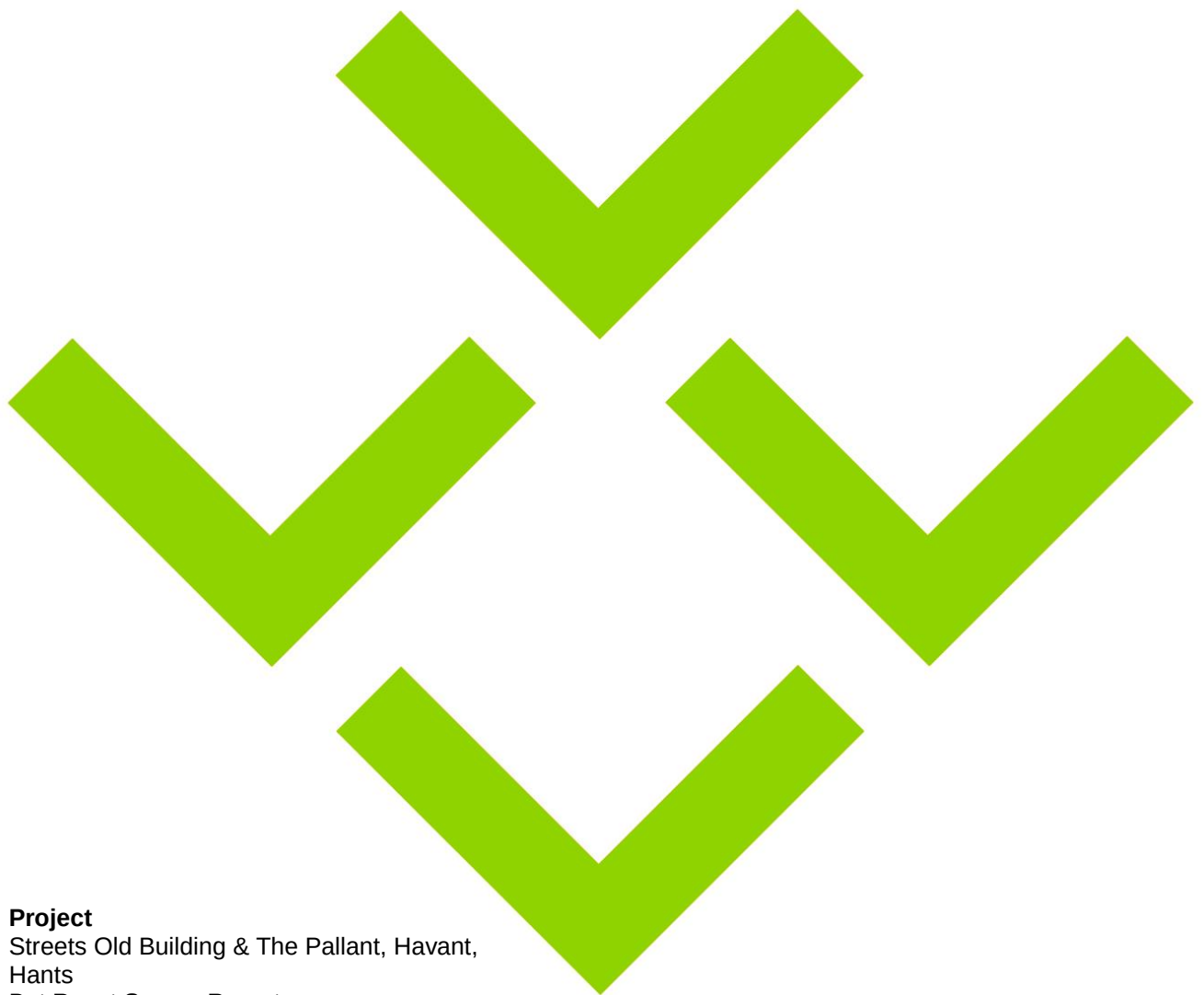




Project

Streets Old Building & The Pallant, Havant,
Hants
Bat Roost Survey Report

Project No

EC1039-05c

Client:

JNP Developments

Date

July 2020, updated October 2020

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Report consultants

Bat surveys: Peter Hayward, Kelly Brown, Jake Cousins

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Final Version completed by:

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Technical check completed by:

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Project Manager Disclosure:

The advice which we have prepared and provided is true to the best of our knowledge and with the information made available at the time and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct.

