Bat Survey Report

Liley Farm, Millhouse Green

29th August 2024

TG Report No. 16598_R02_DP

Tyler Grange

Project No:	Report No.	Date	Revision
16598	R02	29th August 2024	-

Admin QA	Author	Checked	Approved
-	David Paton MEnvSci	Bethany Phythian BSc Qualifying member of CIEEM	Dale Mortiboys BSc (Hons), ACIEEM

Contents:

Appendices:

Plans:

Summary

S.1. This report has been prepared by Tyler Grange Group Limited. It sets out the findings of a bat survey undertaken on an existing agricultural building located at Liley Farm, Millhouse Green, Barnsley (OS Grid Reference SE 21525 02304), hereinafter referred to as the 'site'.

S.2. This report should be read alongside the preliminary ecological appraisal (PEA) report written by Tyler Grange in May 2024 – Ref. **16598 R01b PEA DP JM 08052024** to accompany a planning application for the change of use of this existing agricultural building to a water bottling facility.

S.3. This report assesses whether the onsite building previously determined to offer 'low' roosting potential for bats does indeed contain a bat root roost, what the impacts of the development will be on bats, describes details of any mitigation of impacts required, and if appropriate provides recommendations for ecological enhancement on site.

S.4. During the PBRA, conducted in February 2024 (see Tyler Grange report **16598/R01b** for full details), the building was assessed as having 'low bat roost potential', requiring one further nocturnal emergence survey in line with best-practice guidelines.

S.5. During the emergence survey, little overall bat activity was observed for the duration of the survey. Footage captured using NVA cameras was analysed in full, and throughout the survey and the analysis no bats were seen emerging from or re-entering the building. As such, the building on site was determined have a likely absence of roosting bat species.

S.6. In conclusion, given the negative result of the survey, the proposed development will conform with all legislation with regards to bats as well as all local and national planning policy.

Section 1: Introduction

1.1. This report has been prepared by Tyler Grange Group Limited. It sets out the findings of a bat survey undertaken on an existing agricultural building located at Liley Farm, Millhouse Green, Barnsley (OS Grid Reference SE 21525 02304), hereinafter referred to as the 'site'.

1.2. This report should be read alongside the preliminary ecological appraisal (PEA) report written by Tyler Grange in May 2024 – Ref. **16598 R01b PEA DP JM 08052024** to accompany a planning application for the change of use of this existing agricultural building to a water bottling facility.

1.3. A Preliminary Bat Roost Assessment (PBRA) of the buildings on site was previously undertaken in February 2024, which assessed the building on site as having 'low bat roost potential'. For full details of the survey see Tyler Grange report **16598/R01b**.

1.4. This report assesses whether the onsite building determined to offer bat roosting potential contains a bat roost, what the impacts of the development will be on bats, describes details of any mitigation of impacts required and if appropriate provides recommendations for ecological enhancement on site.

Legislative Context

1.5. UK bat species are protected through European and National legislation together with national and local planning policy.

1.6. As European protected species, all UK bats receive legal protection in England under the Conservation of Habitats and Species Regulations 2018 (HabRegs) (as amended) and the Wildlife and Countryside Act (WCA) 1981 (as amended).

1.7. In addition, planning policy set out in the National Planning Policy Framework (February 2019) requires planning authorities to consider bats (alongside other protected species) when determining planning applications and to ensure that development proposals do not lead to an adverse effect on the conservation status of bats or other protected species.

1.8. All British species of bat are listed on Schedule 2 of the HabRegs as a European protected species (EPS) of animal. Regulation 41 (1) makes it an offence to:

- Deliberately capture or injure a bat;
- Deliberately disturb a bat; or
- Damage or destroy a breeding site or resting place of a bat.

1.9. Section 41 of the NERC Act 2006, which states that decision-makers such as Local Planning Authorities must have regard to Species of Principal Importance (SoPI) in all their activities, including when making decisions on planning applications.

