Unit 7, Saxon Business Centre
41-59 Windsor Avenue
London
SW19 2RR
Tel: 020 8540 9968
E-mail: info@microbee.co.uk
Website: http://www.microbee.co.uk

Bat Emergence Survey at 38 – 42 Vincam Close, Twickenham

Site: 38-42 Vincam Close, Twickenham

Client: NFC Homes Limited

Date: May 2022

bsi. ISO 9001:2015 Quality Management FS 550934 | ISO 14001:2015 Environmental Management EMS 563439 | OHSAS 18001 Occupational Health and Safety Management OHS 614432

DOCUMENT HISTORY AND STATUS

Document Control	
Prepared by	Steve Price BSc (Hons) ACIEEM Great Crested Newt licence (class 1) 2020-48143-CLS-CLS Smooth Snake and Sand lizard licence 2021-53547-SCI-SCI
Checked by *(Technical)*	Andrew S Waller MSc BSc (Hons) MCIEEM Bat Class 2 Licence Registration Number: 2015-15703-CLS-CLS
Report	
The report, conclusions and recommendations are valid for current development plans only. Should these change the report should be reviewed and, if necessary, further survey work and desk study review undertaken.	

The information which we have prepared and provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

Contents

1. Executive Summary

This is a brief summary of findings and recommendations. Please read the report in its entirety for full details.

- Microbee Limited was approached by NFC Homes Limited to undertake a bat presence/likely absence survey at 38-42 Vincam Close (hereafter known as the Site) in March 2022. The presence/likely absence survey, an emergence bat survey, was undertaken on the 4th of May 2022. This assessment will detail the methods by which the bat survey was undertaken and its results.
- The site is situated along Vincam Close, Twickenham, TW2 7AB within the London Borough of Richmond upon Thames. The Site is predominantly dominated by three main dwellings, Numbers (No) 38, 40 and 42 (No 42 not forming part of the survey scope), outdoor storage units, hardstanding and associated landscaping
- Following the completion of the dusk emergence survey at 38-42 Vincam Close on the 4th of May 2022, where no bats were identified as emerging on Site, the anticipated impact of the works on bats on Site are now considered to be negligible.
- No bats were identified as emerging from any target features, or from any previously unidentified roost features associated with the Site. The only bats identified (either through direct observation or an informed assumption based on the direction of the bat detector) were exhibiting commuting and/or foraging behaviour, largely towards the rear of the Site and south-east Site boundary extent. In total five common pipistrelle (*Pipistrellus pipistrellus*) and five soprano pipistrelles *(Pipistrellus pygmaeus)* were recorded during the survey.
- Though no bats were identified as currently roosting within the site, it is recommended that further guidance is followed as per Chapter 7 to ensure industry best practice is followed to reduce the possibility of disturbing bats during the works and enhancing the Site through the development.

2. Introduction

Microbee Limited was approached by NFC Homes Limited to undertake a bat presence/likely absence survey at 38-42 Vincam Close (hereafter known as the Site) in March 2022. The contents of the initial Preliminary Bat Roost Assessment[1] as carried out by Applied Ecology stipulated the requirement for a subsequent presence/likely absence survey for bats on Site, namely dwellings No 38 and 40 both of which exhibit Low suitability for roosting bats. No 42 was considered to have negligible suitability for roosting bats and did not form part of the bat emergence survey and is not discussed further within this report.

The presence/likely absence survey, an emergence bat survey, was undertaken on the 4th of May 2022. This assessment will detail the methods by which the bat survey was undertaken and its results. Following that, as informed by the Preliminary Bat Roost Assessment, and supporting documents provided to Microbee Ltd by the client, results will then be evaluated and assessed for any potential impacts with recommendations for further works on Site.