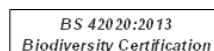
Quality check completed by:

Lisa Higgs

Date

July 2020, updated October 2020

This Assessment is only valid for the named client and the project described. enims Ltd accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purpose for which it was commissioned. The assessment is only valid for a period of six months. If the scope of works or timing of the project is altered the advice given in this report may not be valid.



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Executive Summary

Following the preliminary roost assessment carried out by enims during December 2019, it was found the building had low potential for roosting bats and a single bat roost survey should be carried out in order to establish whether bats species were roosting on-site at 10a The Pallant, Havant. The proposed works to The Pallant are to develop the site into residential housing, however in the short term these buildings will be retained as contractor accommodation for development of the wider site.

One dusk emergence survey was carried out during 22nd July 2020. Three surveyors were used to watch the building and bat calls were recorded and analysed.

No emergences or re-entries were observed during the survey visit to the building itself, however a single common pipistrelle bat was observed emerging from the tiled roof of The Chapel adjacent to the proposed development. There was low bat activity in the surrounding area and two bat species were recorded on the site.

Development works are unlikely to cause direct impacts to the bat roost within The Chapel roof as this is some distance away from the proposed development and lighting in the area is already present. However, precautions should be taken to ensure no indirect impacts to the roost in either the short or long term to prevent impacts to local bat populations. Mitigation should include sensitive lighting both during the construction and occupation phases and attention should be given to not disturbing the roof of The Chapel by either construction works or lighting during the development.

There is the potential for enhancements to the site including integrating a sensitive lighting scheme and the additional of bat boxes to the development.

It is predicted that no negative impact to protected bat species or their local conservation status will be sustained as a result of the proposed works.

Further Survey Effort/Ecology Requirements

Mitigation is required to ensure no impacts to the bat roost in adjacent The Chapel tiled roof. A sensitive lighting strategy is required during both construction and occupation and no direct lighting of The Chapel should occur.

During construction, any required renovations to the roof adjoining The Chapel should ensure the tiled roof of The Chapel is not disturbed and lighting around this area should not directly light the roof. Should scaffolding be required this should be kept within the site boundary.

1 Introduction

1.1 Context and Site Description

enims were commissioned to carry out a bat roost survey of two joined buildings located at The Pallant, Havant, Hampshire, following a Preliminary Roost Assessment (PRA) completed in December 2019 which found features which may be utilised by roosting bats. The building had Low Potential for bats.

The Pallant is a residential road within Havant town centre. Havant is a built-up area and Building 1 and Building 2 are the only two buildings remaining on the site as previous buildings have also been demolished. The remainder of the site comprises of hardcore, brick and rubble.

Local bat records indicate the following bat species in the surrounding 4km. These comprise records of at least fourteen species, including western barbastelle *Barbastella barbastellus*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, Nathusius' pipistrelle *P. nathusii*, brown long-eared *Plecotus auritus*, serotine *Eptesicus serotinus*, noctule *Nyctalus noctula*, Leisler's *Nyctalus leisleri*, alcathoe *Myotis alcathoe*, Bechstein's *M. bechsteinii*, Brandt's *M. brandtii*, whiskered *M. mystacinus*, Daubenton's *M. daubentonii* and Natterer's *M. nattereri* bats.

In 2014 a European Protected species licence (2014-1826-EPS-MIT) was granted to destroy the resting place of common pipistrelle bats approximately 1.1km south of the site.

As all native bat species are material planning considerations, which must be accounted for before a planning decision is made, it is important to establish their presence or likely absence prior to the removal or alteration of any buildings which may potentially act as roosts. For this reason, bat roost surveys were conducted.

Appendix A, Figure 1 shows location of site and Figure 2 plan of buildings B1 and B2 and adjacent building 'The Chapel'

1.2 Project Overview

The site forms part of a small phased development in the local area, comprising "The Streets" (No. 11 East Street), No. 9 East Street, land at Nos. 5, 7 and 13 and The Pallant.

- No. 9 East Street to be demolished and developed by JNP Developments & Investments Limited into a development of ten supported living flats
- No 5 & 7 East Street a vacant site to be developed by JNP Developments & Investments Limited into four one bedroom supported living flats linked to the ten indicated above, and four 2-bedroom residential apartments.
- Land to the rear of 13 East Street a cleared site to be developed by P&N Developments to form a terrace of six 3-bedroom terraced town houses.
- The renovation of "The Streets" into three 2-bedroom apartments by P & N Developments

Current plans for The Pallant are to retain the two buildings as site accommodation in the short term, however once the initial phases have been undertaken it is likely The Pallant will be developed into residential accommodation.