1.10. The following bat species are SoPIs: barbastelle *Barbastella barbastellus*; Bechstein's *Myotis bechsteinii*; noctule *Nyctalus noctula*; soprano pipistrelle *Pipistrellus pygmaeus*; brown long-eared *Plecotus auritus*; greater

horseshoe bat *Rhinolophus ferrumequinum*; and lesser horseshoe bat *Rhinolophus hipposideros*. These are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework.

Section 2: Methodology

Scope of Works

2.1. The surveys followed standard methodologies set out in the Bat Mitigation Guidelines (Mitchell Jones, 2004)[1], the Bat Workers Manual (Mitchell-Jones and McLeish, 2004) and Bat Surveys - Good Practice Guidelines (Collins, 2023)[2] and comprised:

- Desk Study – acquiring records of bat roosts or presence within the local area (full details in Tyler Grange PEA report – Ref. **16598/R01b**);
- Building Preliminary Roost Assessment (PRA) – external building inspection survey to assess potential of the building on site to support roosting bats (full details in Tyler Grange PEA report – Ref. **16598/R01b**); and
- Detailed Roost Surveys – dusk emergence survey conducted on the building on site to assess the presence or likely absence of roosting bats.

Building Preliminary Roost Assessment (PRA)

2.2. A PBRA was undertaken on all buildings of relevance to this assessment. The assessment was undertaken on the 15th February 2024, and was conducted by Emily Macfarlan (Bat license ref. 2021-52065-CLS-CLS) and Mike Bryant (bat license ref. (2016-22617-CLS-CLS). The survey was a daytime inspection and the conditions for the survey was considered optimal. All buildings were inspected from ground level as well as internally where access allowed using binoculars and high-powered torch for accessible features.

2.3. The potential of each building at the site and immediately adjacent to the site to support roosting bats have been categorised against the criteria described in **Table 2.1** below.

Table 2.1 – Building assessment criteria (adapted from Collins, 2023).

Suitability	Description of Roosting Habitat
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, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions 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.
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 and surrounding habitat but unlikely to support a roost of high conservation status.

[1] Mitchell-Jones, A.J and McLeish, A.P (2004) Bat Workers' Manual (3rd edn). Joint Nature Conservation Committee, Peterborough.
[2] Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practise Guidelines (4th edition). The Bat Conservation Trust, London.

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 long periods of time due to their size, shelter, protection conditions and surrounding habitat.

2.4. The surveys followed standard methodologies (Mitchell-Jones, A.J., 2004; Mitchell-Jones, A.J. and McLeish, A.P., 2004; Collins, 2023) which are described below.

2.5. Externally, the buildings were inspected from ground level at different aspects using binoculars and a high-powered torch. The external inspection focussed on features suitable for bats to gain access to potentially suitable roosting areas. This included features such as soffits and fascias, lifted led flashing, lifted roof tiles and around windows and gaps within stone and brickwork.

2.6. Internally, the building was inspected using a high-powered torch to identify potential roost features and signs of bat activity (i.e. droppings, urine splashes, as well as live or dead bats), and all voids and loft spaces were visually examined where accessible in order to identify potential access points for bats.

Nocturnal Bat Surveys

2.7. The PBRA of the building on site identified potential roost features (PRF's) to be present and assessed the building as having 'low bat roost potential'.

2.8. In accordance with BCT guidelines, this triggers a requirement for one nocturnal roost survey for low potential buildings in order to establish the presence or likely absence of roosting bats. Emergence surveys started 15 minutes before sunset, and concluded 1.5 hours after sunset.

2.9. In line with this guidance, a single dusk emergence survey was undertaken within the months of May-August 2024, the details of which are available in **Table 2.2**. The Survey effort was informed by best practice guidelines and mitigation guidelines[3].

Table 2.2 - Nocturnal emergence/re-entry survey details.

