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Client: Muse Places and Wythenshawe Community Housing Group
Project: Brotherton House
Report: Bat Emergence Survey Report

QUALITY ASSURANCE

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1.0 EXECUTIVE SUMMARY

Greengage was commissioned to undertake bat emergence surveys by Muse Places and Wythenshawe Community Housing Group of Brotherton House, hereafter referred to as 'the site', to establish the presence/likely absence of roosting bats and to assess levels of bat foraging or commuting activity across the site.

This document is a report of surveys undertaken on the buildings within the site, in summer 2025 and has been produced to inform a planning application for the site which includes the “*Erection of extra care apartments (Use Class C2) older living apartments, and dwellinghouses (Use Class C3), car and cycle parking, landscaping and other associated works following demolition of existing buildings*”.

A Preliminary Roost Assessment (PRA) and a Ground Level Tree Assessment (GLTA)¹ undertaken by Greengage in July 2025 involved a detailed systematic assessment of the sites suitability to support bats.

The site contained seven buildings (B1- B7), two of which (B1 and B5) are large multi-storey structures. The remaining buildings consist of smaller sheds and residential structures.

The PRA included a daytime external, and where possible internal, inspection of all seven buildings and noted the following suitability for roosting bats:

- B3 and B4 - Negligible suitability;
- B2, B5 and B6 - Low suitability; and,
- B1 and B7 - Moderate suitability.

As such, in accordance with the Bat Conservation Trust (BCT) guidelines a single dusk emergence survey was carried out on B2, B5, and B6, and two dusk emergence surveys carried out on B1 and B7. All of these were conducted during the bat active period (between May and September 2025) with at least one visit of all buildings being conducted between May and August.

A single tree was also noted with a Potential Roost Feature (PRF). A definite ingress/egress point could not be confirmed and as such was classified as Further Assessment Required (FAR) to establish if PRFs are present in the tree. Should it be identified in the future that the proposed development may impact upon the tree an aerial tree inspection should be carried out to accurately inspect any PRF's, and to inform any potential mitigation or additional survey effort that may be required.....

The emergence surveys confirmed the likely absence of roosting bats in all the buildings and no mitigation actions in relation to roosting bats are required. The development is predicted to have a negligible impact upon roosting bats and enhancements measures presented, where implemented, will likely result in the development providing long term positive impacts for bats at a local scale. Mitigation measures with regards to the timing of works and sensitive lighting have also been recommended to minimise impacts to foraging and commuting bats.

The data collected during the bat emergence surveys are considered valid for 12 months in accordance Chartered Institute of Ecology and Environmental Management (CIEEM) guidance² and an updated

survey will be required if the works have not started within this timeframe or should site conditions change significantly during this period.

2.0 INTRODUCTION

Greengage was commissioned to undertake bat emergence surveys by Muse Places and Wythenshawe Community Housing Group (WCHG) of Brotherton House, hereafter referred to as 'the site', to establish the presence/likely absence of roosting bats and to assess levels of bat foraging or commuting activity across the site.

This document is a report of surveys undertaken in summer 2025 and has been produced to inform a planning application for the site which includes the “*Erection of extra care apartments (Use Class C2) older living apartments, and dwellinghouses (Use Class C3), car and cycle parking, landscaping and other associated works following demolition of existing buildings*”.

2.1 AIMS OF SURVEY

The purpose of the surveys was to establish the presence/likely absence of roosting bats and to assess levels of bat foraging or commuting activity across the site. The surveys aimed to:

- Determine the presence/absence of bat species; and,
- Determine the intensity of bat activity both spatially and temporally to help estimate bat diversity and relative abundance and measure the relative importance of the site for local populations.

Existing data for the area was used to support the surveys, to determine the presence/likely-absence of bats across the site and in the wider area. This information can then be used to inform the extent of any mitigation, compensation or enhancement that may be appropriate.

2.2 SITE DESCRIPTION

The site extends to approximately 1.77 hectares (ha) and is centred on Ordnance Survey National Grid Reference (OS NGR): SJ 82256 87190 OS Co-ordinates 382256 , 387190.

The site comprises of seven buildings (B1- B7), two of which are large multi-storey structures (B1 and B5). The remaining buildings consist of smaller sheds and residential structures. The habitats within the site consist of areas of grassland, scrub and scattered trees in addition to hedgerows.

The site is located off Cornfield Drive, with the immediate surroundings set within residential estates and Wythenshawe Civic shopping centre situated 0.25 kilometres (km) to the east. Wythenshawe bus interchange is located to the east of the site. Kirkup Gardens, an open access greenspace and children's play area located immediately south of the site.

2.3 PROPOSALS

The proposals seek to construct a mixed-use housing development of 160 -180 units, consisting of semi-detached properties and care home provision, as well as associated landscaping. To facilitate this, all buildings within the site are due to be demolished.

2.4 ECOLOGICAL CONTEXT

A Preliminary Ecological Appraisal (PEA)¹ was undertaken by Greengage in July 2025, from which a desk-based assessment, Preliminary Roost Assessment (PRA) and Ground Level Tree Assessment (GLTA) were carried out to assess the sites suitability to support roosting bats.

Desk-based Assessment

A desk-based assessment of the local area using aerial photography, OS mapping and biological data was undertaken in September 2025.