1.3 Legislation and Policy Context

All native bat species are fully protected by nature conservation legislation. Protection is afforded by Section 9 of the Wildlife and Countryside Act 1981 (as amended) through the species' inclusion under Schedule 5. All native bat species are also defined as European Protected Species (EPS) through inclusion in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); the UK implementation of the EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.

In brief, these legislative instruments make it an offence to deliberately or recklessly kill, injure or capture any bat. Roosts are protected from damage or destruction, furthermore it is illegal to deliberately disturb a bat whether roosting or otherwise.

In addition, the following native bats are adopted as Species of Principal Importance in England under Section 41 of the Natural Environment and Rural Communities Act 2006:

- Barbastelle Bat
- Bechstein's Bat
- Noctule
- Soprano Pipistrelle
- Brown Long-eared Bat
- Greater Horseshoe Bat - *Rhinolophus ferrumequinum*
- Lesser Horseshoe Bat - *Rhinolophus hipposideros*

The National Planning Policy Framework (Department of Communities and Local Government, 2019, as amended) requires local authorities to avoid and minimise impacts on biodiversity and, where possible, to provide net gains in biodiversity when taking planning decisions: "The planning system should contribute to and enhance the natural and local environment protecting and enhancing valued landscapes and minimising impacts on biodiversity and providing net gains in biodiversity"

The Havant Borough Biodiversity Strategy January 2019 refers to the National Planning Policy Framework in their objectives to conserve and enhance the biodiversity network of the Borough:

'The National Planning Policy Framework (NPPF) (July 2018) states;

In paragraph 170:

"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) ... the wider benefits from natural capital and ecosystem services...

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."

Paragraph 171 states:

"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 Framework⁵³; 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."

Providing the rationale for the preparation of this Biodiversity Strategy, paragraph 174 states that:

“To protect and enhance biodiversity and geodiversity, plans should:

a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”

2 Methodology

2.1 Bat Roost Survey

The aim of the roost survey carried out was to establish the presence or likely absence of bat species on site, and to determine whether they were roosting within the building itself. All surveys were carried out in strict accordance with Good Practice Guidelines published by the Bat Conservation Trust (Collins, 2016).

Supplementary information such as foraging and commuting behaviour was noted in order to develop the best possible understanding of how the site is utilised by bats.

During July 2020 one dusk emergence survey visit was carried out. The survey was carried out using EchoMeterTwo (EMT) detectors and BatLoggerM units. Over the course of the survey, three surveyors were positioned in order to maximise the visibility of areas with potential emergence points for roosting bats. As the two buildings were joined to one another, they were considered as one larger building for survey purposes and could be easily covered by three surveyors.

2.2 Impact Assessment and Approach to Mitigation

A standardised methodology is adopted to undertake impact assessments for bat species identified in this roost survey.

When assessing potential impacts from development operations, the following factors are considered:

- Baseline value of the ecological feature or resource.
- Positive or negative biodiversity outcome.
- Confidence in predictions.
- Magnitude of impact.
- Extent of impact.
- Duration of impact.
- Reversibility of impact.
- Timing and frequency of impact.

This process supports the design of sufficient yet proportionate mitigation strategies. Appropriate levels of mitigation in this report are taken from the English Nature (now Natural England) Bat Mitigation Guidelines (Mitchell-Jones, 2004) (Table 1.).

Table 1. Guidelines for proportionate mitigation, taken from the Bat Mitigation Guidelines (Mitchell-Jones et al, 2004a).

Conservation Significance	Roost Status	Mitigation/Compensation
	Feeding perches of common/species.	Flexibility over provision of bat-boxes, access to new buildings etc. No conditions about timing or monitoring.
	Individual bats of common species.	
	Small numbers of common species. Not a maternity site.	Provision of new roost facilities where possible. Need not be exactly like-for-

Conservation Significance		Roost Status	Mitigation/Compensation
		Feeding perches of Annex II species.	like, but should be suitable based on the species' requirements. Minimal timing constraints or monitoring requirements.
		Small numbers of rarer species. Not a maternity site.	
		Hibernation sites for small numbers of common/rarer species.	Timing constraints. More or less like-for-like replacement. Bats not to be left without a roost and must be given time to find the replacement. Monitoring for two years preferred.
		Maternity sites of common species.	
		Maternity sites of rarer species.	Timing constraints. Like-for-like replacement as a minimum. No destruction of former roost until replacement completed and usage demonstrated. Monitoring for at least 2 years.
		Significant hibernation sites for rarer/rarest species or all species assemblages.	
		Sites meeting SSSI guidelines.	Natural England generally opposes interference. Seek improved roost provision. Timing constraints. No destruction of former roost until replacement completed and significant usage demonstrated. Monitoring for as long as possible.
		Maternity sites of rarest species.	

2.3 Personnel

Bat roost surveys were led by Peter Hayward, ecologist at enims Ltd and assisted by Kelly Brown and Jake Cousins, who are both experienced in bat surveys and bat ecology.

3 Survey Results

3.1 Bat Roost Survey Results

There was low activity recorded by two species during the survey at The Pallant; common pipistrelle and noctule. No emergence or re-entry behaviour was observed during the survey from The Pallant itself, however an emergence by a single common pipistrelle from the adjacent building 'The Chapel' was observed at 21:34 from beneath tiles at roof level.

Full survey data is given in Appendix B including Meteorological Data. Activity map and surveyor positions in Figure 3, Appendix C.

4 Assessment and Recommendations

4.1 Bat Roost Survey Outcome

It is concluded that although The Pallant has several potential bat roost features, these were not being utilised by bats during the survey visit. However, there was a single bat emerging from the roof of the adjacent building 'The Chapel' and any development should take this roost into consideration.

As the building has low potential, one survey visit is satisfactory to bolster confidence in this assessment (in accordance with the "Bat Surveys for Professional Ecologist – Good Practice Guidelines" (Collins, 2016)).

4.2 Potential Impacts of Proposed Works

Current development plans are to retain The Pallant as site accommodation whilst earlier development phases are being completed. In the longer term it is likely the buildings will be developed into residential accommodation. Previous plans for development show no alteration in the connection to The Chapel, which is at first floor level only. The Pallant will increase in height to three storeys, however the second floor will be set back from The Chapel, remaining above the existing building footprint and should not impair the flight path into the existing roost.

There is the potential during site development for an increase in lighting to cause some disturbance to the adjacent bat roost, however this is thought to be limited by the already high lighting levels in the surrounding area. The distance from the roost entrance and well-lit existing surroundings already present mean the cumulative effects of the proposed development are likely to be insignificant. However, precautions should be taken during the construction of the development to ensure no impacts. Increased noise, lighting and disturbance during construction should be mitigated to safeguard The Chapel bat roost.

Short term impacts

Under current proposals, it is unlikely development of The Pallant could result in injury or death of a bat and the damage or destruction of a roost.

Disturbance is possible to the adjacent roost during all construction activities due to an increase in noise, vibration and lighting during the construction works themselves.

Long term impacts

Increased disturbance by lighting may impact the adjacent roost

4.3 Mitigation Requirements

No specific recommendations for the proposed development itself are given here as a result of the nil return in emergence/re-entry observed.

It should be recognised however, that this situation can change as bats are highly mobile and do utilise a range of bat roosting locations within their territories, even during the course of one night. There is always the potential for individual bats to utilise this structure on an opportunistic basis.

It is important to recognise that in the UK all bat species and their roosts are legally protected, by both domestic and international legislation. In England and Wales, the relevant legislation is the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); and by the Conservation of Habitats and Species Regulations (2017, as amended).

This means that a criminal offence will be committed if someone:

- Deliberately captures, injures or kills a bat
- Intentionally or recklessly disturbs a bat in its roost or deliberately disturbs a group of bats
- Damages or destroys a bat roosting place (even if bats are not occupying the roost at the time)
- Possesses or advertises/sells/exchanges a bat (dead or alive) or any part of a bat
- Intentionally or recklessly obstructs access to a bat roost

It is not anticipated that the above offences will apply in this project, but it is important to recognise that in the unlikely event of finding a bat(s) during the demolition, all work must immediately stop, and the advice of the project ecologist be sought on the way forward. The ecologist may also need to consult with Natural England over the next step in order to protect bats at this location. If this does happen, the above procedure may lead to some delays in the works programme.