Visit Number	Building	Date	Weather Conditions		Survey Timings	Surveyors
			Start	End		
V1	B01	15/08/2024	Temp (°C): 15 Wind (BFS): 3 Cloud cover (1-8): 7 Precipitation: Drizzle	Temp (°C): 13 Wind (BFS): 3 Cloud cover (1-8): 4 Precipitation: None	Start: 20:18 Sunset: 20:33 End: 22:03	Laura Dennis Jeff Clarke Peter Giles Nick Carter

2.10. Surveyors were positioned around the buildings to provide adequate coverage of all suitable features during visits – see plan **16598/P03** for surveyor locations. Surveyors used a combination of visual observation, echolocation devices and night vision aid (NVA) cameras with infra-red torches and floods to identify and bats emerging from the building, assisted by two-way radios in order to correlate bat movements between surveyors.

[3] Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1. Chartered Institute of Ecology and Environmental Management, Ampfield.

2.11. Survey equipment used comprised Bat loggers, anabat scouts, an echometer touch Pro and an anabat walkabout. BatExplorer and Analook software was used to analyse sonograms of any calls recorded in the field. NVA cameras included Canon XA10 cameras, Pixfra thermal imaging cameras, and Nightfox Whisker cameras.

2.12. Infra-red camera footage recorded was thoroughly reviewed following surveys to confirm whether any bats emerged from the buildings.

Quality Assurance

2.13. All ecologists at Tyler Grange are members of CIEEM, or are working towards membership and act under the direction of members, and abide by the Institute's code of conduct.

Limitations

2.14. Bats use a variety of roosts, ranging from maternity, mating or swarming and hibernation roosts, containing many individuals, to mating or night-time feeding roosts containing few individuals or single animals. Bats also tend to be nomadic (although are faithful to certain favoured roosting sites), spending variable lengths of time in a variety of roosts. As a result, even with the considerable survey effort it is possible that small transient roosts of bats may have been missed, although these tend to be less important to bats and so this should not affect the evaluation and recommendations made.

2.15. The weather was optimal during the nocturnal surveys and as such a sufficient level of confidence is placed in the results obtained.

2.16. The findings of this report are valid at the time of writing. Owing to the dynamic nature of ecological resources, if more than 12 months have elapsed since the report was written, advice should be sought to determine whether update work is required. The findings of the report should not be relied upon without this advice.

Section 3: Survey Results and Assessment

3.1. No bats were confirmed to be emerging from or re-entering the any of the buildings throughout the nocturnal surveys.

3.2. Footage captured using NVA cameras was analysed in full, and during the analysis, no bats were seen emerging from or re-entering the building.

3.3. Bats were observed and recorded from all surveyor positions shown on plan **16598/P03**. Common pipistrelle *Pipistrellus pipistrellus* was the most commonly detected species, and other species detected include soprano pipistrelle, noctule bat, and Myotis bat species *Myotis sp*.

3.4. It was noted that throughout the survey, little activity was seen around all surveyor positions, with the most concentrated bat passes being behind position 4, shown on plan **16598/P03**, where multiple pipistrelle bats were seen foraging within the open barn to the south-west of the building shortly after sunset. None of the bats observed at this time were noted to fly close to the building on site however.

3.5. Although bat activity of multiple species was detected across the site, no roosts were detected, and it is therefore considered that there is a likely absence of bat roosts within the site

Section 4: Implications, Mitigation Strategy and Conclusions

Impacts

4.1. The proposals for the site comprise a planning application for the change of use of this existing agricultural building to a water bottling facility, which will involve the alteration and refurbishment of the structure of the building.

Mitigation Requirements

4.2. The nocturnal surveys of the building within the site did not record any roosting bats and they are considered likely absent of roosting bats. Therefore, it is considered that the proposed development will not result in any adverse impacts on roosting bats, and no further mitigation is required.

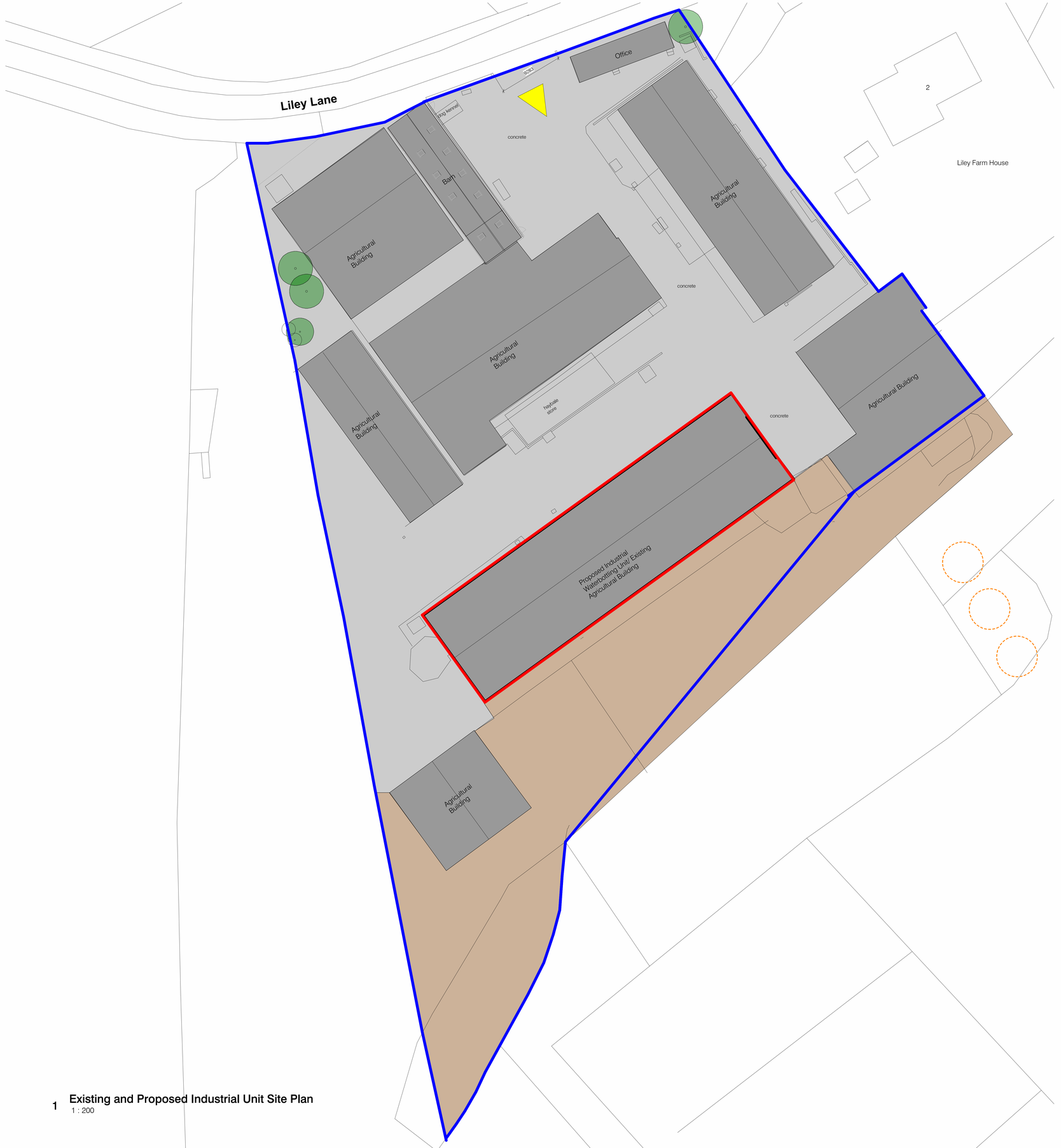
4.3. The site is made up entirely of the building, which a single storey breezeblock structure with metal cladding and corrugated roofing. The structure is considered unsuitable to install bat boxes on due to its height and structure, and therefore no such enhancements are recommended.