The assessment identified the presence of 111 records of bats from the previous 10 years. No records were returned from within the site. The closest record pertained to a brown long eared bat in 2016, approximately 375 metres (m) northwest of the site. The closest roost record pertained to a common pipistrelle roost in 2015, approximately 1.2km west of the site. Biological records obtained from Greater Manchester Local Record Centre (GMLRC) identified the following bat species within 2km of the site:

- Common pipistrelle *Pipistrellus pipistrellus*;
- Soprano pipistrelle *Pipistrellus pygmaeus*;
- Noctule *Nyctalus noctula*;
- Brown long eared *Plecotus auritus*;
- Daubenton's *Myotis daubentonii*;
- Whiskered *Myotis mystacinus*; and,
- Unidentified *Pipistrellus* and *Myotis* species.

A single granted European Protect Species Licence (EPSL) was identified, approximately 1.5km south west of the site. This concerned the destruction of a resting place for common pipistrelle, soprano pipistrelle, noctule, whiskered and Natterer's bat *Myotis nattereri* (reference: 2015-9463-EPS-MIT-2).

Preliminary Roost Assessment (PRA) and Ground Level Tree Assessment (GLTA)

A PRA and GLTA were carried out on 24th July 2025 to identify the presence of Potential Roost Features (PRFs) at buildings and trees on the site and categorise their suitability for roosting bats.

The PRA comprised an external and internal visual assessment of the buildings to identify and record PRFs and check for signs of roosting bats, including the presence of droppings, urine staining, grease marks, food remnants (e.g. moth and butterfly wings) or bats themselves.

A GLTA of the trees on the site was carried out to identify and record any PRF's, including their type, height and elevation.

The PRA and GLTA were carried out by suitably qualified and experienced ecologist with the aid of a high powered torch and binoculars, in accordance with current survey guidance detailed in the Bat

Conservation Trust (BCT) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines³ and the Bat Workers Manual (2004)⁴. Full details of the PRFs identified during the assessments are detailed in Appendix A and summarised below.

The suitability for buildings to support roosting bats were assessed as follows:

- B3 and B4 - Negligible suitability;
- B2, B5 and B6 - Low suitability; and,
- B1 and B7 - Moderate suitability.

A single tree was assessed as Further Assessment Required (FAR) to establish if PRFs are present in the tree.

In accordance with current survey guidance^{3 4}, for the reasons listed above, and given the legal protection afforded to bats (see Appendix B), the requirement for a single emergence survey on B2, B5, and B6 and two emergence surveys on B1 and B7 in order to identify the presence/ likely absence of roosting bats, were identified. No further surveys are currently required for B3 and B4.

No additional surveys have been conducted on the tree assessed as FAR as part of this assessment. There is a requirement to undertake an aerial tree inspection of the tree, should it later be identified that the proposed development may impact upon it. The inspection would be to further classify the roosting suitability of the tree to support roosting and/or hibernating bats, and identify roosting where possible.

3.0 METHODOLOGY

3.1 EMERGENCE SURVEYS

The emergence surveys were undertaken in accordance with BCT guidelines⁵, between August and September 2025 and where multiple visits were required, these were spread at least three weeks apart.

Each survey was undertaken during clear, still and warm conditions with temperatures at sunset between 15°C and 21°C. Surveys commenced 15 minutes prior to sunset and continued for 90 minutes after sunset. The PRA identified locations on site that would enable all aspects of the buildings to be surveyed to be viewed. Surveyor locations are mapped in Appendix C with auxiliary data, with the specific dates and weather conditions for each survey, presented at Appendix D.

In line with BCT Guidelines³ for buildings of Moderate and Low suitability for roosting, B1 and B7 were subject to two dusk emergence surveys (with one visit being between May and August). B2, B5 and B6 were subject to a single dusk emergence survey which was conducted between May and August.

Each surveyor was equipped with an Echo Meter Touch bat detector to detect, visualise and record the calls of any bats present in the area. Additionally, infrared Canon XA11 cameras, each alongside two Light Emitting Diodes (LED) Infra-Red (IR) lights, were used as Night Visual Aids (NVA) for each surveyor, and in replacement of a single surveyor at B5 on 13th August and B6 on 19th August. Stills from the darkest point of the survey from each surveyor location have been provided in Appendix E. Following the survey, the video footage and bat calls were analysed in-office using specialist computer software to confirm species present and assess any ambiguous sightings/calls.

3.2 SURVEYORS

BCT guidance outlines the different levels of competency to undertake professional bat work which aligns with Chartered Institute of Ecology and Environmental Management (CIEEM) definitions⁶. Each of the surveys was led by suitably experienced ecologists, as detailed below:

- Francesca Thorley, Senior Consultant, has a BSc (Hons) in Geography and a MSc in Biodiversity and Conservation. She holds a Natural England Great Crested Newt licence, is a Level 4 botanist as accredited by FISC, is Certified to undertake River Condition Assessments (RCA) and is an Associated Member of CIEEM. Francesca has over seven years' experience in the commercial sector.
- Daniel Perlaki, Senior Consultant, has a BSc (Hons) in Ecology (BSc Hons), a MSc in Conservation Science and Policy and is a Graduate member of CIEEM. Dan has over eight years' experience in ecology survey and consultancy.
- Abbie Case, Senior Consultant, has a BSc (Hons) in Ecology and Conservation, an MSc in Conservation Biology and is an Associate member of CIEEM. Abbie has over seven years in ecological survey and assessment and holds a Natural England Great Crested Newt licence, and is a Level 4 botanist as accredited by FISC.

