wall. B2.



Photo 10: Internal brick walls of basement were in good condition without cracking. B2.



Photo 10: Interior view of survey Building 3.