Conclusions

4.4. In conclusion, given the negative result of the survey, the proposed development will conform with all legislation with regards to bats as well as all local and national planning policy.

Appendix 1: Site Proposals

22328-FSA-IU-SI-DR-A-1003_P02 - Existing and Proposed Industrial Unit Site Plan



1 **Existing and Proposed Industrial Unit Site Plan**
1 : 200

0 2 4 8 16
Scale 1: 200

Status
PLANNING

Architects are to be notified of any discrepancies.
Contractors must check all dimensions on site.
This drawing is subject to copyright laws and is for use on this project only.
This drawing is to be used solely for the information as titled only.
For other information refer to the latest revision of any cross referenced drawings.
To be read in conjunction with relevant design standards/protocols
This is a colour drawing. In order to ensure any subsequent reproduction is viewed correctly it should be printed in full colour.
No Survey Information Available.
Shown As Indicaive Only. TBC On Site By Contractor

Key

- Site Ownership
- Site Boundary
- Existing Hard-Landscaping to be retained
- Existing Soft-Landscaping to be retained
- Entrance
- Borehole (Borehole locations shown indicatively)

Industrial Unit GIA	
Name	Area
Industrial Level 00 GIA	820 m²

Industrial Unit GEA	
Name	Area
Industrial Level 00 GEA	856 m²

No.	Revision	Date	Inits
P02	Issued for Planning	19.03.24	MT
P01	Preliminary Issue	14.03.24	MT

Job
LILEY FARM

Drawing
Existing and Proposed Industrial Unit Site Plan

Client
MARSDEN DEVELOPMENTS

FRANK SHAW ASSOCIATES LIMITED
ARCHITECTS
www.frankshawassociates.co.uk
Chesterfield 01246 233 255
Cambridge 01223 838 100
Leeds 0113 512 7510

Scale	Drawn/Checked
1:200@A0	MT/HC
Job Number	Date
22328	MAR 2024
Drawing Number	Rev
22328-FSA-IU-SI-DR-A-1003	P02

Appendix 2: NVA Footage Analysis

Figure A2.1 / **Figure A2.2** – Start and finish screenshots from NVA footage.

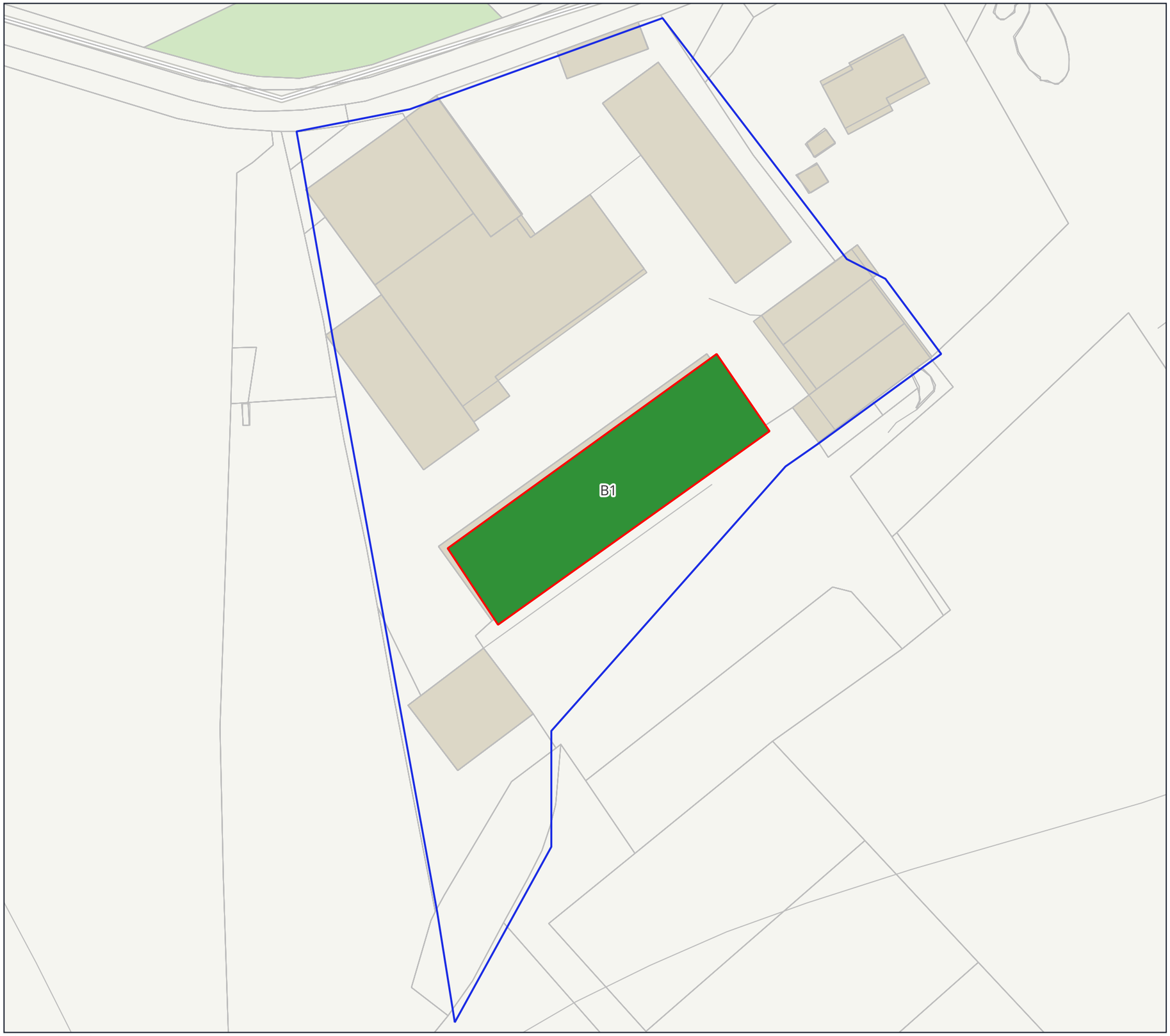
Figure A2.3 / **Figure A2.4** – Start and finish screenshots from NVA footage.

Figure A2.5 / **Figure A2.6** – Start and finish screenshots from NVA footage.

Plans:

Plan 1: 16598/P02 – PBRA Results Plan

Plan 2: 16598/P03 – Emergence Survey Results Plan



Legend

Boundaries

- Application Redline Boundary
- Land Under Ownership

PBRA Results

- Building - Negligible Potential
- Building - Low Potential
- Building - Moderate Potential
- Building - High Potential

N

0 10 20 m

Project	Lley Farm, Barnsley
Drawing Title	PBRA Results Plan
Scale	As Shown (Approximate)
Drawing No.	16598/P02
Date	March 2024
Checked	DP/JM

Tyler Grange

3 Jordan Street, Deansgate, Manchester, M15 4PY
T: 0161 236 8367 E: info@tylergrange.co.uk W: www.tylergrange.co.uk

Tyler Grange Group Ltd

Legend

Boundaries

Application Redline Boundary

Emergence Survey Results

Building

Surveyor Location

Sight Lines

Results Summary:

No bat emergences were observed from Building 1 throughout the survey and analysis of NVA footage.

N

0 10 20 m

Project	Lley Farm, Barnsley
Drawing Title	Emergence Results Plan
Scale	As Shown (Approximate)
Drawing No.	16598/P03
Date	August 2024
Checked	DP/DM

Tyler Grange

3 Jordan Street, Deansgate, Manchester, M15 4PY
T: 0161 236 8367 E: info@tylergrange.co.uk W: www.tylergrange.co.uk

Step into our world

www.tylergrange.co.uk

Tyler Grange

Landscape | Ecology | Arboriculture