- Sophie Trigg, Senior Consultant, has a BSc (Hons) in Zoology and has over seven years of experience in ecological consultancy. Sophie holds a Natural England Great Crested Newt licence and is a Level 3 botanist, as accredited by FISC. She has experience in a wide range of survey and assessment types.
- Kelsey Marratt, Consultant, has a BSc (Hons) in Zoology and a MSc in Conservation Biology. She holds a Natural England Level 2 (CL18) class licence for bats and Natural England class licence for dormice (CL10a), is a Level 3 botanist as accredited by FISC and is a qualifying member of CIEEM. Kelsey has four years' experience in the commercial sector.
- Clare McNeil, Graduate Ecologist, has a BSc (Hons) in Biology and a MSc in Wildlife Conservation. Clare's experience includes two seasons of bat activity/emergence surveys, report writing and data analysis.
- Emily Spencer, Graduate Ecologist, has a BSc (Hons) in Wildlife Ecology & Conservation and is completing an MSc in Wildlife Conservation. Emily's experience includes three years of bat activity surveys, several protected species surveys and report writing.
- Joshua Phillips, Seasonal Ecologist, has a BSc (Hons) in Environmental Science and Sustainability and is a member of The Institute of Sustainability and Environmental Professionals (ISEP). Joshua has over two years of experience undertaking ecological and species-focused surveys.
- Toby Holmes, Seasonal Ecologist, holds a MBiolSci in Biology. He has experience of Breeding Bird Surveys, Wetland Bird Surveys and Heathland Bird Surveys with the BTO and has assisted with research at two South American biological stations.
- Jack Rees-Elford, Seasonal Ecologist, is commencing his final year of a MBiolSci in Zoology and has four years of survey experience in various locations, including Central America, Australia, and Europe. He is also a trainee bird ringer with the BTO.

The report has been prepared by the following:

- Ryan Evans, Senior Consultant, who has a BSc (Hons) in Geography and is an Associate member of CIEEM. Ryan has over seven years' experience as an ecologist, holds a Natural England Great Crested Newt licence, is a certified tree climber and is accredited to undertake RCA.
- Jennie Caddick, Associate Consultant, holds a BSc (Hons) in Ecology and full CIEEM membership. She has 20 years consultancy experience working for a varied client base, with a focus on complex schemes where requirement for consultation and bespoke surveying has been used and holds Natural England survey licences for bats (Class 2), GCN, water vole and white-clawed crayfish. In addition, she has also held mitigation licences for otter.

The survey was designed by Francesca Thorley who meets the BCT Level 2 (Capable) competency which is the appropriate level for simple sites such as this one.

This report was written by Ryan Evans, reviewed by Francesca Thorley and verified by Jennie Caddick who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:

- Represents sound industry practice;
- Reports and recommends correctly, truthfully and objectively;
- Is appropriate given the local site conditions and scope of works proposed; and,
- Avoids invalid, biased and exaggerated statements.

3.3 SURVEY LIMITATIONS

The data collected during the bat emergence surveys is considered valid for 12 months in accordance CIEEM guidance⁷. An update survey will be required if the works have not started within this timeframe or should site conditions change significantly during this period.

There were no significant limitations to the bat surveys. The surveys were undertaken at a suitable time of year and during generally suitable weather conditions.

During the emergence survey on 5th August 2025 one bat detector malfunctioned, and failed to record for approximately 10 minutes. This surveyor location was, therefore, covered by a human surveyor only, who accurately recorded all observable bat activity during this time. Therefore, this is not thought to be a considerable constraint to the survey.

During the emergence survey on 5th August 2025 and 10th September 2025 there was moderate wind at the beginning of the survey. However, bats were recorded during this visit. Therefore, this is not thought to be a considerable constraint to the survey.

During visit 1 for both B5 and B6 on 13th and 19th August 2025 respectively, there were two locations that were only covered by a NVA and no surveyor. Upon completion on the survey NVA footage was thoroughly reviewed in order to determine the level of bat activity and whether a roost was present or likely absent at the time.

During the emergence survey at B1 on 5th August 2025, a potential emergence was observed with a degree of uncertainty in the field. Following the survey, the footage from the NVA's was reviewed, and it was concluded that no bats emerged, but instead demonstrated foraging and commuting behaviour around the corner of the building.

The effectiveness of any presence/likely-absence analysis requires that all species, including elusive or rarer species, be recorded, and correctly identified in post-collection analysis. As such, the following considerations should be made for the species that have been detected:

- Average number of registrations for common pipistrelle and the soprano pipistrelle may be over/underestimated as echolocation of these species often tends to overlap, especially around the 50kHz;
- It is sometimes difficult to differentiate between the Leisler *Nyctalus leisleri* and serotine *Eptesicus serotinus* bats in areas of high clutter as their frequency bandwidth often overlaps. This is also true of the noctule and Leisler bats at lower frequencies, depending on the type of call they emit;
- Bats from the *Myotis* genus are notoriously difficult to identify to species level. Therefore, *Myotis* species have been identified to genus level; and,

- Brown long-eared bats are very common and widespread throughout Great Britain but are notoriously difficult to capture as their calls due to their extremely low volume which means that they need to be flying in close proximity to the microphone of the detector to be recorded.

4.0 RESULTS

4.1 EMERGENCE SURVEYS

There was no evidence of roosting observed during the emergence survey(s) therefore, it is concluded that roosting bats are currently likely-absent from the buildings on site.

During the surveys low levels of foraging and commuting activity, associated with the areas of vegetation and along lines of trees within the site, was recorded. Activity was attributed to three species: common pipistrelle, soprano pipistrelle and noctule bats.

Locations of passes and foraging activity, in addition to the surveyor locations, are shown at Appendix C.

5.0 RECOMMENDATIONS AND CONCLUSIONS

5.1 SUMMARY

The survey results have concluded the likely absence of roosting bats within all the buildings on the site. There is therefore no requirement for mitigation with regards to roosting bats.

Low levels of bat foraging and commuting activity were observed during the emergence surveys, associated with the vegetation and tree lines within the site. Given their use by bats, these habitats could be considered reasonably important for local bat populations.

