The Hop Pole, Limpley Stoke

Bat Report

Final

V 1.0

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1 INTRODUCTION

1.1 BACKGROUND

Johns Associates Ltd was commissioned by the Limpley Stoke Community Benefits Society Ltd (LSCBS) to undertake a Potential Bat Roost Inspection and subsequent Phase 2 bat emergence/re-entry surveys of The Hop Pole former public house, Limpley Stoke. This assessment is in support of a Listed Building Consent application to allow the urgent repairs and enhancement works proposed for 2023 to proceed.

The Hop Pole is a former public house of long standing located in Limpley Stoke between Bradford and Avon and Bath.

The property is C17th, possibly earlier, with a rectangular building at its core. This has been added to on three possibly all four sides at various periods in the building's history. The land surrounding the building is steeply sloping and uncharacteristically the building is set at 90° to the general fall of the land on what appears to be a cut and fill terrace plot. The principal elevation is south facing with a primary entrance porch and small area of car parking to the front. To the rear is a large garden and the majority of phased alteration works providing service accommodation. The east and west ends are gabled and blind, the west being a hard up against a retaining wall and neighbouring property and the east a high retaining wall dropping onto the highway.

The building is constructed from local stone from several locations and has been roofed with double Roman tiles. Windows are mullioned stone ogee style windows with a variety of casements all originally bedded in lime mortar. There is evidence of extensive and multiple alterations that are proving difficult to fully decipher in part due to significant over pointing with cement and unauthorized removal of internal fabric.

The building is owned by LSCBS who is the recipient of a substantial grant from the 'Community Ownership Fund'. A critical condition of the grant (awarded on 10th December 2022) is that the funds must be expended by 10th December 2023. This grant is critical to the successful repair and renovation of the building. To enable LSCBS to have the best chance of exploiting the grant it has become necessary to divide the project into parts that will enable works to be progressed in order of urgency and in a sequence that will permit the development of designs for the extension and renovation to an appropriate time scale. The approach will allow the proposals to be presented for approval and for the packages to be let to appropriately skilled contractors, all within the short timeframe required by the COF.

This document has been prepared to support the first of these applications – Listed Building Consent for urgent repairs and enhancement works.

The proposed works associated with the Listed Building Consent include:

- Roof – repair, renewal and enhancement
- External Masonry – repair, renewal and enhancement
- External Masonry – repointing
- Windows and External Doors – repair, renewal and enhancement
- Removal of modern services (all defunct)
- Renewal of gutters and rainwater goods
- External redecoration

1.2 PURPOSE OF THIS REPORT

The information contained within this report has been compiled to specifically address the following with respect to bats (BCT, 2016):

- Are proposed activities likely to impact on a designated site, thus requiring consultation with relevant bodies;
- Are proposed activities likely to impact any bat species (or genera) confirmed/thought to be present;
- Are proposed activities likely to impact any bat roosts that will be affected (on or off site);
- Are proposed activities likely to impact any Core Sustenance Zones of bats from any off-site roosts; and

- Are there are any rare bat species within the area that may require species-specific survey methodologies (including migratory species for coastal sites).

Should any potential impacts be identified, further survey work may be required; and suitable alternative proposals and methods may be required to reduce the detrimental effect on bats. The specific objectives of this study are:

- To provide information on the existing evidence in the buildings with regards to bats or the potential for bats at the site;
- To inform the classification of the buildings as bat roosts or not; and to identify whether additional survey work is required to confirm likely presence or absence of bats from the buildings;
- To identify potential constraints and opportunities that bats may pose to the development proposals; and
- To outline appropriate mitigation and enhancement proposals, if necessary.

Based on the specific nature of the Listed Building Consent proposals (associated with the building only), it is considered reasonable to discount potential effects on other ecological receptors, other than nesting birds.

1.3 LEGISLATION AND PLANNING POLICY

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 provides protection for species listed under this legislation (European Protected Species), which includes bats. The legislation concerning bat species in England is set out within the provisions of these Regulations and the Wildlife and Countryside Act 1981 (as amended) (UK Government, 1981).

Legal offences associated with bats in England and Wales include inter alia:

- Deliberate capture, injury or killing;
- Deliberately disturb bats in a way that would significantly affect their local distribution or abundance, or affect their ability to survive, breed or rear young;
- Intentional or reckless disturbance of a bat in its roost;
- Damaging or destroying a bat roosting place (even if bats are not occupying the roost at the time);
- Intentionally or recklessly obstructing access to a bat roost; and
- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat.