[1] Applied Ecology – 38-42 Vincam Close, Twickenham – Preliminary Bat Roost Assessment (June 2021)

2.1 Site context

The Ssite is situated along Vincam Close, Twickenham, TW2 7AB within the London Borough of Richmond upon Thames. The Site predominantly comprises three main dwellings, No 38, 40 and 42 (No 42 not forming part of the survey scope), outdoor storage units, hardstanding and associated landscaping.

Figure 1 – Site boundary for emergence bat survey, Ordnance Survey Grid Reference (OSGR) - TQ 13367 73828

2.2 Proposed Development

This report and its findings will inform the proposed scheme which seeks to demolish the existing buildings and develop further residential units and associated landscaping, all maintained within the larger Site boundary.

2.3 Objectives

The purpose of the report was to:

- Provide the results of the bat emergence survey undertaken at 38-42 Vincam Close on 4th of May 2022.
- Propose any further measures required with respect to bats and the works on Site.

3. Methods

This report has been produced with reference to current guidelines for bat emergence surveys, as well as bat survey reporting writing (Bat Conservation Trust, 2016)[2].

3.1 Data Search

A basic desktop study was undertaken using NBN[3] Atlas and MAGIC[4] to further inform the way in which bats may use the on Site and surrounding areas, a summary of which has been provided below.

- One European Protected Species (EPS) licence application was identified within 2 km of Site. This occurred approximately 1.4 km east (October 2014[5]) of Site. Common pipistrelle *(Pipistrellus pipistrellus)* and soprano pipistrelle *(Pipistrellus pygmaeus)* were identified as species detailed in the licence.
- The nearest bat records to Site recorded within the 10 years prior to this assessment were as follows; two Daubenton's Bats *(Myotis daubentonii),* one noctule *(Nyctalus noctule),* three common pipistrelle and one soprano pipistrelle.

3.2 Emergence Survey

Following the Preliminary Bat Roost Assessment guidance indicating dwellings No 38 and 40 were of Low suitability for roosting bats, a presence/likely absence survey was required.
Considering the suitability of the buildings and the scope of the works on Site, a single emergence bat survey was conducted on the 4th of May 2022. Justifications for the timing of the emergence survey are as provided in Table 7.2 of Bat Conservation Trust (BCT) Good Practice Guidelines (2016), replicated in Table 1 below.

Table 1 – Recommended timings for presence/likely absence dusk emergence surveys.

Survey Type	Start time	End time
Dusk emergence	15 minutes before sunset	1.5 – 2 hours after sunset

A summary of the survey on Site is described in Table 2 below. In addition, surveyor positioning in relation to the Site is further indicated in Figure 2 and Photographs 1,2,3 and 4.

Table 2 – Summary of dusk emergence survey undertaken at 38 – 40 Vincam Close

Date	Sunset Time	Start Time	End Time
04/05/2022	20:29	20:14	21:59
Weather: Cloudy (7/8cc), dry, calm and mild (clearer towards the end of the survey. RH: 88% Wind: 0mph			

[2]

[3] https://nbnatlas.org/

[4] https://magic.defra.gov.uk/

[5] Month and year in brackets indicates the approximate expiration of the relevant European Protected Species Bat Licence

Temperature 14°c (start) – 12°c (end)			
Surveyor 1 location (OSGR)	Surveyor 2 location (OSGR)	Surveyor 3 location (OSGR)	Surveyor 4 location (OSGR)
TQ 13383 73825 south-east of site (front of dwelling)	TQ 13361 73840 north-east of site (rear of dwelling)	TQ 13367 73804 south-west of site (front of dwelling)	TQ 13347 73832 north-west of site (rear of dwelling)

The survey was undertaken by Andrew Waller (Bat Class 2 Licence), Mark Rapson, Luke Taylor MCIEEM and Steve Price ACIEEM. Cumulatively, the surveyors have over 40 years' experience in undertaking bat surveys, including numerous dusk emergence surveys on similar buildings, as well as further experience in relevant activities such as re-entry surveys, transects, harp trapping, mist netting, acoustic luring, static hand netting and bat care as well as training on topics such as endoscopes for surveys and arboriculture and bats. All surveyors were equipped with a bat detector each to record any bat activity and note behaviour.