Whilst foraging and commuting resources for bats are not formally protected by law, their protection is a material consideration within the planning process, therefore, suitable best practice and mitigation recommendations are detailed below.

5.2 MITIGATION

During Construction

To reduce disturbance to foraging/commuting bats during the summer months works should only take place during daylight hours, when bats are inactive, and noise disturbance should be kept to a minimum. No additional artificial lighting should be left on overnight. As such, light, noise and general disturbance through construction activity will be limited to within those hours that bats are not active.

Post-construction

Artificial lighting can cause disturbance to bat species' roosting, foraging and commuting activity. Proposals should therefore impose measures to limit additional light disturbance at site following development. Bat-sensitive lighting should be incorporated into the scheme to minimise any potential impacts of increased lighting levels on foraging, commuting and socialising bats. Lighting design should follow guidance provided by the Institute of Lighting Professionals (ILP) and BCT, specifically to:

- Avoid use of metal halide and fluorescent light sources;
- Incorporate light at a <2700K in external areas where possible, with peak wavelengths higher than 550 nanometers (nm);
- Use screens/hoods to make any external lighting as directional as possible, avoiding light spill on any natural features;
- Position external lights as low to the ground as possible and avoid using bollard lighting;
- Consider only luminaires with a negligible or zero Upward Light Ratio, and with good optical control. Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt;
- Have lighting controls in place, where appropriate, to minimise the duration lights are illuminated, this could be instated through motion sensor lighting or subject to curfews. Lighting associated with

existing or created greenspace should be prohibited during the active bat season (April-October, inclusive);

- Create dark corridors with no light levels over the hedgerow and tree lines edges;
- Take measures when placing internal lights to reduce risk of light spill from windows;
- Model lighting at site to confirm predicted intensity and spill, which should be reviewed by a Suitably Qualified Ecologist (SQE).

By providing compensatory foraging habitat through landscaping proposals, and minimising the impacts of external lighting, impacts upon foraging and commuting bats will be sufficiently minimised.

5.3 ENHANCEMENTS

In addition to the above best practice mitigation, the following enhancement measures are also recommended due to the suitability for bats at the site.

Bat Boxes

Most species of bats will use bat boxes at various times of year but in particular they are favoured by pipistrelles, Leisler's, noctule, brown long eared and *Myotis* species⁸. Three of these species were identified during the survey and are known to occur in the wider area.

It is recommended that where possible, bat boxes are incorporated into the proposed development, integrated into the new structures or installed on the buildings, which should incorporate approximately 16 to 20 boxes across the development. Bat boxes should be positioned in sunny locations, most suitably on the southern and western façades of the building. Bat boxes should be placed away from doors, windows and street lighting, ideally at 3-5m from ground level, with the entrance free from obstruction. The behaviour of bats varies between species however, generally they will use a number of different roosts of varying climate conditions. Therefore, it is advisable to integrate several boxes with varying locations and aspects across the site.

Greengage do not endorse specific products, but the products shown in Figure 5.1 or similar would be suitable.

Figure 5.1 Bat box product types

Integrated Habitat Bat Box 003 - Blended Facing⁹ (top left); Vivara Pro low profile woodstone bat box¹⁰ suitable for mounting on buildings (top right); 2F Schwegler bat box¹¹ suitable for tree mounting (bottom left)



6.0 SUMMARY AND CONCLUSION

Greengage was commissioned to undertake bat emergence surveys by Muse Places and Wythenshawe Community Housing Group of a site known as Brotherton House to establish the presence/likely absence of roosting bats and to assess levels of bat foraging or commuting activity across the site.

A PRA/GLTA undertaken by Greengage in July 2025 involved a detailed systematic daytime external assessment of the sites' suitability to support bats and noted the following suitability for roosting bats:

- B3 and B4 - Negligible suitability;
- B2, B5 and B6 - Low suitability; and,
- B1 and B7 - Moderate suitability.
- A single tree was also assessed as FAR

As such, in accordance with the Bat Conservation Trust (BCT) guidelines a single dusk emergence survey was carried out on B2, B5 and B6, and two surveys carried out on B1 and B7. The emergence surveys were conducted during the bat active period (between May and September 2025) with at least one visit of all buildings conducted between May and August.

The emergence surveys concluded the likely absence of roosting bats in all the buildings and no mitigation actions in relation to roosting bats are required.

Appropriate and proportionate mitigation and enhancement measures have been recommended which include, the provision of bat sensitive lighting to redress the potential impacts of the development upon bats.

Enhancement measures for bats have been recommended to increase the biodiversity value of any proposed redevelopment and include provision of bat boxes to provide roosting opportunities. Assuming these enhancements are followed, the development will result in value for local bat populations.

APPENDIX A PRA/ GLTA RESULTS

Location Reference	Elevation	Suitability	Description	Plate
Buildings				
B1	Northeast	Low	Hole in fascia of overhanging roof space. Appears to lead into a cavity, though unlikely to be able to hold a consistent temperature. Underside appears to be made of plasterboard. Feature is approximately 15 centimetres (cm) x 10cm	

Location Reference	Elevation	Suitability	Description	Plate
B1	Southeast	Moderate	Metal vent leading into building, from floor level to 3m high.	

Location Reference	Elevation	Suitability	Description	Plate
B1	North	Negligible	Five large metal grates within the brick wall, appears to be a secondary, smaller grate behind which would stop access for bats.	
B1	N/A	Moderate	Large gap in plasterboard tile, allowing access into cavity. Extends back further into existing panels, approximately 1m x 30m gap.	