Some bat species are also included within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Natural England and the Commission for Rural Communities, 2006) which lists flora, fauna and habitats considered by the Secretary of State to be of principal importance for conserving biodiversity.

The Wildlife and Countryside Act 1981 (as amended) states inter alia all birds, their nests and eggs are protected by law and it is thus an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.

The publication of the "England Biodiversity List" satisfies the requirements of Section 41 of the NERC Act 2006 for the conservation of biodiversity. Section 40 of the NERC act 2006 requires public bodies, including local planning authorities, to have regard for the conservation of biodiversity in England, when carrying out their normal functions.

Section 11 of the National Planning Policy Framework (NPPF) (Department for Communities and Local Government, 2012) requires impacts to biodiversity to be minimised and all developments should include a net gain in biodiversity. The NPPF also emphasises the requirement for ecological networks to be created throughout the wider landscape. This can be achieved by sympathetic landscape and structure design, although these proposals are understood to be permitted development. Our recommendations on the most effective measures to employ to achieve this are outlined in section 5.4.

1.4 SITE DESCRIPTION AND LOCATION

The area which hereafter is referred to as the 'Site', comprises the building associated with the former Hop Pole public house (see **Error! Reference source not found.** and 2). The Site is located within the village of Limpley Stoke and as such is associated with residential properties and gardens (including the large grounds of the Limpley Stoke Hotel), with a main line railway, local roads/driveways/parking and the River Avon corridor nearby.

The wider landscape context includes the wooded slopes of the Limpley Stoke valley, grazed grassland on the valley floor, other residential and agricultural buildings, the River Avon and the Kennet and Avon Canal.

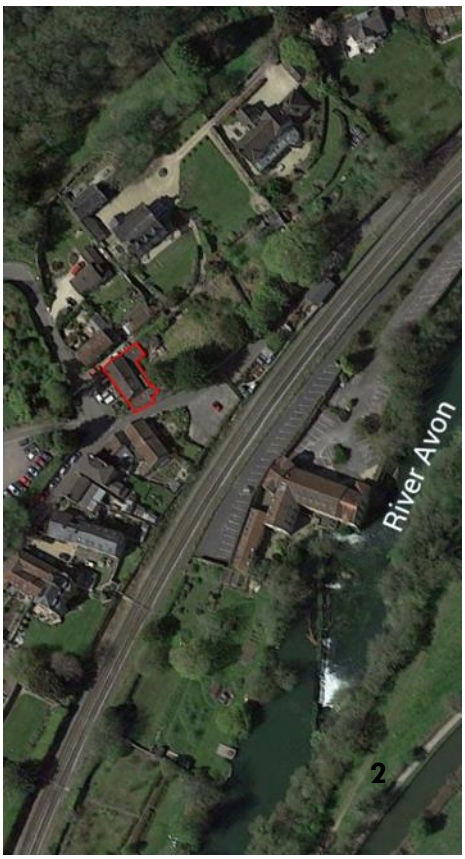

Figure 1: Location of the Hop Pole former public house in Limpley Stoke. North is towards the top of the page. Image courtesy Google Earth

Figure 2: Hop Pole former public house – image courtesy Google Earth

Plates 1 to 5 illustrate the general external views of the Hop Pole.

Plate 1: View of the front of the Hop Pole

Plate 2: View of the front of the Hop Pole showing northwest gable end

Plate 3: View of the southeast gable end

Plate 4: View of the rear of the Hop Pole

Plate 5: View of the rear of the Hop Pole showing the kitchen extension

2 METHODOLOGY

2.1 DESK STUDY

The local area supports a wide range of bat species that utilise roosts such as buildings, other structures, former mines and quarries, and trees. The landscape is rich in foraging opportunities and is located within well-connected and critical corridors, such as the River Avon valley.

A search using magic.gov.uk has confirmed that the site is located 1.2km from nearest statutorily designated site of nature conservation importance associated with bats (Winsley Mines Site of Special Scientific Interest SSSI) that is also part of the internationally designated Bath and Bradford on Avon Bats Special Area of Conservation (SAC) that cite bats as a feature of interest, with other sites that form part of this international designation also located within 5km. These include:

- Combe Down and Bathampton Down Mines SSSI located at ST 821 603 – designated for its geological interest but known to support a range of roosting bat species.
- Winsley Mines SSSI (also part of the Bath and Bradford on Avon Bats SAC) located at ST 794 607 are important hibernation sites for the rare and endangered greater horseshoe bats *Rhinolophus ferrumequinum*. A number of other bat species have also been recorded including lesser horseshoe *Rhinolophus hipposideros*, whiskered *Myotis mystacinus*, Brandt's *Myotis brandti*, and Natterer's *Myotis nattereri*.
- Browns Folly SSSI (also part of the Bath and Bradford on Avon Bats SAC) located at ST 793 659 is important for its wintering bat population as well as supporting bats at other times of the year including Natterer's, whiskered, Brandt's, brown long-eared *Plecotus auritus*, greater horseshoe and lesser horseshoe.
- Iford Manor SSSI located at ST 802589 consists of a large country house and gardens situated on the Avon/Wiltshire border alongside the River Frome and surrounded by water meadow, permanent pasture and hedgerows leading up into nearby woodland. The roof voids of the Iford Manor barn and Iford Manor mill are used as a summer maternity roost by a colony of greater horseshoe bats. Iford Manor contains the second largest breeding colony in England (with counts in excess of 250 bats recorded each year) and is one of only 14 known breeding roosts in the country. Trees within the orchard are known to be used by Daubenton *Myotis daubentonii* and Noctule *Nyctalus noctula* bats and are also used by greater horseshoe bats as a flight path on emergence.
- The Bath and Bradford on Avon Bath SAC is located throughout the wider area and is associated with many of the SSSIs listed above. The following Annex II species are a primary reason for selection of this internationally important site:
    - 1304 Greater horseshoe bat This site in southern England includes the hibernation sites associated with 15% of the UK greater horseshoe bat population and is selected on the basis of the importance of this exceptionally large overwintering population.
    - 1323 Bechstein's bat *Myotis bechsteinii*. Small numbers of Bechstein's bats have been recorded hibernating in abandoned mines in this area, though maternity sites remain unknown.

  It is also associated with Annex II species present as a qualifying feature, but not a primary reason for site selection:
    - 1303 Lesser horseshoe bat

It is considered that the proposed renovation works would not affect the status of any designated sites due to their small scale and temporary nature in terms of disturbance to the roof, and distance from these sites.

A number of Natural England bat licences have been issued for development in the local area, confirming local bat roost presence in buildings. These can be seen by using www.magic.gov.uk.

It has not been considered appropriate or necessary, at this stage, given the highly focused, local and low impact nature of the proposals (including the slow and careful approach needed to implement the Listed Building Consent) to carry out a wider desk study for this Site or obtain a Local Records Centre data search.

2.2 POTENTIAL BAT ROOST SURVEY

Based on the focused nature of the proposed Listed Building Consent works to the building the focus of this appraisal was on bats and any evidence of birds using the building for nesting.

This initial survey entailed a detailed external and internal survey of the Hop Pole on the 6th May 2022 by an experienced ecologist (Matt Johns BSc MSc CEnv MCIEEM – bat class licence registration number: 2015-14942-CLS-CLS). The surveys followed the professional survey guidance as detailed in Bat Survey Guidelines for Professional Ecologists: Good Practice Guidelines (Bat Conservation Trust, 2016)

The survey entailed a direct search for evidence of bats on both internal and external features of the building. The external building inspection was carried out from the ground and from a surveyors ladder. Other supporting equipment included close focusing binoculars, an endoscope and a torch, as required. The building was examined externally for features that could support roosting bats and features that could lead to internal potential roost features (PRFs). The building was also subject to detailed internal examination, including all internal rooms and roof voids, where safely accessible. Where areas were not accessible due to unacceptable safety risks, a precautionary approach has been taken to the assessment of the suitability of this structure for bats.

The presence of roosting bats can be spotted through signs such as accumulations of moth or butterfly wings or bat droppings and staining and/or scratch marks around potential entrance and exit points. However, the absence of droppings/evidence cannot be treated as conclusive evidence that bats are not present, and therefore, an assessment was made of the potential of the building to support bats based on the criteria detailed in Table 1.

Table 1 - Guidelines for assessing the potential suitability of proposed development sites for bats, based on presence of habitat features within the landscape, to be applied using professional judegement (Bat Conservation Trust, 2016).

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions (a) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential (b).	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions (a) and surrounding habitat but unlikely to support a roost of high importance/ value for the local bat population (c).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
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 due to their size, shelter, protection, conditions (a) and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

a. For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

b. This system of categorisation aligns with BS8596:2015 Surveying for bats in trees and woodland (BSI,2015).

c. Assessment is made with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed.

2.1 BAT EMERGENCE AND RE-ENTRY SURVEY

One dusk emergence and one dawn re-entry survey were carried out at the Hop Pole. These surveys were undertaken on 21st June 2022 and 12th July 2022. Two experienced surveyors and two survey assistants were positioned to cover various aspects of the building. The dusk emergence surveys commenced 15 minutes before sunset and continued for at least one and-a-half hours after sunset. This survey was supported through the use of an infra-red camera. Four surveyors were also used to cover the pre-dawn surveys, which started 2 hours before dawn and concluded at dawn.

The surveys were undertaken during the optimal months for conducting bats surveys and were conducted in suitable weather conditions; in full compliance with Bat Survey Guidelines for Professional Ecologists: Good Practice Guidelines (Bat Conservation Trust (BCT), 2016).

Bat detectors used were Elekon BatLogger M. The surveyors were positioned in order to have an unrestricted view of the identified potential roost entry/exit points. A bat detector was also placed within the loft void to aid the detection of any internal bat calls prior to and during the surveys. In addition, a Rexing B1 infra-red camera was positioned alongside the surveyors, to aid in monitoring bat activity levels.

All bat activity observed during the survey period was recorded although the focus was on any emerging or re-entering bats and the point of entry or exit from the building. Bat detector recordings and infra-red camera footage were analysed following the survey in order to confirm the identification of any bats recorded during the surveys.

All calls associated with any emerging/re-entering bats were analyzed using established methods and call parameters as detailed in (Barataud, 2016) (Middleton, Froud, & French, 2014) and (Russ J. , 2012).

Table 2 - Emergence Survey Details

Survey Type	Number of Surveyors	Date	Start/End time	Weather	Lead Surveyor
Emergence	4 + IR Camera	21/06/22	22:14 – 00:14	17°C, dry, no wind, cloud 4/8	Matt Johns[1]
Re-entry	4	12/07/22	03:07 – 05:07	13°C, dry, wind 2mph, cloud 2/8	Matt Johns[1]

[1] BSc (Hons) MSc CEnv MCIEEM, Level 2 Bat Licence (2015-14942-CLS-CLS) and NE Earned Recognition CL-47 Licence BER00091

2.2 ECOLOGICAL CONTEXT ASSESSMENT

An assessment of the ecological context of the site was undertaken with notes made with respect to the suitability of the on-site and surrounding habitats to support foraging and commuting bats. The ecological context of a structure, such as a building, can significantly influence the likelihood of it supporting bat roosts. For example, a structure of low suitability is more likely to be used if it is set within an area of high-quality habitat with few alternative roosting opportunities. Likewise, a highly suitable structure is less likely to be used by roosting bats if it is isolated within an area providing no suitable foraging or commuting habitat.

The ecological context of the development site was assessed for the following characteristics:

- Proximity to suitable foraging habitats
- Connectivity to known roosts
- Connectivity to foraging areas
- Lighting and disturbance effects

2.3 LIMITATIONS, CONSTRAINTS AND ASSUMPTIONS

The findings of this report are valid at the time of writing (September 2022, reviewed in January 2023). Should there be delays to the project timetable and/or implementation of the proposed development beyond 2023, update survey work may be required. In this instance, advice should be sought to ensure the data, recommendations and conclusions set out in this report remain valid.

No other limitations or constraints with regard to the field survey or desk study were encountered.

3 SURVEY RESULTS

3.1 POTENTIAL BUILDING ROOST ASSESSMENT

3.1.1 External

The Hop Pole is a two storey solid stone built former public house, set between the junction of two minor roads, an adjacent residential property, drive and garden, and its own former pub garden. It is understood that a number of historical modifications have occurred to the building, with the original form being extended to include some additional single storey extensions. Some more recent alterations to remove certain features were undertaken by a previous owner. The building is considered to require urgent repair as a result of a wide range of external and internal dilapidations resulting in water, light and wind ingress, structural and other issues.

The main roof is double-pitched and supports double roman tiles, with three stone chimneys, with ridge tiles and solid stone coping at the gable ends. The eaves include wooden barge boards supporting the guttering.

Windows are present on the front of the building, both on the upper and lower floors and front and rear. A stone porch is also present at the front.

A number of single storey extensions are present. One (associated with the southeast gable end), is solid stone and has a single pitched roof with double roman tiles and barge boards and windows. Two further extensions are located in the former pub garden. One provided a 'snug' and has a double pitched sloping roof with double roman tiles, ridge tiles, stone coping at its eaves, with windows and entry door, the second is associated with the former kitchen and is constructed from solid ashlar blocks with a single pitched roof also with double roman tiles, ridge tiles, windows and door.

The front and sides of the Hop Pole are well lit from streetlights. The rear elevation, facing the garden, is darker.

Full details can be found in the Condition Survey Report prepared by Harrison Brookes Architects (November 2022). Please also refer to Plates 1 to 5 (above) for images of the external form of the building.

No direct evidence of bats or bat usage was found as a result of the external inspection. A range of potential bat roost features were identified, both providing potential access to the roof void and also some external features that may support roosting bats directly. These are illustrated on Figure 3 and Figure 4. These included:

- Broken tiles leading to internal roof void
- Lifted roof tiles leading to internal roof void
- Missing mortar leading to shallow void between stone blocks
- Lifted lead flashing
- Gaps under overhanging eaves tiles leading to internal roof void
- Gaps behind barge boards leading to small cavity between board and stone wall

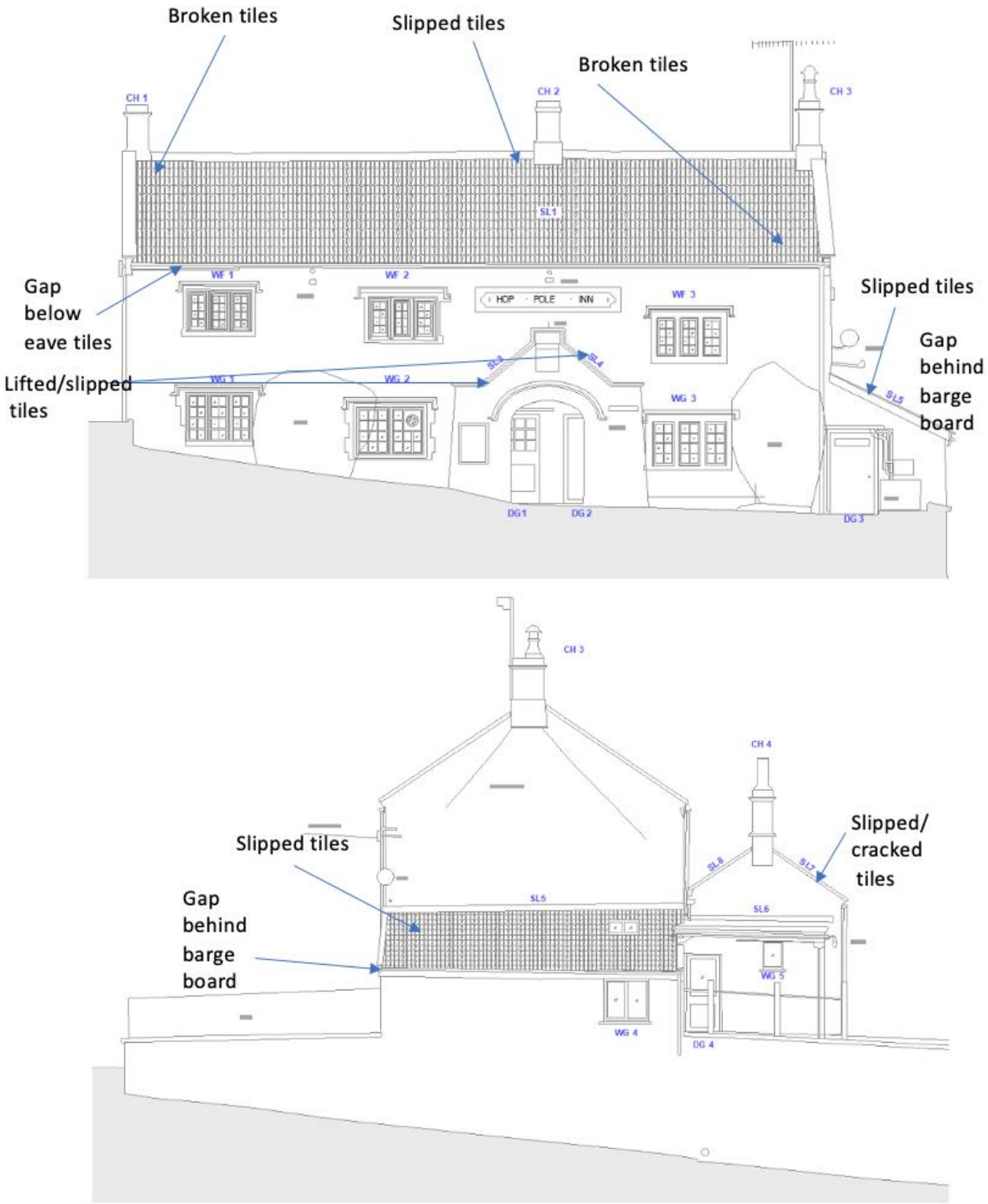

Figure 3: Locations of Potential Bat Roost Features (blue references are from the Building Condition Report)

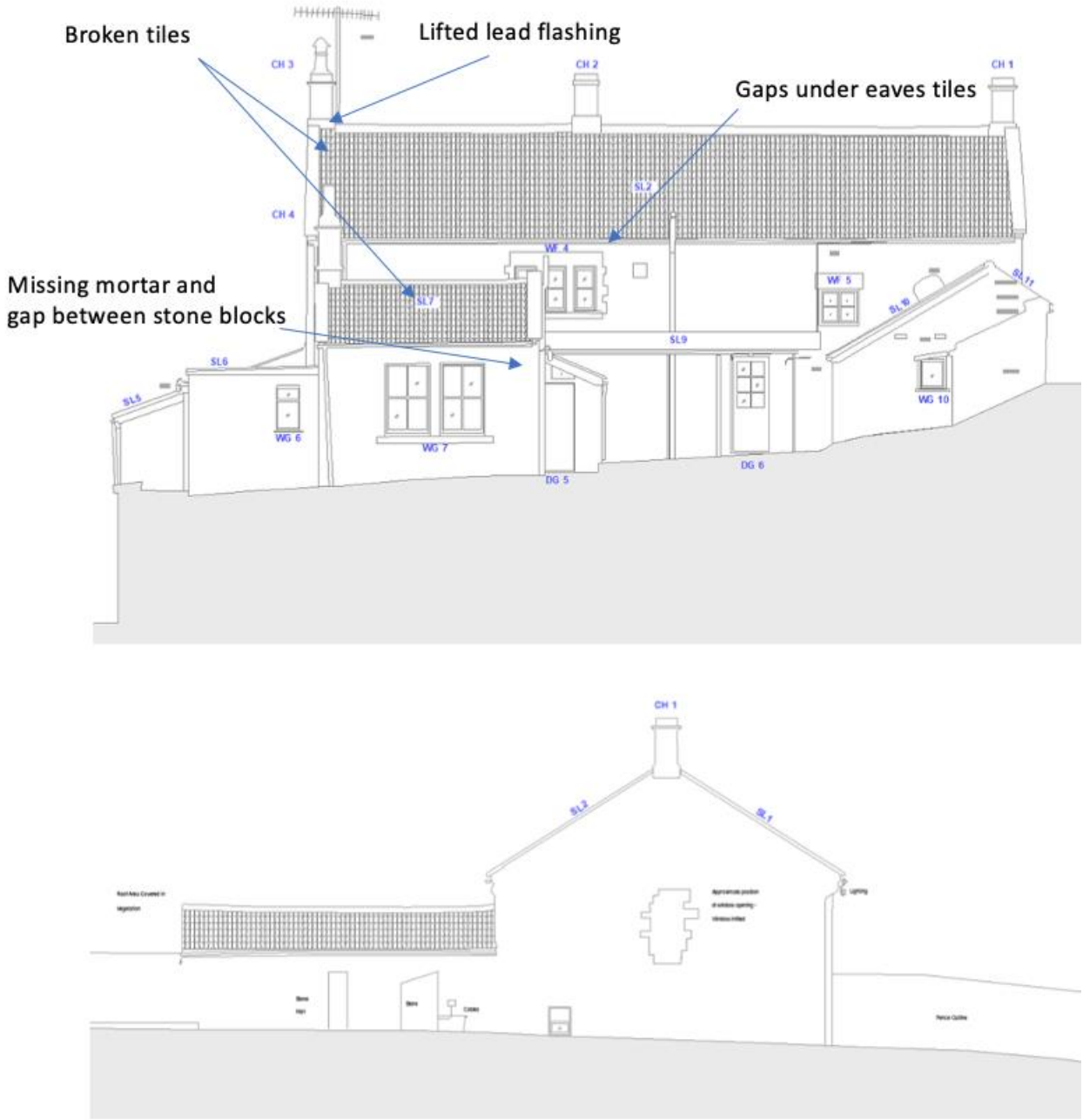

Figure 4: Locations of Potential Bat Roost Features (blue references are from the Building Condition Report)

3.1.2 Internal

Access to all internal spaces and features was possible at the time of survey. The ground and first floor spaces were well lit by natural lighting/windows. The ground floor comprised the main public and business areas of the former public house, including bar, snug, restaurant, toilets, kitchen and 'beer cellar' (although this is not a cellar and is at ground level – the southeast extension). The first floor was characterised by the accommodation aspects of the Hop Pole. The ground floor rooms were in a mixed condition, with some exposed solid stone walls, some timber panelling and some exposed ceiling timbers. The first-floor rooms were generally plastered and painted with exposed timber floors.

The roof void was accessible via a single loft hatch. The roof void was moderately lit from natural lighting entering the building through gaps below a number of roof tiles, also admitting wind and rain (evidenced by moving cobwebs and damp areas/mould).

There was a total absence of underfelt throughout the roof with tiles being directly fixed onto wooden batons. This allowed a full inspection of all tiles. No bats or evidence of bats was observed.

Exposed timbers are present including the ridge beams, rafters, purlins and posts. No mortice joints or fixings with gaps/crevices were evident. No evidence of bats was recorded within the open timber structure of the roof void. No associated evidence such as staining, polishing or scratch marks were identified. No characteristic odour associated with larger numbers of bats or bat calls were observed/heard.

The floor was not boarded, with exposed joists and old fibreglass insulation being present. Access was possible by timber boards (see Plate 6). A detailed inspection of the void floor was carried out using a high lux torch. No evidence of bat droppings, dead bats or other potential evidence was recorded.

No evidence of nesting birds was recorded.

Plates 6 to 10 illustrate the internal features.

Plate 6: General internal loft void view showing solid stone gable end and exposed timbers.

Plate 7: Example of light / environmental entry to the roof void via lifted/gaps below tiles.

Plate 8: View of tiles showing an absence of underfelt or below tile cavity.

Plate 9: Typical view of well-lit downstairs room.

Plate 10: Example of well-lit first floor room.

3.1.3 Summary of Potential Roost Suitability

Whilst on first inspection it appeared that the Hop Pole could be considered to offer a High Suitability for roosting bats (based on numerous lifted/slipped/gaps under tiles, together with some other features (lifted flashing, occasional external gaps between stone blocks and gaps behind some barge boards), further detailed inspection using ladders, endoscopes, high lux torches and internal inspections provided evidence to robustly support the conclusion that the building only offers a Moderate Suitability for roosting bats.

This classification is supported by the following evidence:

- External features such as small gaps between stone blocks and barge boards did not contain bats when examined by endoscope/torch;
- No external evidence of staining/scratch marks/droppings on accessible locations below potential roost features;
- Well lit ground floor and first floor rooms during daylight hours;
- An absence of evidence of bats (and evidence such as droppings, scratch/polish marks, corpses, urine stains, sounds, feeding remains, odour from a careful internal inspection of ground and first floor rooms/features using an endoscope/torch);
- Well-lit exterior (apart from the rear) from nearby streetlights during hours of darkness, that also illuminate the front facing upper rooms;
- The absence of underfelt below the roof tiles also allowing a clear inspection of the roof and associated roof timbers with no evidence of bats being recorded; and
- The ingress of daylight, wind and water into the roof void and lack of insulation to regulate internal temperatures.

These factors also support the conclusion that the Hop Pole is not suitable as a potential hibernation roost for bats.

In conclusion, the Potential Roost Assessment of the Hop Pole supports the classification of the building as having Moderate Suitability for roosting bats, meaning it is a structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high importance/ value for the local bat population (because of the constraining factors listed above and lack of evidence of bat usage).

Based on this assessment, two emergence and re-entry bat surveys will be required in suitable months of the year (ideally during the key breeding season) to confirm the use of the Hop Pole by bats (including species, numbers, likely function) or to provide reasonable confidence that it is not a bat roost. Should bats be recorded emerging/re-entering during these surveys, a further survey would be necessary.

3.2 EMERGENCE AND RE-ENTRY SURVEY

Four surveyors were positioned to ensure all aspects of the Hop Pole were clearly visible during both surveys. One detector was placed in the roof void on both occasions. An infrared device was used to assist the observations of potential bat emergence/re-entry at the rear of the building, which was less illuminated by artificial lighting.

3.2.1 Emergence Survey (Survey 1)

Moderate bat activity levels were recorded throughout the emergence survey in June, with bats being observed and detected at the front, rear and side of the Hop Pole. The greatest activity was associated with the rear garden, with a number of common and soprano pipistrelle bats being observed and heard feeding over the garden and around the trees. The pipistrelles were seen/heard flying around the side of the building and its front, sometimes moving away over nearby gardens before returning. This was correlated through the use of two-way radios by the surveyors. Other bats were also heard at times, including noctule bat, lesser horseshoe bat and myotis species were noted as commuting past the Hop Pole – heard but not seen. No characteristic feeding buzzes were recorded from these species.

No bats were observed/heard/detected emerging from the Hop Pole in June.

No bat calls were recorded on the internally positioned bat detector.

No bats were seen emerging on the footage recorded by the infra-red device (which was positioned at the rear of the building for this survey).

3.2.2 Dawn Re-entry Survey (Survey 2)

The dawn re-entry survey started quietly, with no bat activity recorded within the first half of the survey. Common and then soprano pipistrelle were first recorded from 04:03 foraging in the vicinity of the Hop Pole. Serotine, noctule and Myotis sp. bats were heard echolocating as they commuted past the building between 04:25 and 04:46, with reducing numbers of foraging pipistrelle as dawn approached. No bats were detected after 04:58.

Conditions were excellent and with increasing light levels (and supported by street lighting) all aspects of the building were clearly visible to the surveyors.

No bats were observed/heard/detected entering the Hop Pole in July.

No bat calls were recorded on the internally positioned bat detector.

No bats were seen re-entering the building on the footage recorded by the infra-red device.

3.3 ECOLOGICAL CONTEXT ASSESSMENT

The Site is situated in a rural location, associated with Limpley Stoke.

The features that increase the suitability for bat roosting are:

- Proximity to a variety of medium to high quality foraging habitats (water, grassland and woodland) in the wider landscape; and
- Access for bats to potential roosting features within the building.
- Proximity to other potential building roosts.

The features that decrease the suitability for bat roosting are:

- Proximity to street lighting.

Therefore, the ecological context of the site has been assessed as optimal foraging and commuting habitat for bats but less suitable to support light sensitive roosting bats.

4 CONCLUSIONS

A robust assessment of potential roost suitability (external and internal) and emergence/re-entry surveys has been completed of the Hop Pole, led by a suitably experienced and licenced ecologist.

Although locally associated with habitat that is favourable and clearly used by a range of bat species and situated in a landscape that is of national and international importance for bats (including numerous SSSIs and an associated SAC), there are a range of factors that limit the suitability of the Hop Pole for roosting bats and in particular sustained and successful on-going usage. This is demonstrated by the lack of evidence found during the preliminary roost assessment and the environmental/structural factors that have been previously documented.

The emergence/re-entry surveys confirmed (in accordance with best practice methods) that it is reasonable to conclude that as of 2022, no bats were roosting in the Hop Pole and the Hop Pole is not a legally protected bat roost.

Based on these findings, the proposed works to the Hop Pole do not need to be conducted under an appropriate Natural England bat licence associated with the Conservation of Habitats and Species Regulations 2017 (as amended) and the proposals associated with the Listed Building Consent meet all legal requirements. They also meet relevant local and national policy associated with bats, subject to the provision of suitable enhancement measures through the repair/renovation of the Hop Pole (this is discussed further in the following section).

5 PRECUATIONARY MITIGATION AND ENHANCEMENT REQUIREMENTS

- Secure Listed Building Consent and discharge any ecology related conditions.
- Ecologist holding a bat licence to conduct a pre-works precautionary re-inspection of the internal/external elements of the hop Pole to confirm no change in condition and the findings set out in this report remain valid. Assuming no change, then works in 2023 can proceed without requiring a Natural England bat EPS licence. *If conditions have changed/evidence of bats are recorded, then work must not proceed until a Natural England bat licence has been granted. In this situation, suitable mitigation/compensation will be needed and the works must follow associated licence and method statement requirements.*
- Ecologist to prepare and deliver an ecological toolbox talk to roofing contractors.
- Two suitable bat boxes e.g Schwegler 1FD to be installed on mature yew tree in pub garden (away from any lighting) to provide external potential roosting opportunities for bats.
- No artificial contractor lighting directed on the roof of the building during the works.
- Incorporation of three ridge tile cavities and two bat tiles located on the front and two bat tiles located on the rear of the main roof.
- Commit to creating a rear pub garden that is full of a wide range of night-scented and other flowers, shrubs, trees and grassland to attract invertebrate prey species.

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