4. Results

A summary of the bats recorded during the emergence survey is indicated below in Table 3.

Table 3 – Summary of recordings during bat emergence survey undertaken at 38-42 Vincam Close. Unique reference should be used in associated with the information available in Figure 2.

Time of recording	Species	Number	Seen/Heard (S/H)	Emerging	Behaviour observed	Unique reference
20:56	Common pipistrelle	1	S/H	No	Commuting	2056CP
20:56	Common pipistrelle	1	S/H	No	Commuting – 4 passes	2056CP
20:57	Common pipistrelle	1	H	No	Commuting	2057CP
20:59	Soprano pipistrelle	1	H	No	Commuting	2059SP
20:59	Soprano pipistrelle	1	H	No	Foraging in rear garden	2059SP
21:14	Soprano pipistrelle	1	S/H	No	Foraging in rear garden	2114SP
21:15	Soprano pipistrelle	1	S/H	No	Foraging in rear garden	2115SP
21:19	Soprano pipistrelle	1	S/H	No	Foraging in rear garden	2119SP
21:24	Soprano pipistrelle	1	S/H	No	Foraging in rear garden	2124SP
21:31	Common pipistrelle	1	S/H	No	Commuting along rear garden	2131CP
21:32	Common pipistrelle	1	H	No	Commuting	2132CP

No bats were identified as emerging from the target features, or from any previously unidentified roost features associated with the Site. The only bats identified (either through direct observation or an informed assumption based on the direction of the bat detector) were exhibiting commuting and/or foraging behaviour, largely towards the rear of the Site and south-east Site boundary extent. Both common pipistrelles and soprano pipistrelles were recorded during the survey.

5. Evaluation

5.1 Relevant legislation

All British bat species and their roosts are fully protected under Schedule 5 of the Wildlife and Countryside Act, 1981 (as amended) and the Conservation of Habitats and Species Regulations, 2010. Therefore, it is a criminal offence to:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats.
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time).
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.

Some species of bats are also species of principal importance, as listed under Section 41 of the NERC Act 2006.

5.2 Survey Limitations

Site access was achieved through the client with all potential roosting features covered, surveyors were positioned strategically to cover all aspects of the Site. A fully detailed illustration of surveyor positioning in relation to the Site and target areas for emergence survey is shown in Figure 2, as well as in Photographs 1, 2, 3 and 4. The surveyor locations ensured that both buildings stipulated as requiring further surveys in the Preliminary Bat Roost Assessment were afforded sufficient survey effort.

6. Impact Assessment

Following the completion of the dusk emergence survey at 38-42 Vincam Close on the 4th of May 2022, where no bats were identified as emerging on Site, the anticipated impact of the works on bats on Site are now considered to be negligible. Though bats were not identified as emerging from any of the recognised features of bat roost potential on site, there is residual potential for bats to be present within otherwise undetected features. Furthermore, there is potential for bats to occupy the Site between the undertaking of the emergence survey on the 4th of May 2022 and the works on Site commencing. Therefore, the recommendations within Section 7 of this assessment should be enforced, as well as due attention paid to any potential enhancements for bats on Site.

During the bat emergence survey, an incidental sighting of a foraging hedgehog *(Erinaceus europaeus)* was recorded to the rear of No 38. As a species in decline and subject to restricted protection under the Wildlife and Countryside Act 1981, efforts should be made to safeguard this species during works and post-scheme conclusion as per Chapter 7.

7. Required Actions

7.1 Recommendations

- If the Site works are not undertaken within 12 months of the completion of the emergence bat survey, then an update survey should be undertaken to check for any material change to the building which may result in an increased likelihood of bat occupation.
- If a bat, or potential evidence such as droppings or staining, is found at any time, works must stop and further advice be obtained from a bat licensed ecologist.
- The soft stripping of roof and window tiles should be undertaken to ensure industry best practice is adopted, in the eventuality that a bat is discovered on Site.
- All excavations should be covered overnight during works to ensure no hedgehogs are entrapped during the scheme.

7.2 Enhancements

- Bat boxes, brick, and tubes – In conjunction with the councils Biodiversity Action Plan (BAP) a focus towards enhancing roosting opportunities could be feasible on Site. The 2F Schwegler bat box[6] would be a suitable model and is used by several common urban bat species, including common pipistrelle. Where possible, such features should be installed at a height of 6 m up a building, facing south-east, south or south-west with enough space for bats to easily fly under the box. Care must be taken not to illuminate any of the boxes with artificial lighting as this may deter use of the features by bats.
- Where achievable, the integration of bat roosting features will be incorporated into the development design. An example of a typical bat roost feature of suitability would be the Ibstock Enclosed Bat Box[7].
- Any lighting within close proximity to trees or buildings should be designed to minimize the impact it has on potential bat roosting and commuting. Lighting should be in-line with the Bat Conservation Trust (BCT) lighting guidelines (Bats and Artificial Lighting in the UK (Bat Conservation Trust, 2018[8]).
- Any lighting on Site should be of low level, be on downward deflectors and ideally be on Passive Infrared (PIR) sensor. Using LED directional lighting can also be a way of minimizing the light spill affecting the habitat. No up-lighting should be used.
- Fence lines during works and post development to ensure ease of passage (gaps 13 cm x 13 cm) for hedgehogs, to access the associated landscaping to the scheme and wider/ adjoining sites to promote foraging habitat connectivity.

[6] https://www.nhbs.com/2f-schwegler-bat-box-general-purpose

[7] https://www.nhbs.com/ibstock-enclosed-bat-box-c

[8] Bat Conservation Trust (BCT) (2018) Guidance Note 08/18. Bats and Artificial Lighting in the UK. Bats and the Built Environment Series. Available at: https://cdn.bats.org.uk/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?mtime=20181113114229&focal=none. Accessed on: 27/05/2021

8. References

Applied Ecology – 38-42 Vincam Close, Twickenham – Preliminary Bat Roost Assessment (June 2021)

Bat Conservation Trust (BCT) (2018) Guidance Note 08/18. Bats and Artificial Lighting in the UK. Bats and the Built Environment Series. Available at: https://cdn.bats.org.uk/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?mtime=20181113114229&focal=none. Accessed on: 27/05/2021

HM Government (1981). *Wildlife and Countryside Act 1981* (as amended).

HM Government (2010). *Conservation of Habitats and Species Regulations 2010*.

NHBS Wildlife Ecology and Conservation (2021) Available at: https://www.nhbs.com/ Accessed On: 20/05/2021

London Borough of Richmond upon Thames Biodiversity Action Plan (BAP) Available at: https://habitatsandheritage.org.uk/wp-content/uploads/2020/10/Biodiversity-Action-Plan-Richmond_compressed.pdf