Location Reference	Elevation	Suitability	Description	Plate
B1	North	Low	Two large metal grates within the metal fascia. Not possible to tell from ground level whether they are likely to provide bats access into a cavity space. Metal fascia likely provides unsuitable roosting materials.	

Location Reference	Elevation	Suitability	Description	Plate
B1	Northeast	Low	Hole in metal fascia next to the grate. Possibly leads to a cavity within the fascia and may lead into building. However, the fascia material likely provides unsuitable roosting habitat due to temperature fluctuations. Size is 10cm x 10cm triangle.	

Location Reference	Elevation	Suitability	Description	Plate
B1	Northeast	Moderate	Missing mesh behind the vent, allowing access into the building. Approximately 50cm x 50cm gap behind the vent.	

Location Reference	Elevation	Suitability	Description	Plate
B1	East	Moderate	Gap between metal and wood of roller door, 4m long gap extends all the way, is 5m wide.	

Location Reference	Elevation	Suitability	Description	Plate
B1	Southeast	Negligible	Vent on side of building. Appears to have a second smaller grate inside which has gaps that appear too small for bats to access.	

Location Reference	Elevation	Suitability	Description	Plate
B1	Southeast	Low	Small hole 10cm in diameter in brick wood. Wires are protruding from the hole, blocking the entrance. However, presence of wires indicates there may be internal access into the wall or building through the hole.	

Location Reference	Elevation	Suitability	Description	Plate
B1	Southeast	Low	Hole in metal fascia, likely leads to an internal cavity, however metal structure is unsuitable for roosting bats. Feature is downward facing and approximately 10cm in diameter.	

Location Reference	Elevation	Suitability	Description	Plate
B1	North	Low	Five air vents located on the northern edge of building. All same height, size and orientation. Unable to determine if they extend back into the building, so precautionarily noted as features.	
B1	Northwest	Low	Air vent, approximately 50cm x 50cm in size. Precautionarily noted as a feature as unable to see how far it extends. Appears to be nesting material inside grate.	

Location Reference	Elevation	Suitability	Description	Plate
B2	Southeast	Low	Building precautionary low. Small gap above wooden door frame, very exposed and open.	

Location Reference	Elevation	Suitability	Description	Plate
B5	Northeast	Low	Two small holes in brickwork, hanging over a smaller reception roof. Could potentially have access to a cavity wall space, but unable to confirm from ground level.	

Location Reference	Elevation	Suitability	Description	Plate
B5	Southeast	Low	Open vent which could potentially lead to an inner room or wall space. Large gap is approximately 2ft x 1ft but the whole areas have an open grate, which could be accessed. May be too exposed for bats, unless there are internal, more sheltered cavities. Surveyors unable to find access internally.	

Location Reference	Elevation	Suitability	Description	Plate
B6	North	Low	Hole in plasterboard where it meets the wall, offering access into the roof space. Triangular hole approximately 30cm x 10cm. Potential to be endoscoped from ground level.	

Location Reference	Elevation	Suitability	Description	Plate
B7	North	Low	Gap under fascia	

Location Reference	Elevation	Suitability	Description	Plate
B7	East	Low	Small gaps under the whole length of the east facing fascia board.	
B7	Northeast	Low	Missing mortar on edge of roof tiles next to drainpipe on pitched roof; 30cm x 5cm	

Location Reference	Elevation	Suitability	Description	Plate
B7	West	Low	Gaps in rotten wooden fascia board. Multiple gaps approximately 5cm to 10cm	
B7	Northwest	Moderate	Hole in mortar under roof tile, potential to provide access into roof cavity	

Location Reference	Elevation	Suitability	Description	Plate	
B7	Northeast	Moderate	Holes in mortar underneath roof tiles, providing access points which may lead into roof cavities. Most notable towards the east of the roof, but gaps are evident along entire roof edge.		
Trees					

Location Reference	Elevation	Suitability	Description	Plate
Tree 1	East	FAR	Whitebeam Sorbus aria with a knothole	

APPENDIX B LEGISLATION AND POLICY

B.1 LEGISLATION

All UK bats and their roosts are protected by law. Since the first legislation was introduced in 1981, which gave strong legal protection to all bat species and their roosts in England, Scotland and Wales, additional legislation and amendments have been implemented throughout the UK.

Six of the 18 British species of bat have Biodiversity Action Plans (BAPs) assigned to them, which highlights the importance of specific habitats to species, details of the threats they face and proposes measures to aid in the reduction of population declines.

The Wildlife & Countryside Act 1981 (WCA)¹² was the first legislation to provide protection for all bats and their roosts in England, Scotland and Wales (earlier legislation gave protection to horseshoe bats only.)

All eighteen British bat species are listed in Schedule 5 of the Wildlife and Countryside Act, 1981 and under Annexe IV of the Habitats Directive¹³, 1992 as a European protected species. They are therefore fully protected under Section 9 of the 1981 Act and under Regulation 43 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹⁴, which transposes the Habitats Directive into UK law. Consequently, it is an 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; and,
- Intentionally or recklessly obstruct access to a bat roost.

This legislation applies to all bat life stages.

The implications of the above in relation to the proposals are that where it is necessary during construction to remove trees, buildings or structures in which bats roost, it must first be determined that work is compulsory and if so, appropriate licenses must be obtained from Natural England. Additionally, although habitats that are important for bats are not legally protected, care should be taken when dealing with the modification or development of an area if aspects of it are deemed important to bats, such as flight corridors and foraging areas.

B.2 PLANNING POLICY

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) 2024¹⁵ sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the

natural environment, stating plans should 'identify and pursue opportunities for securing measurable net gains for biodiversity'.

It goes on to state: 'if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'. Alongside this, it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost.