The adjacent roost in the roof of The Chapel should be protected from disturbance during construction of the wider site and during any future development of The Pallant and occupation of all proposed new dwellings. Current lighting levels at the site are already high due to the position within the town and it is likely the bat(s) utilising the adjacent building are habituated to lights, noise and disturbance to some extent.

4.3.1 Construction Phase

Timing of Works

Construction work should only be carried out in daytime hours when working during the bat active period of April to October inclusive to prevent disturbance to any bats emerging from nearby roosts or foraging and commuting in the surrounding area. If this is not possible, low level floodlighting should be used and be directed away from The Chapel.

Lighting

Security lighting should be motion sensitive and directed away from The Chapel to prevent disturbance to any bats emerging from nearby roosts or foraging and commuting in the surrounding area.

Physical Protection

Renovation of the roof adjoining The Chapel is likely to be required and attention must be paid to ensure the roof of The Chapel is not physically damaged or disturbed during works. Access by bats to the roof of The Chapel must not be obstructed or impeded as a result of construction activities. For example, any scaffolding used should be kept within the site boundary to avoid disrupting the flight path to The Chapel.

4.3.2 Operation Phase

Lighting

A bat sensitive lighting scheme is required to be implemented for the site development, to prevent disturbance to bats emerging from the adjacent property. This should include measures to reduce potential light disturbance, such as:

- Directional lighting using careful aiming, positioning and selection on luminaires
- Consideration of column heights to reduce spill
- LED luminaires – good cut-off, low intensity with dimming options
- 0% upward output, no tilt

- Warm white luminaires with peak >550nm, no UV component
- Dimming and part night lighting, motion sensors for security lighting
- No illumination of The Chapel roof.

4.4 Ecological Enhancements

For the future development of The Pallant, significant opportunities exist for ecological enhancements, such as the addition of bat roosts as integrated boxes installed during construction. The bat boxes should be installed on the south or west elevations of the development with a clear flight path to the box.

The positioning of the bat boxes will also consider the following:

- Favourable height; three metres or higher above ground level
- Favourable aspect; south or south-west elevations of the building.
- Clear flight path for bats entering and leaving the box.
- Minimal disturbance from human activities; away from external lights, windows and busy areas.
- Avoiding accumulations of droppings where they will be a nuisance to householders
- Connectivity with linear features for commuting bats
- The installation of bird boxes
- Native species planting and planting for pollinators in any outdoor space

All native bat species are light-adverse and will avoid using strongly lit areas. Minimisation of any external lighting on the proposed development will ensure that bats are not disturbed and any commuting and foraging routes in the surrounding area are retained.

4.5 Data Constraints

The data and conclusions presented here are an evidence-based assessment of the current status of the application site. As a highly mobile species, bat roost survey data is valid for 12 months. Should the scheme be delayed beyond 12 months from the date of the report, it is recommended that repeat assessment be undertaken in order to ensure the continued validity of conclusions.

5 Conclusion

It is concluded that although The Pallant has several potential bat roost features, these were not being utilised by bats during the survey visit. There was low bat activity in the surrounding area during the survey visit, however a single common pipistrelle bat was observed emerging from the tiled roof of The Chapel adjacent to the proposed development.

Current plans are to retain The Pallant as site accommodation for the wider site developments. Future works to develop into residential housing are unlikely to cause direct impacts to the bat roost within The Chapel, however precautions should be taken to ensure no disruption to The Chapel in either the short or long term to prevent impacts to local bat populations. Mitigation should include sensitive lighting both during the construction and occupation phases and attention should be given to not disturbing the roof of The Chapel either by scaffolding, construction works or lighting during the development.

There is the potential for enhancements to the site including integrating a sensitive lighting scheme and the addition of bat boxes to the development.

Bats are therefore not considered to be a constraint to this development.

6 References

enims Ltd. (2020). *Preliminary Roost Assessment*. enims Ltd, Southampton.

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Mitchell-Jones, A. J. (2004). *Natural England Bat Mitigation Guidelines*. English Nature. Peterborough.

Mitchell-Jones, A. J. and McLeish, A. P. eds., (2004). *Bat Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

Stone, E. L. (2013). *Bats and Lighting: Overview of Current Evidence and Mitigation*. University of Bristol, Bristol

Appendix A: Site Plans



Figure 1. View of application site (red line) and surrounding landscape

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Figure 2. Red line plan of application site showing the wider site (blue line) and location of The Chapel

Appendix B: Bat Roost Survey Data

Survey Visit; 22nd July 2020

Location:	The Pallant	Project No:	EC1039
Weather:	Dry, cloud 0%, 1BF, mild		
Start temp:	18°C	End temp:	16°C
Date:	22.7.2020	Sunrise/ sunset times:	21:03
Start time:	20:48	End time:	22:33

Time	Species	Notes (flight path, emerging/ re-entering, location observed, behaviour)
21:33	Common pipistrelle	Heard not seen, south-west
21:34	Common pipistrelle	Emerged from adjacent building and flew west, south-east
21:41	Common pipistrelle	Foraging, flew south, south-east
21:44	Common pipistrelle	Foraging over road, north
21:52	Common pipistrelle	Heard not seen, south-west
21:58	Common pipistrelle	Heard not seen, north and south-west, 2 passes
22:04	Common pipistrelle	Heard not seen, foraging, faint, 7 passes, south-east Foraging, 2 passes, south-west
22:09	Common pipistrelle	Foraging, 2 passes, south-west
22:10	Noctule Common pipistrelle	Heard not seen, south-east Heard not seen, 2 passes, south-west
22:11	Common pipistrelle	Foraging, north
22:12	Noctule	Heard not seen, distant call, north
22:13	Common pipistrelle	Seen not heard foraging, north
22:30	Common pipistrelle	Heard not seen, north

Appendix C: Bat Activity

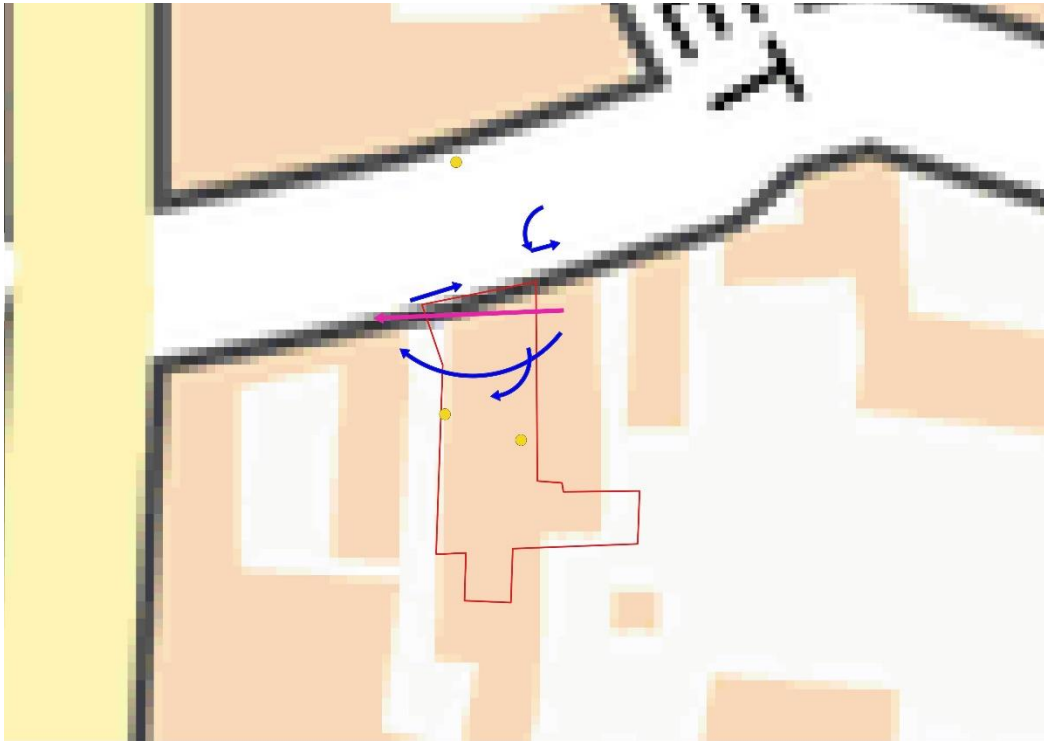


Figure 3. Surveyor position shown by yellow, bat emergence from adjacent building by pink arrow and bat foraging activity by blue arrows