9. Figures

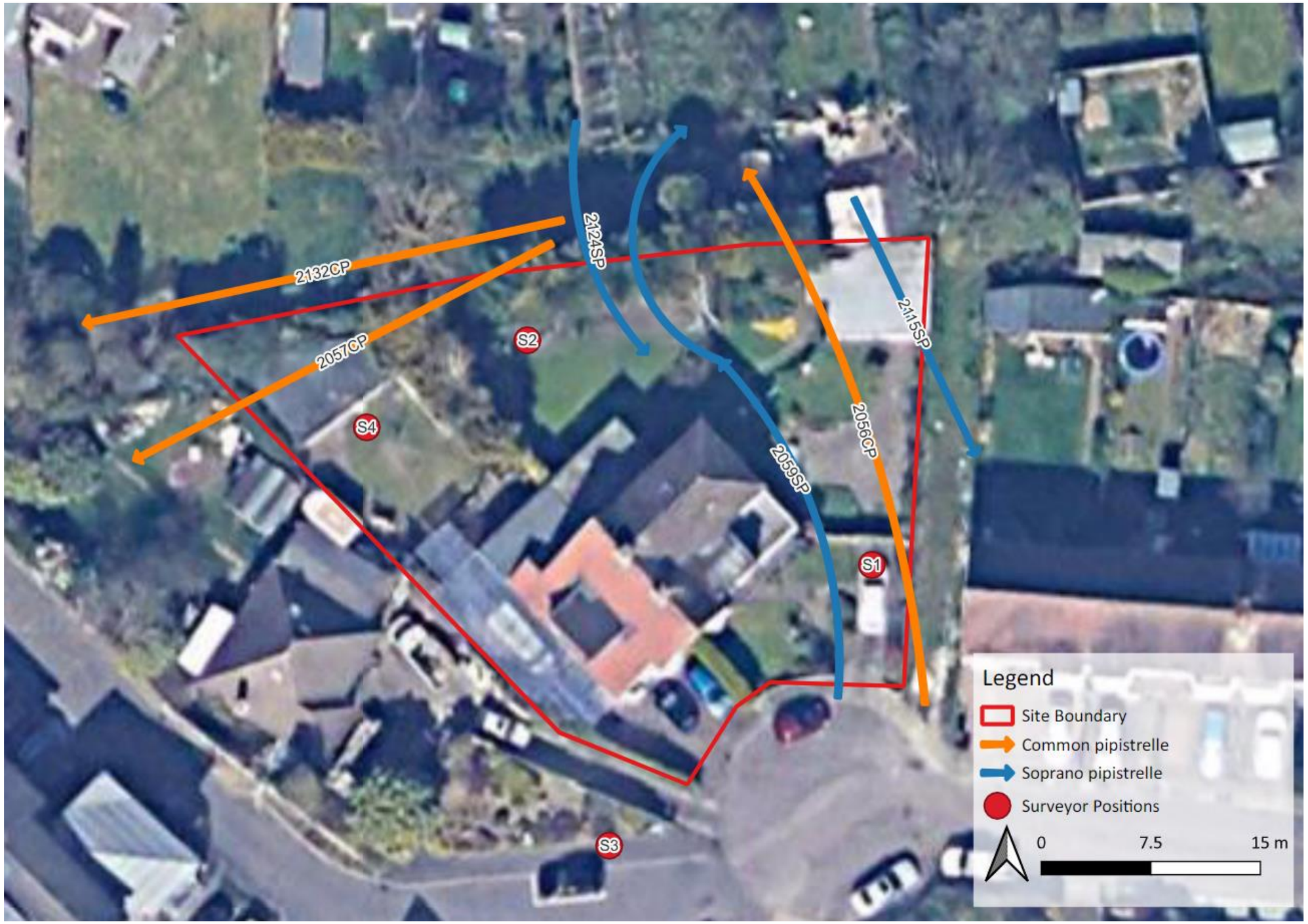

Figure 2 – Summary of bat survey data from emergence survey, including surveyor locations and assumed flight paths

10. Photographs

Photograph 1: East of Site – covered by a combination of surveyor 1 and 2 (Figure 2 for vantage points). Small gap highlighted within the eave, opportunistic roosting potential only.

Photograph 2: Vantage point of surveyor 2 (TQ 13361 73840). Single slipped tile near Velux window highlighted prior to survey.

Photograph 3: South-west corner of the site, covered by surveyor 3, largely focused on the horizontal tiles. Gaps in eaves and pantiles highlighted during the Preliminary Bat Roost Assessment.

Photograph 4: Vantage point of surveyor 4 (TQ 13347 73832). Lifted lead flashing around chimney and pantiles as highlighted in the Preliminary Bat Roost Assessment were flagged prior to survey.