APPENDIX C SURVEYOR LOCATIONS AND BAT SURVEY RESULTS

Figure C.1 - Buildings and Surveyor Locations

Figure C.2 - Visit 1 Survey Results

Figure C.3 - Visit 2 Survey Results

WYTHENSHAWE
BROTHERTON HOUSE

Key

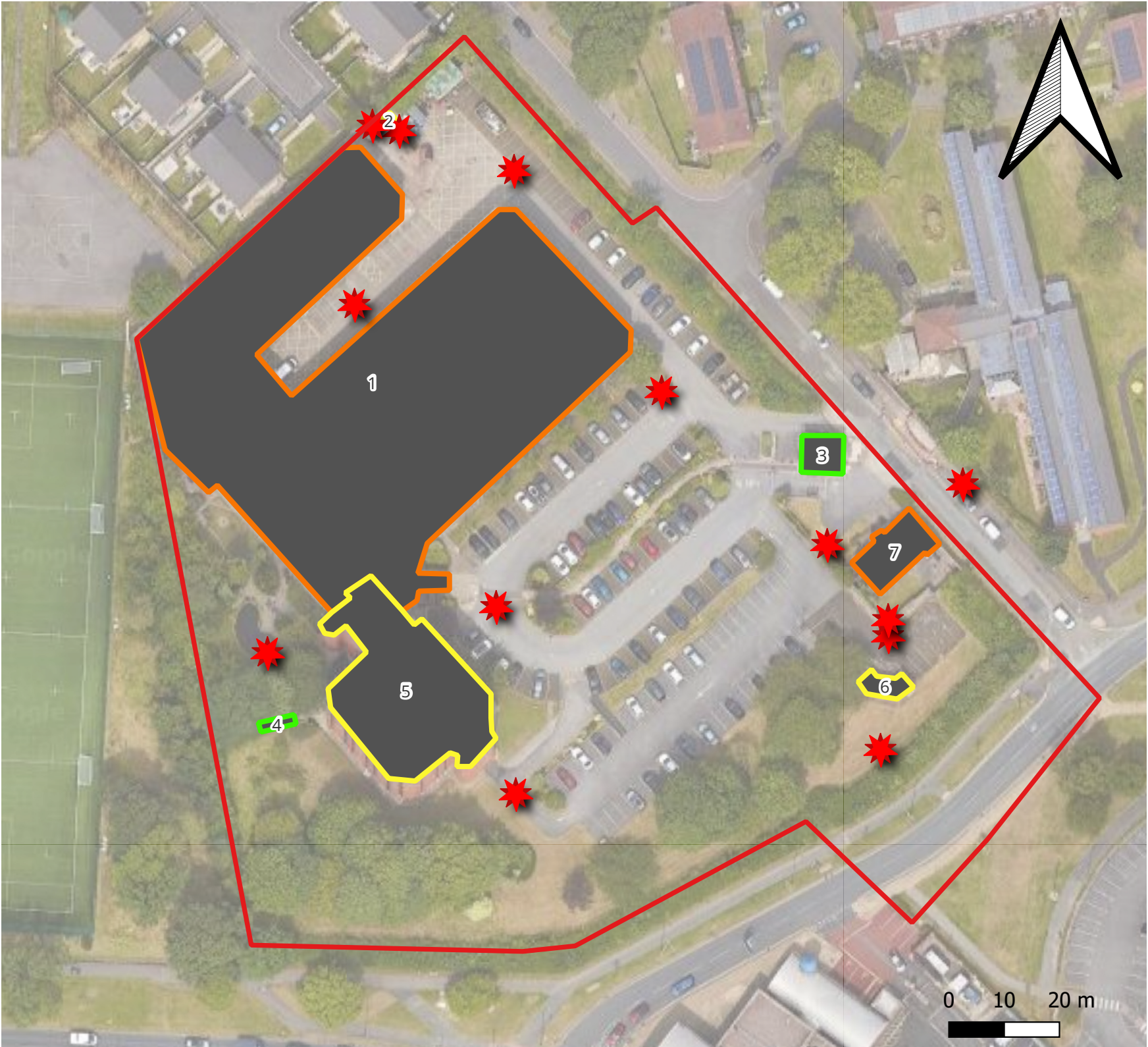
- Site Boundary
- Bat surveyor locations
- Buildings
 - Low
 - Moderate
 - Negligible

Title: Figure C.1 Buildings and Surveyor Locations

Drawn by: RE
Date: 14/10/2025

Reviewed by: FT
Date: 14/10/2025

Project number: 553439
Sources: ESRI World Topo, Greenspace Information for Greater London (GiGL), Natural England



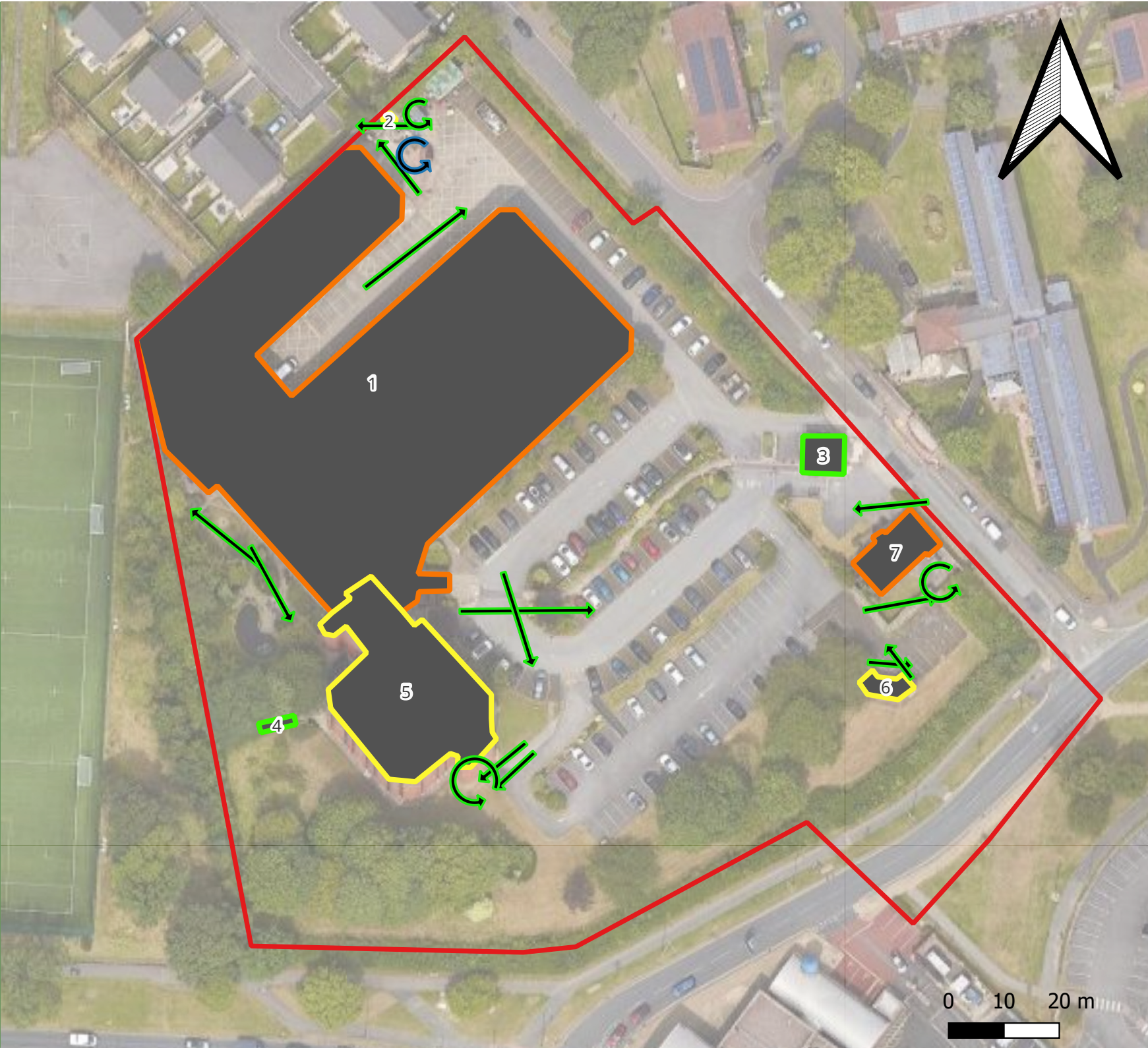
WYTHENSHAWE
BROTHERTON HOUSE

- Site Boundary
- Common Pipistrelle
- Soprano Pipistrelle

Title: Figure C.2 Visit 1 Survey Results
Drawn by: RE
Date: 14/10/2025

Reviewed by: FT
Date: 14/10/2025

Project number: 553439
Sources: ESRI World Topo, Greenspace Information for Greater London (GiGL), Natural England



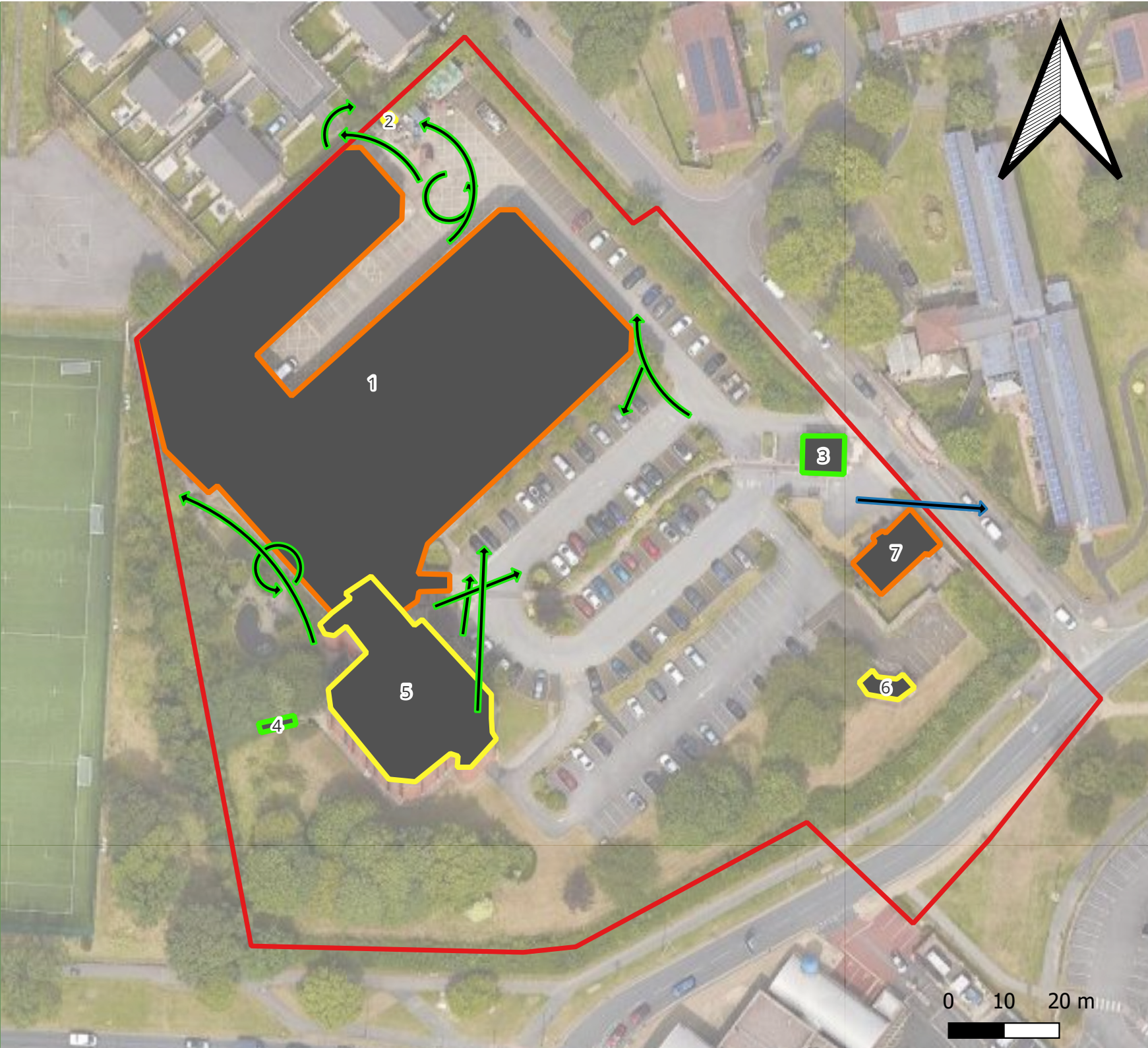
WYTHENSHAWE
BROTHERTON HOUSE

- Site Boundary
- Common Pipistrelle
- Soprano Pipistrelle

Title: Figure C.3 Visit 2 Survey Results
Drawn by: RE
Date: 14/10/2025

Reviewed by: FT
Date: 14/10/2025

Project number: 553439
Sources: ESRI World Topo, Greenspace Information for Greater London (GiGL), Natural England



APPENDIX D AUXILIARY SURVEY DATA

Table D.1 Auxiliary survey data

Survey type	Building Number (Visit No.)	Date	Surveyor	Sunset	Conditions
Emergence	B1 (1)	05/08/25	Daniel Perlaki Abbie Case Clare McNeil Emily Spencer Toby Holmes Jack Reese Elford	20:57	Start 17°C End 14°C Clear sky Moderate Wind
Emergence	B1 (2)	03/09/25	Thomas Salt Clare McNeil Kelsey Marratt Emily Spencer Daniel Perlaki Liam James	19:53	Start 16°C End 15°C Overcast Light Wind
Emergence	B2 (1)	13/08/25	Clare McNeil	20:41	Start 21°C End 20°C Overcast Light Wind
Emergence	B5 (1)	13/08/25	Sophie Trigg Kelsey Marratt NVA	20:41	Start 21°C End 20°C Overcast Light Wind
Emergence	B6 (1)	19/08/25	Joshua Phillips NVA	20:27	Start 16°C End 15°C Overcast Light Wind
Emergence	B7 (1)	19/08/25	Franchesca Thorley Emily Spencer Toby Holmes	20:27	Start 16°C End 15°C Overcast Light Wind
Emergence	B7 (2)	10/09/25	Clare McNeil Emily Spencer Franchesca Thorley	19:36	Start 15°C End 14°C Overcast Moderate Wind, Light Rain

APPENDIX E STILLS FROM NVA AT THE DARKEST POINT OF SURVEY

Table E.1 Stills from NVAs during the darkest point of survey

Date	Building Number (Visit)	Survey Location reference	Still
05/08/25	B1 (1)	Daniel Perlaki	
		Abbie Case	
		Clare McNeil	

Date	Building Number (Visit)	Survey Location reference	Still
		Emily Spencer	
		Toby Holmes	
		Jack Reese Elford	
03/09/25	B1 (2)	Thomas Salt	

Date	Building Number (Visit)	Survey Location reference	Still
		Clare McNeil	
		Kelsey Marratt	
		Emily Spencer	
		Daniel Perlaki	

Date	Building Number (Visit)	Survey Location reference	Still
		Liam James	
13/08/25	B2 (1)	Clare McNeil	
13/08/25	B5 (1)	Sophie Trigg	
		Kelsey Marratt	

Date	Building Number (Visit)	Survey Location reference	Still
		NVA	
19/08/25	B6 (1)	Joshus Phillips	
		NVA	
19/08/25	B7 (1)	Franchesca Thorley	

Date	Building Number (Visit)	Survey Location reference	Still
		Emily Spencer	
		Toby Holmes	
10/09/25	B7 (2)	Clare McNeil	
		Emily Spencer	

Date	Building Number (Visit)	Survey Location reference	Still
		Franchesca Thorley	

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- ³ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6.
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- ⁸ The Vincent Wildlife Trust (2006) An analysis of the usage of bat boxes in England, Wales and Ireland
- ⁹ Habitat Bat Box 003 - Blended Facing. Available from: [Integrated Bat Boxes | NHBS Practical Conservation Equipment](#)
- ¹⁰ Vivara Pro low profile woodstone bat box. Available from: [For Crevice Species | NHBS Practical Conservation Equipment](#)
- ¹¹ 2F Schwegler bat box. Available from: [2F Schwegler Bat Box \(General Purpose\) | NHBS Practical Conservation Equipment](#)
- ¹² HM Government, (1981); Part I and Part II of Wildlife and Countryside Act (as amended). HMSO
- ¹³ CEC (Council of the European Communities), (1992); Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
- ¹⁴ HM Government, (2019); The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Statutory Instrument 2019 no. 579
- ¹⁵ GOV.UK. (2024). National Planning Policy Framework. [online] Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework>