Thomson
environmental
consultants





Potential Roost Feature Inspection Survey

Former Peacock Centre and Pipewell Avenue

For

Clarion Housing Group

Report Ref.: CLA001-011-006/004/001

May 2026

London & South East
Compass House
Surrey Research Park
Guildford
GU2 7AG. UK

t: +44 (0)1483 466 000

North East
Unit 4 Carrwood Park
Selby Road
Leeds
LS15 4LG. UK

t: +44 (0)113 518 2121

North West

Kennedy House
31 Stamford St
Ground Floor
Altrincham
Greater Manchester
WA14 4DZ

t: +44 (0)1483 466 000

Wales & South West
Sophia House
28 Cathedral Road
Cardiff
CF11 9LJ UK

t: +44 (0)292 066 0180

Midlands
605 Holly Court, Holly Farm Business Park
Honiley, Kenilworth
Warwickshire
CV8 1NP

t: +44 (0)121 827 3180

East
70-72 The Havens, Ransomes Industrial Estate,
Ipswich, Suffolk
IP3 9BF

t: +44 (0)1483 466 000

Enquiries

e: enquiries@thomsonec.com

w: www.thomsonec.com

PEERS QUALITY ASSURANCE LTD
UKAS MANAGEMENT SYSTEMS
ISO 9001:2015 9940
PEERS QUALITY ASSURANCE LTD
UKAS MANAGEMENT SYSTEMS
ISO 14001:2015 9940

Project Number	Report No.
CLA001-011-006	004

Revision No.	Date of Issue	Author	Reviewer	Approver
001	28/05/2026	Elizabeth Redpath Katrional Millar	Olivia Satur	Alex Blundell

Disclaimer:

Copyright Thomson Environmental Consultants Limited. All rights reserved.

No part of this report may be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants Limited. If you have received this report in error, please destroy all copies in your possession or control and notify Thomson Environmental Consultants Limited.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Thomson Environmental Consultants Limited, no other party may use, make use of or rely on the contents of the report. No liability is accepted by Thomson Environmental Consultants Limited for any use of this report, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in the report are on the basis of Thomson Environmental Consultants Limited using due skill, care and diligence in the preparation of the same and no explicit warranty is provided as to their accuracy. It should be noted and it is expressly stated that no independent verification of any of the documents or information supplied to Thomson Environmental Consultants Limited has been made.

Contents

1. Summary and Main Recommendations 5
   1.1 Summary 5
   1.2 Main Recommendations 5
2. Introduction 6
   2.1 Development Background 6
   2.2 Ecology Background 6
   2.3 The Brief and Objectives 6
   2.4 Limitations 6
3. Methodology 8
   3.1 Survey Area and Data Collection 8
   3.2 Potential Roost Feature (PRF) Inspection Survey 8
4. Results 12
   4.1 Potential Roost Feature Inspections 12
5. Legal Consideration 13
6. Recommendations 14
   6.1 Constraints 14
   6.2 Recommendations 14
7. Conclusion 15
8. References 16

Appendix 1: Full Tree and PRF Inspection Survey Results 17

Appendix 2: British Bats 29

Table 3.1: PRF types that can be exploited by bats and how they form (adapted from Bat Roosts in Trees (BTHK, 2018) 8
Table 3.2: Guidelines for assessing the suitability of tree PRFs on proposed development sites for bats, to be applied using professional judgement (adapted from Collins ed 2023) 9
Table 3.3: Classification of bat roost type definitions (adapted from Collins ed 2023) 10
Table 4.1: Summary aerial inspection results 12
Table 6.1: Summary of recommendations 14

Figure 1a: Site Location (Former Peacock Centre)
Figure 1b: Site Location (Pipewell Avenue)
Figure 2a: PRF Inspection Survey Results (Former Peacock Centre)
Figure 2b: PRF Inspection Survey Results (Pipewell Avenue)

1. Summary and Main Recommendations

1.1 Summary

1.1.1 Clarion Housing Association Ltd is preparing a planning proposal of a new residential development in Gorton, Manchester (central Grid References: SJ 88322 96605 and SJ 88322 96605). The site location is shown on Figure 1a and 1b. The site currently consists of the Former Peacock Centre which comprises scrub, grassland, individual trees and artificial unvegetated; unsealed surface, and Pipewell Avenue, comprising modified grassland, bramble scrub, hard standing and individual trees. The proposal includes the construction of 79 homes and requires the clearance of vegetation including scrub and trees.

1.1.2 A Preliminary Ecological Appraisal (PEA) and Ground Level Tree Assessment (GLTA) of the site was completed by Thomson Environmental Consultants (Thomson, 2025a) in April 2025. The field survey concluded that potential roosting habitat for bats may be present within the site in trees.

1.1.3 Bats are protected from killing, injury and disturbance. Bat roosts are also protected from damage or destruction. If bats or their roosts will be impacted by the works appropriate mitigation would be required under licence from Natural England.

1.1.4 Thomson Environmental Consultants was commissioned to undertake a bat Potential Roost Inspection survey of the trees noted on site during the GLTA. The objective was to fully determine the potential of the trees to support roosting bats, in accordance with best practice guidelines (Collins(ed), 2023). This report details the methods and results of the assessment and makes recommendations for further surveys, if required to determine presence or absence of roosting bats.

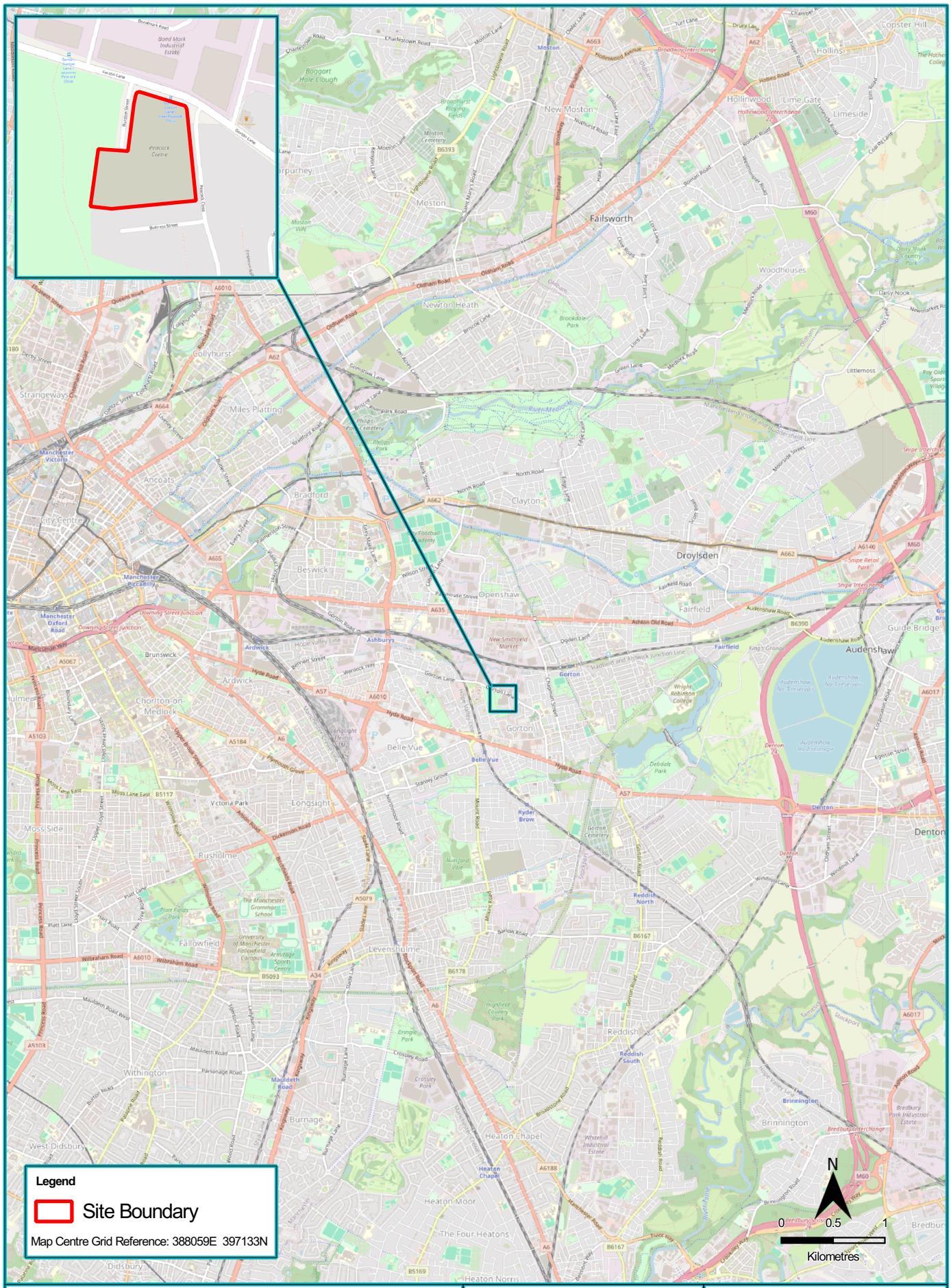
1.1.5 The results of the site assessment are shown on Figure 2a and 2b. Ten trees were recorded as 'PRF-I', which means that these trees have potential to support individual bats. The current proposals could result in damage, destruction or disturbance of the roost features with potential to support roosting bats identified in this assessment.

1.2 Main Recommendations

1.2.1 Trees confirmed with potential for individual bats only (PRF-I) should be soft felled in the presence of a suitably experienced ecologist.

1.2.2 Removal of ivy and repeat PRF inspection prior to soft felling in the presence of a suitably experienced ecologist should be undertaken on T27.

1.2.3 A Precautionary Method of Works (PMoW) for bats should be produced.

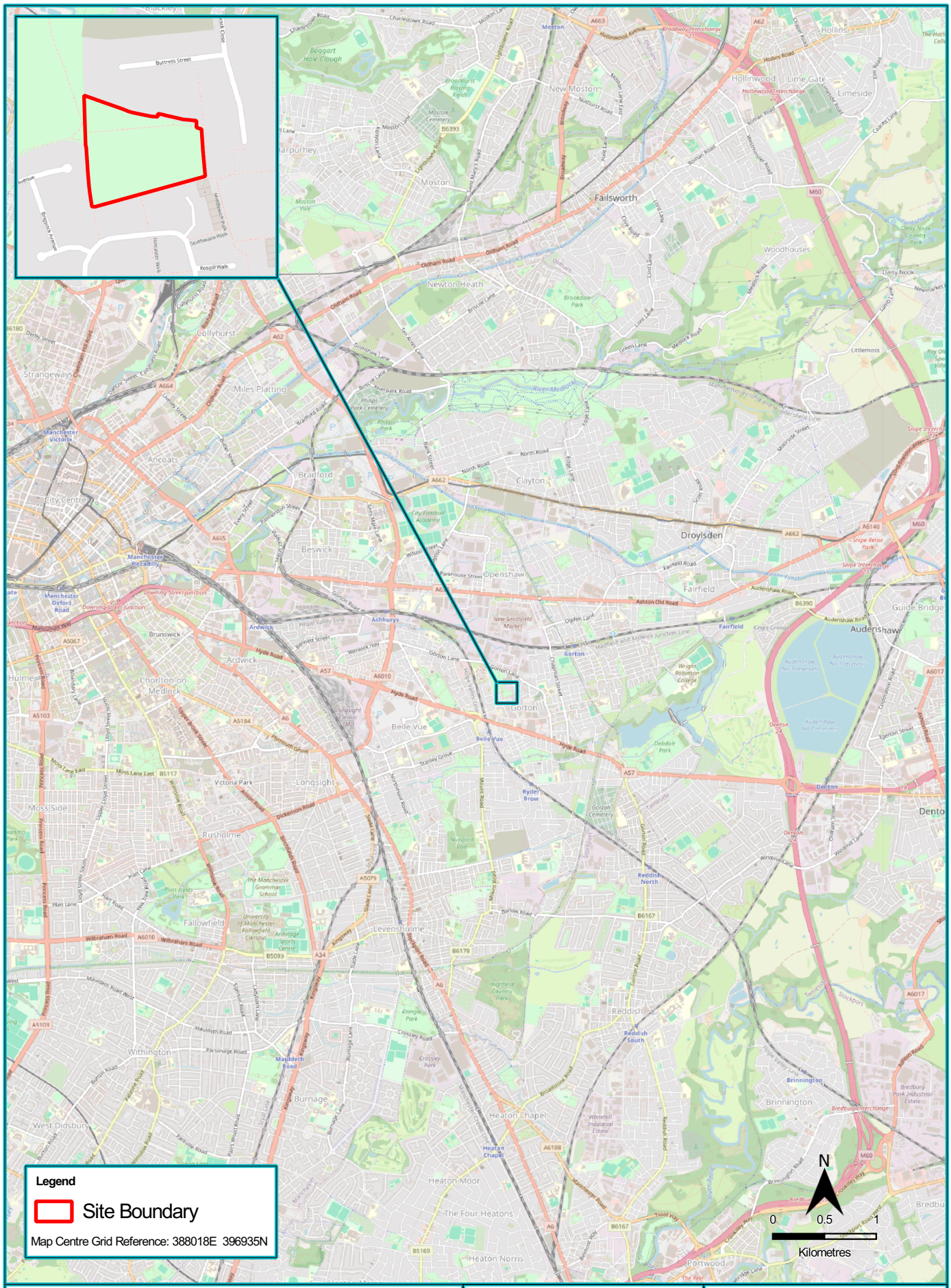


Client: Clarion Housing Group		Drawing Ref: CLA001-011/409753/1	Thomson environmental consultants
Figure Number: 1a		Scale at A4: 1:50,000	
Figure Title: Site Location (Former Peacock Centre)		Drawn: AS	Checked: JB
		Date: 26/05/2026	Date: 26/05/2026

www.thomsonec.com
enquiries@thomsonec.com

Filepath: M:\Live Projects\Terrestrial Ecology\Manchester\CLA001-011_1 Former Peacocks Centre\6 - Mapping\Working\Quote 006 Former Peacock Centre & Pipewell Lane\CLA001_011_Fig1a_SiteLocation_AS_140526.qgz

Contains Ordnance Survey data © Crown copyright and database right 2026. This map must not be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants.



Client: Clarion Housing Group		Drawing Ref: CLA001-011/409754/1	
Figure Number: 1b		Scale at A4: 1:50,000	
Figure Title: Site Location (Pipewell Avenue)		Drawn: AS	Checked: JB
		Date: 26/05/2026	Date: 26/05/2026

Thomson environmental consultants

www.thomsonec.com
enquiries@thomsonec.com

Filepath: \\thmazstoragelive.file.core.windows.net\thm-live-files\Live Projects\Terrestrial Ecology\Manchester\CLA001-011_1 Former Peacocks Centre\6 - Mapping\Working\Quote 006 Former Peacock Centre & Pipewell Lane\CLA001_011_Fig1b_SiteLocation_AS_140526.qgz
Contains Ordnance Survey data © Crown copyright and database right 2026. This map must not be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants.



Thomson environmental consultants
www.thomsonec.com
enquiries@thomsonec.com

Legend

Overall Suitability of Tree to Support Roosting Bats

- PRF-I
- None
- Site Boundary

Map Centre Grid Reference: 388322E 396612N

Contains Ordnance Survey data
© Crown copyright and database right 2026.

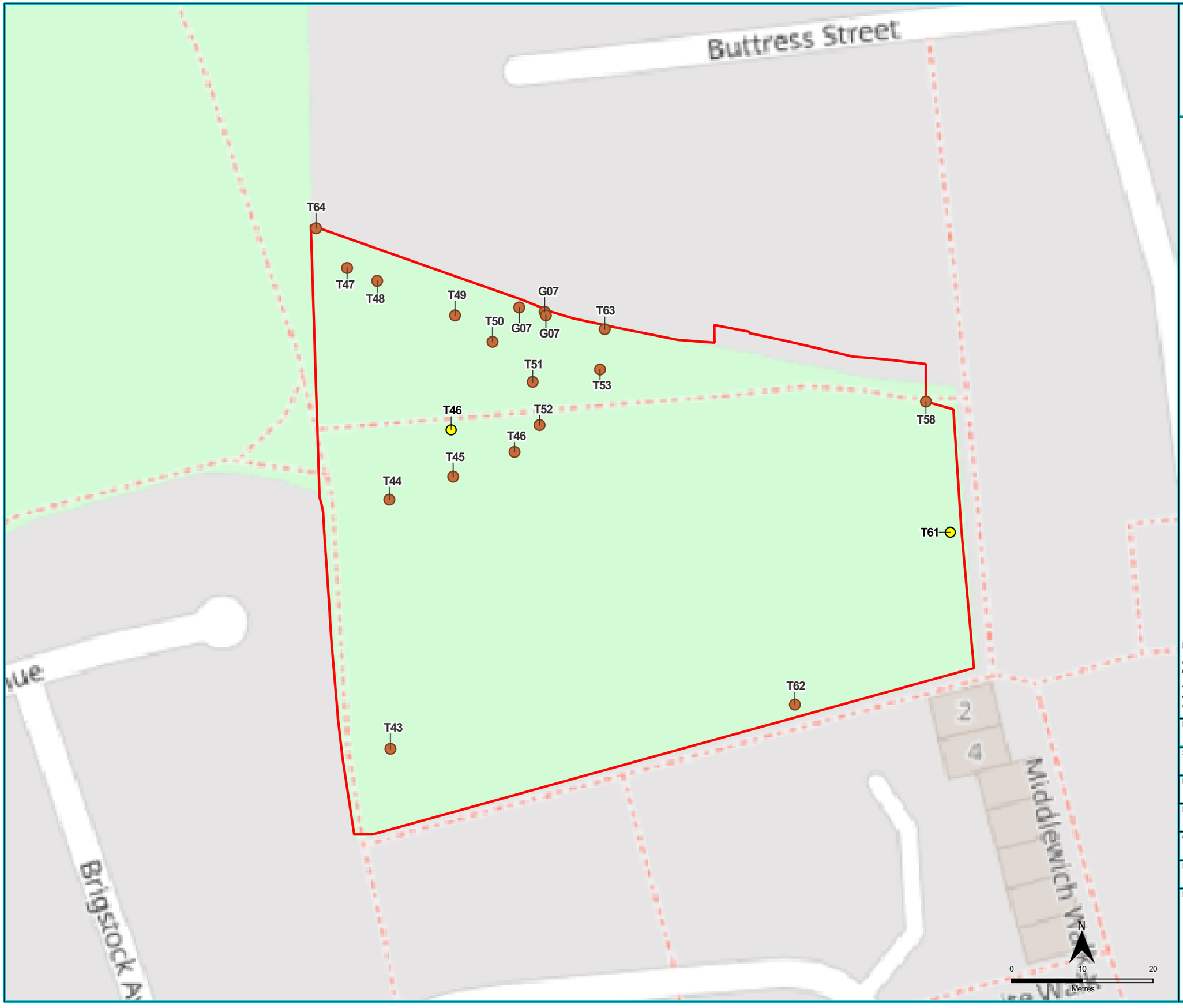
This map must not be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants.

Drawing Ref	CLA001-011/409755/1
Scale at A3	1:600
Drawn: AS	Checked: JB
Date: 26/05/2026	Date: 26/05/2026
Client	Clarion Housing Group
Figure Number	2a

Figure Title

PRF Inspection Survey Results (Former Peacock Centre)

Filepath: \\thmazstoragelive.file.core.windows.net\thm-live-files\Live Projects\Terrestrial Ecology\Manchester\CLA001-011_1 Former Peacocks Centre\6 - Mapping\Working\Quote 006 Former Peacock Centre & Pipewell Lane\CLA001_011_Fig2a_PRFInspection_AS_140526.qgz
Contains Ordnance Survey data © Crown copyright and database right 2026. This map must not be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants.



Thomson environmental consultants
www.thomsonec.com
enquiries@thomsonec.com

Legend

Overall Suitability of Tree to Support Roosting Bats

- PRF-I
- None
- Site Boundary

Map Centre Grid Reference: 388306E 396473N

Contains Ordnance Survey data
© Crown copyright and database right 2026.

This map must not be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants.

Drawing Ref	CLA001-011/409756/1
Scale at A3	1:500
Drawn: AS	Checked: JB
Date: 26/05/2026	Date: 26/05/2026
Client	Clarion Housing Group
Figure Number	2b

Figure Title

PRF Inspection Survey Results (Pipewell Avenue)

Filepath: \\thmazstoragelive.file.core.windows.net\thm-live-files\Live Projects\Terrestrial Ecology\Manchester\CLA001-011_1 Former Peacocks Centre\6 - Mapping\Working\Quote 006 Former Peacock Centre & Pipewell Lane\CLA001_011_Fig2b_PRFInspection_AS_140526.qgz
Contains Ordnance Survey data © Crown copyright and database right 2026. This map must not be copied or reproduced by any means without prior written permission from Thomson Environmental Consultants.

2. Introduction

2.1 Development Background

2.1.1 Clarion Housing Association Ltd is preparing a planning proposal for a site in Gorton, Manchester. The site is split into two parcels, The Former Peacock Centre (central Grid Reference: SJ 88322 96605), a former school that has been since demolished, and Pipewell Avenue (central Grid Reference: SJ 88322 96605), approximately 60m south of the Former Peacock Centre. The area impacted by the works is hereafter referred to as 'the site' and location is shown on Figure 1a and 1b.

2.1.2 The proposal includes the construction of 79 homes and requires the clearance of vegetation including scrub and trees. The proposal is hereafter referred to as 'the 'development'.

2.1.3 The project will require planning consent from Manchester City Council.

2.2 Ecology Background

2.2.1 A Preliminary Ecological Appraisal (PEA) and Ground Level Tree Assessment (GLTA) was undertaken by Thomson Environmental Consultants on 24th March 2025. A total of four trees were assessed as Further Assessment Required (FAR) and five trees as Potential Roost Feature (PRF). It was recommended that where impacts to these trees could not be avoided, aerial inspection surveys should be undertaken to further assess their suitability for roosting bats (Thomson Environmental Consultants 2025).

2.3 The Brief and Objectives

2.3.1 Clarion Housing Association Ltd commissioned Thomson Environmental Consultants on 21st April 2026 to undertake the following:

- Surveys for bat roosts in trees at the Former Peacock Centre and Pipewell Avenue;
- Up to 10 trees will be checked for the presence of bat roosts using a combination of inspection cameras and tree climbing to assess the potential of all features located within each tree to support roosting bats. The surveyors will inspect any features with the potential to support bats using a camera, an endoscope, binoculars or a high-powered torch, as appropriate. Any evidence of bats will be recorded; and
- A report on the surveys giving the methods and results, discussion of the legal and planning policy issues and our recommendations, including a digitised map of the survey results.

2.4 Limitations

2.4.1 None of the trees were suitable for aerial inspection via tree climbing due to health and safety. The trees previously assessed as FAR or PRF were therefore assessed from the ground or via ladder. All trees on site were able to be adequately inspected from the ground except for T27 therefore further survey is not required to address this limitation.

2.4.2 Tree T27 was covered in dense ivy on the majority of the tree which was impractical to inspect fully from the ground. Recommendations are made in Section 6 to address this limitation.

2.4.3 Trees T33 and T37 were outside of the red line boundary of the site and therefore could not be climbed as landowner permission was not received. They were also assessed as being unsafe to climb due to being located immediately adjacent to a metal fence. However, the trees were situated within publicly accessible land (Taylor Street Playing Fields) so they could be inspected from the ground.

2.4.1 This report is based on the development boundary and layout shown on "B100705-AD 1000 G Pro Site Layout_SOA", "Sketch 04 – Peacock Centre Tree Retention and Removal" and "Sketch 05 – Pipewell Avenue Tree Retention and Removal". It is understood that, at the time of writing, the landscape design and therefore tree retention has not been finalised. Subsequent changes to either may result in a requirement to reassess the potential impacts of the development and the requirements for avoidance, mitigation and enhancement.

3. Methodology

3.1 Survey Area and Data Collection

3.1.1 A survey area was defined that encompassed the development site. All data was recorded on the ArcGIS FieldMaps mobile mapping app. See Figure 2a and 2b for a map of the survey area.

3.2 Potential Roost Feature (PRF) Inspection Survey

3.2.1 Within the following method description, aerial close inspection surveys of trees with confirmed, or potential to contain, PRFs were carried out using the following access methods:

- Mobile elevated working platform (MEWP): this is the preferred method of access, based on the lowest risk to surveyors when working at height. However, in many cases this is not possible due to ground conditions, access to the tree and position of the PRF within the tree;
- Accessing the tree using ropes and harness, by suitably trained and qualified personnel.

3.2.2 The PRF inspection survey was undertaken on 30th April 2026 during suitable weather.

3.2.3 The survey was conducted by Senior Ecological Consultant Charlotte Ward BSc (Hons), MSc, MCIEEM and Ecological Consultant Katriona Millar BSc (Hons), MSc, ACIEEM according to current best practice guidelines (Collins ed. 2023). Both surveyors have City & Guilds Level 2 Certificate of Competence in Tree Climbing and Aerial Rescue. Both surveyors hold Natural England Level 1 Survey Licences (CL17), and were accredited under Irfaan Junaideen's Level 2 Survey Licence (CL18).

3.2.4 Following assessment of the safest access route, PRFs were accessed and close inspected using an endoscope, torch and mirror (as necessary). PRFs targeted were based on Table 3.1 below:

Table 3.1: PRF types that can be exploited by bats and how they form (adapted from Bat Roosts in Trees (BTHK, 2018)

Disease/Decay Formed PRFs	Damaged formed PRFs	Association formed PRFs
woodpecker holes	lightning strikes	Fluting
squirrel holes	hazard beams	ivy
knot holes	subsidence cracks	
pruning cuts	shearing cracks	
tear outs	transverse snaps	
wounds	welds	
cankers	lifting bark	

compression forks butt rots	desiccation fissures frost cracks	

3.2.5 All confirmed PRFs were classified according to the following categories in Table 3.2.

Table 3.2: Guidelines for assessing the suitability of tree PRFs on proposed development sites for bats, to be applied using professional judgement (adapted from Collins ed 2023)

Suitability	Description
None	No potential space to support roosting bats.
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used for a maternity colony.

3.2.6 Any suspected PRFs which could not be accessed on health and safety grounds, were classified as 'further assessment required' (FAR), which at this stage would likely trigger the need for roost emergence surveys (unless direct and indirect impacts to the tree can be avoided).

3.2.7 All accessible PRFs were searched for evidence of use by roosting bats, including droppings (although these often deteriorate rapidly in trees) and bats occupying a PRF at the time of the survey.

3.2.8 During the classification visit, all PRFs were mapped within each tree (following the GLTA references) and numbered, with the following attributes were recorded, and updated as necessary during subsequent visits:

- stem/limb diameter at the PRF
- no. entrances
- width of all entrances
- internal dimensions (height, width and depth) and apex shape
- internal conditions (substrate, dry, damp, wet, odour)
- presence of competitors
- presence of bats / bat droppings
- lack of evidence of use by bats
- if roosting bats present: species, number, state (torpid/awake), location in PRF, distance from entrance

3.2.9 Where bats were present, they were photographed, and any droppings found were collected in a receptacle labelled with the tree and PRF reference, to enable species identification and verification (multiple species may use a single feature) through DNA analysis.

3.2.10 The initial PRF classification visit counts as a PRF survey visit provided the PRF can be accessed and fully inspected.

3.2.11 Following completion of all PRF inspection surveys, any roosts recorded were classified as far as possible according to Table 3.3. Where certainty of roost classification was low, further surveys may be recommended to enable a reliable conclusion to be drawn, if necessary.

Table 3.3: Classification of bat roost type definitions (adapted from Collins ed 2023)

Roost Type	Definition
Day roosts	Where bats shelter as individuals or small groups during the day. This term can be applied in conjunction with other roost types, typically transitional depending on the season and nature of use (see below). Perhaps most commonly applied to males during the summer season when females gather in nursery colonies. Occupancy typically throughout the active season (April – October)
Night roosts	Where bats shelter at night as individuals or a whole colony. These can be located very close to or within the same structure as day roosts. Occupancy typically throughout the active season (April – October)
Feeding roost	Used by individuals or small groups for feeding at night between foraging bouts. These are often in association with night roosts especially for species such as brown long-eared. These can also be very close to or within the same structure as a day roost. Occupancy typically throughout the active season (April – October)
Transitional roost	A roost used by bats between the summer and winter seasons, often (though not always) during a physical movement phase between summer and wintering roosts/geographical locations. This term can be applied to other roost types if they are used only during the transitional period. Indicated mainly by the time of year (typically April – early May, or September - October).
Maternity roost	Mainly dominated by females where they give birth to young and raise these. Maternity roost characteristic preferences differs between species, however warm conditions are generally favoured, typically larger spaces that are south facing and retain warm temperatures during the maternity season (May – August).
Hibernation roost	Where bats are found individually or in groups during winter. These classically need to have cool temperature and high humidity, although more 'cold hardy' species can be found

Roost Type	Definition
	hibernating singly/in low numbers within day roosts which are used year-round (sometimes referred to as 'winter roosts'). Typically November – March, peak season in December – February.
Satellite roost	An alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

3.2.12 Along with the above mentioned roosting categories, bats also use the following sites that were flagged up if evidence of such activity was recorded on site:

- Swarming sites – A place where male, female and juvenile bats congregate, flying and roosting together in the late summer to autumn (late August – October). Mating behaviour is known to happen within these locations.
- Mating site – A place where mating occurs through late summer into as late as early winter (late August – early November). These sites are associated with mating song perches where bats remain stationary whilst calling for a mate, or adjacent to place where bats call on the wing in song flights. The mating itself occurs in what is known as a mating or harem roost.

4. Results

4.1 Potential Roost Feature Inspections

4.1.1 Inspections were conducted on nine trees identified as PRF or FAR during the GLTA, either via from a ladder or from the ground. A summary of the results is given in Table 4.1 and full results and photographs are given in Appendix 1.

4.1.2 During the survey, an additional tree (T46) was scoped in for inspection due to the presence of butt rot which appeared to extend into the trunk.

Table 4.1: Summary aerial inspection results

Tree I.D.	Type of PRF	Overall Suitability
T01	Wound Knot hole Tear-out	PRF-I
T07	Shearing crack Lifting bark	PRF-I
T18	Hollow trunk	PRF-I
T27	Ivy/epicormic growth	PRF-I (see Limitations)
T28	Ivy/epicormic growth	PRF-I
T29	Knot hole Knot hole	PRF-I
T33	Ivy/epicormic growth	PRF-I
T37	Ivy/epicormic growth	PRF-I
T46	Butt rot	PRF-I
T61	Knot hole Knot hole	PRF-I

5. Legal Consideration

5.1 Background

5.1.1 The content of this section is the legislation that we know are relevant based on this survey and information provided by the client.

5.2 Legislation

5.2.1 All bat species are protected by the Conservation of Habitats and Species Regulations 2017 (as amended). The Regulations make it an offence, with very few exceptions, to:

- Deliberately capture, injure or kill a bat;
- Deliberately disturb a bat in such a way as to be likely:
  - to impair its ability to survive, to breed or reproduce, or to rear or nurture its young; or
  - to impair its ability to hibernate or migrate; or
  - to affect significantly the local distribution or abundance of the species to which they belong.
- Damage or destroy a breeding site or resting place of a bat; or
- Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead bat, or any part of, or anything derived from a bat.

5.2.2 In addition to the protection given to bats under the Conservation of Habitats and Species Regulations 2017 (as amended) already described, bats are also partially protected in England under the Wildlife and Countryside Act 1981 (as amended), which adds the following offences (with certain exceptions):

- Disturbance while it is occupying a structure or place which it uses for shelter or protection; or
- Obstructing access to any structure or place used for shelter or protection.

5.2.3 A roost is any structure or place used by bats for shelter or protection. As bats tend to re-use the same roosts year after year, the roost is protected whether bats are present or not at the time.

5.2.4 For more information regarding legislation protecting bats and bat roosts, see Appendix 2.

5.2.5 Should a bat roost be present within any of the trees surveyed there is the potential for disturbance to, or loss of, a roost which would contravene legislation. As such, to be compliant with legislation described above, recommendations for mitigation or further survey are provided in Section 6.

6. Recommendations

6.1 Constraints

6.1.1 The works have the potential to injure, kill and disturb any bats that could be using the trees to roost. They also have the potential to damage or destroy a breeding site or resting place of a bat.

6.2 Recommendations

6.2.1 The trees to which the following recommendations apply are listed in Table 6.1.

6.2.2 If more than 12 months passes before works are undertaken that could impact bat roosts, then a follow up GLTA survey is recommended to determine if the suitability of all trees has changed.

6.2.3 PRF-I trees to be removed as a part of the proposal should be done so using precautionary methods. This includes a pre-commencement check of PRFs immediately prior to soft-felling under the supervision of a suitably qualified ecologist.

6.2.4 If impacts (damage, destruction, or disturbance) on trees identified with potential to support roosting bats can be avoided, then further survey or mitigation for these trees may not be required.

6.2.5 PRF-I trees to be removed as part of the proposal should be compensated for by the inclusion of bat boxes within the scheme.

6.2.6 To protected retained PRF-I during the works, a Precautionary Method of Works (PMoW) is required.

Table 6.1: Summary of recommendations

Recommendations	Trees
If more than 12 months passes before works are undertaken that could impact bat roosts, then a follow up survey is recommended to determine if the suitability of trees has changed.	All trees.
Removal of ivy and repeat PRF inspection prior to soft felling in the presence of a suitably experienced ecologist. Compensation for loss of roost features.	T27 if it is to be removed.
Pre-commencement check of PRFs immediately prior to soft felling in the presence of a suitably experienced ecologist. Compensation for loss of roost features.	PRF-I trees to be removed.
PMoW for bats.	PRF-I trees to be retained (including T33 and T37).

7. Conclusion

7.1.1 The bat aerial roost assessment recorded trees with potential to support roosting bats. Recommendations are given for trees where impacts (destruction, damage or disturbance) to potential bat roosts cannot be avoided.

8. References

Bat Tree Habitat Key (BTHK) (2018) Bat Roost in Trees: A Guide to Identification and Assessment for Tree-Care and Ecology Professionals. Pelagic Publishing, UK

Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines. (3rd Edition). Bat Conservation Trust. London.

His Majesty's Stationery Office (HMSO) (1981). Wildlife and Countryside Act 1981. Chapter 69. https://www.legislation.gov.uk/ukpga/1981/69

His Majesty's Stationery Office (HMSO) (2006). Natural Environment and Rural Communities Act 2006. https://www.legislation.gov.uk/ukpga/2006/16/introduction

His Majesty's Stationery Office (HMSO) (2017). The Conservation of Habitats and Species Regulations 2017. https://www.legislation.gov.uk/uksi/2017/1012/contents/made.

Institution of Lighting Professionals (2023) Guidance Note GN08/23 Bats and Artificial Lighting at Night

Joint Nature Conservation Committee. (2004). Bat workers manual. Joint Nature Conservation Committee.

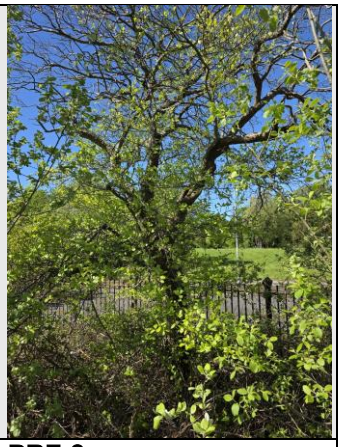
Thomson Environmental Consultants (2025). Preliminary Ecological Appraisal, Former Peacock Centre and Pipewell Avenue. Report reference: CLA001-011-001/002/002

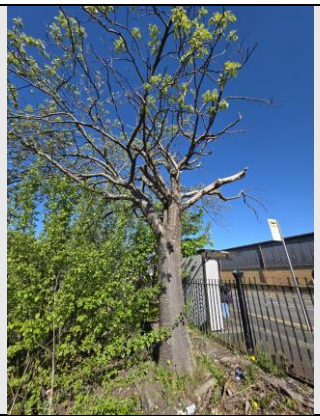
Thomson environmental consultants

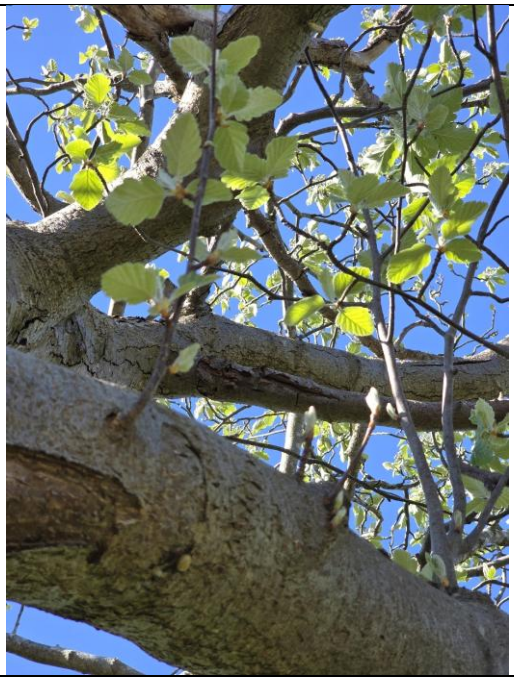
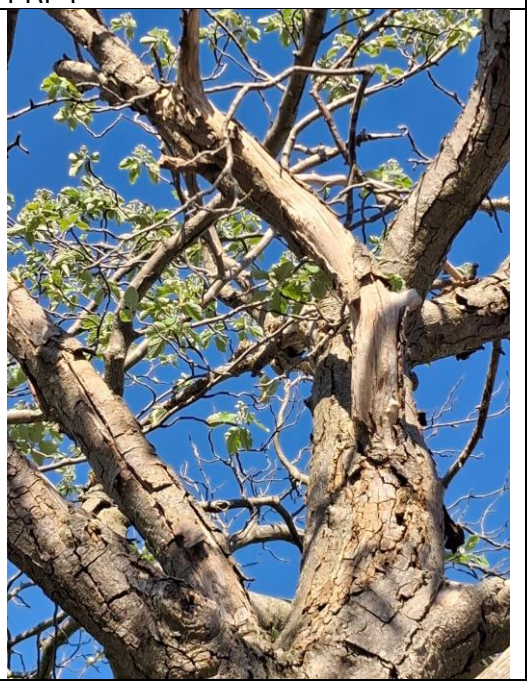
Appendix 1: Full Tree and PRF Inspection Survey Results

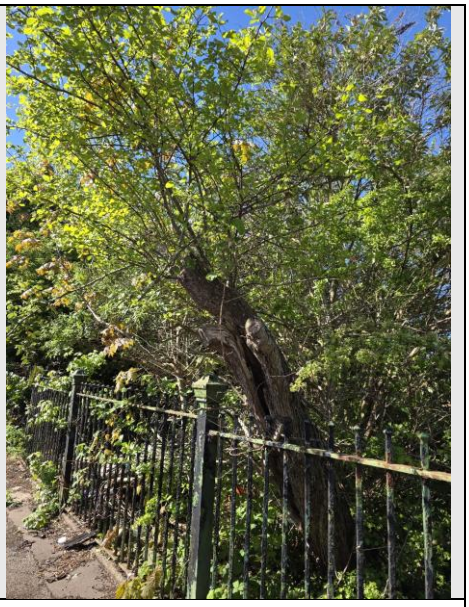
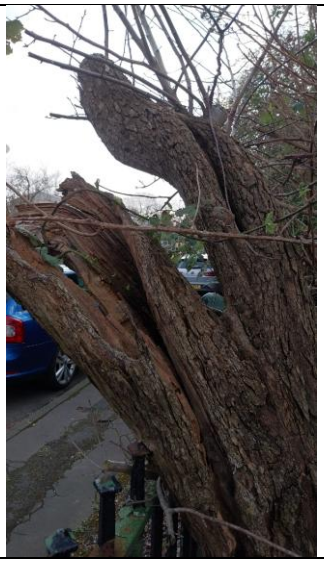
Tree I.D.	Tree Species (Tag No.)	Life Stage - Condition	DBH - Height	Main Habitat-Setting	PRF Description	Level of Disturbance	Overall Suitability
T01	Cockspur thorn (*Crataegus crus-galli*)	Mature Fair	300mm 6m	Urban	Tear out and knot hole leading into a tree cavity, Pruning wound.	Moderate	PRF-I
T07	Swedish whitebeam (*Sorbus intermedia*)	Mature Fair	410mm 7m	Urban	Crack in branch. Lifting bark.	Moderate	PRF-I
T18	Cockspur thorn	Mature Poor	320mm 3m	Urban	Hollow trunk.	Moderate	PRF-I
T27	Sycamore (*Acer pseudoplatanus*)	Early mature Fair	500mm 15m	Urban	Ivy	Moderate	PRF-I
T28	Cockspur thorn	Early mature Fair	260mm 7m	Urban	Ivy	Moderate	PRF-I
T29	Swedish whitebeam	Mature Good	460mm 10m	Urban	Two knot holes.	Moderate	PRF-I
T33	Sycamore	Early mature Fair	400mm 13m	Urban	Ivy	Moderate	PRF-I
T37	Swedish whitebeam	Mature Fair	330mm 13m	Urban	Ivy	Moderate	PRF-I
T46	Silver maple (*Acer saccharinum*)	Mature Fair	710mm 16	Urban (Park)	Butt-rot/hollow trunk.	Moderate	PRF-I
T61	Common lime (*Tilia x europea*)	Mature Good	530mm 14m	Urban (Park)	Two knot holes.	Moderate	PRF-I

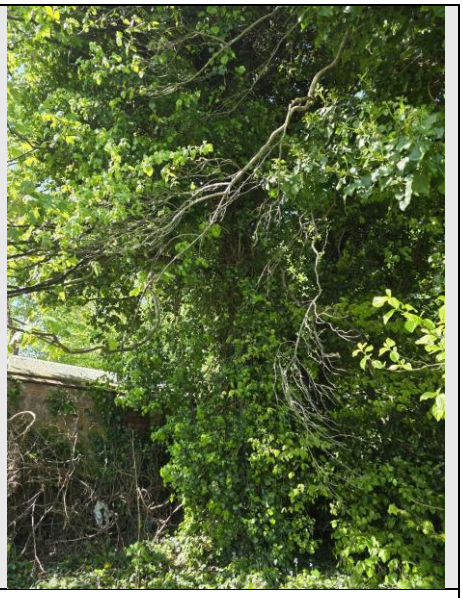
Thomson environmental consultants

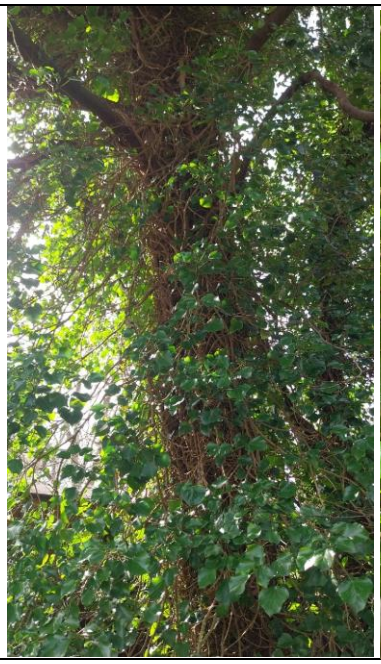
Tree ID	**T01**		
Location (GR)	**SJ 88305 96628**		
Species	**Cockspur thorn (*Crataegus crus-galli*)**		
Description	**Cockspur thorn with a tear out and knot hole leading into a tree cavity, A pruning wound is also present.**		
PRF Aerial inspection complete	**Yes – using ladder.**		
PRF Number	**PRF-1**	**PRF-2**	**PRF-3**
Type	Knot hole	Tear-out	Wound
Aspect	North	North	North
Height	2m	2m	2m
Entrance Height	20cm	5cm	8cm
Entrance Width	4cm	4cm	5cm
Depth	4cm	5cm	8cm
Competitor	Woodlice	Woodlice	None
Description	Callus roll leading to cavity.	A small hole caused by a tear out. Hole leads upwards approx. 5cm.	Pruning wound. Upward facing opening approximately 8cm in depth. Very exposed with no shelter for bats.
Suitability	PRF-I	PRF-I	None
Photograph			

Tree ID	**T07**	
Location (GR)	**SJ 88325 96664**	
Species	**Swedish whitebeam (*Sorbus intermedia*)**	
Description	**Swedish whitebeam with partially dead canopy located adjacent to road.**	
PRF Aerial inspection complete	**No – Unsuitable for climbing due to tree being partially dead. PRFs assessed from ground.**	

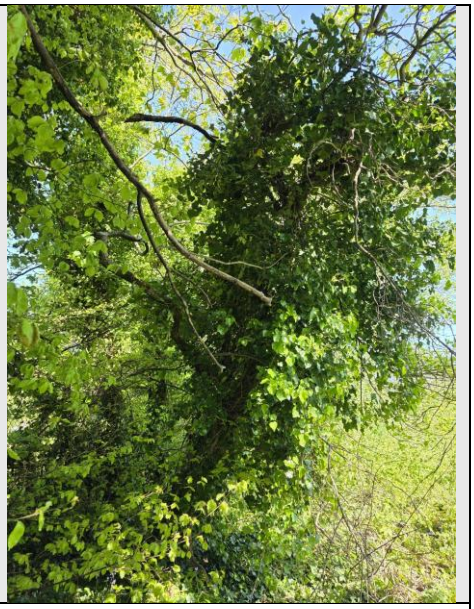
PRF Number	**PRF-1**	**PRF-2**
Type	Crack in branch	Lifting bark
Aspect	East	East
Height	3m	3m
Entrance Height	50cm	4cm
Entrance Width	2cm	5cm
Depth	1cm	3cm
Competitor	None	None
Description	Several splits in the deadwood (small dead branches) in the canopy. Long and very narrow, upward facing and exposed.	Lifted bark throughout dead areas of the tree including the trunk. The areas are shallow and do not extend into the branch/trunk. The peeling bark is exposed and open on the sides.
Suitability	PRF-I	PRF-I
Photograph		

Tree ID	**T18**	
Location (GR)	**SJ 88364 96592**	
Species	**Cockspur thorn**	
Description	**Cockspur thorn that has been pruned leaving an open cavity in the trunk.**	
PRF Aerial inspection complete	**No – Unsuitable for climbing. PRFs assessed from ground.**	
PRF Number	**PRF-1**	
Type	Hollow trunk	
Aspect	East	
Height	1m	
Entrance Height	100cm	
Entrance Width	10cm	
Depth	10cm	
Competitor	None	
Description	Trunk hollow with multiple entrance cracks. Openings are upward facing making it exposed. Big feature but holes are everywhere making it exposed. Opening at top covered in cobwebs and upward facing, Feature is over hanging a footpath next to streetlights.	
Suitability	PRF-I	
Photograph	  	

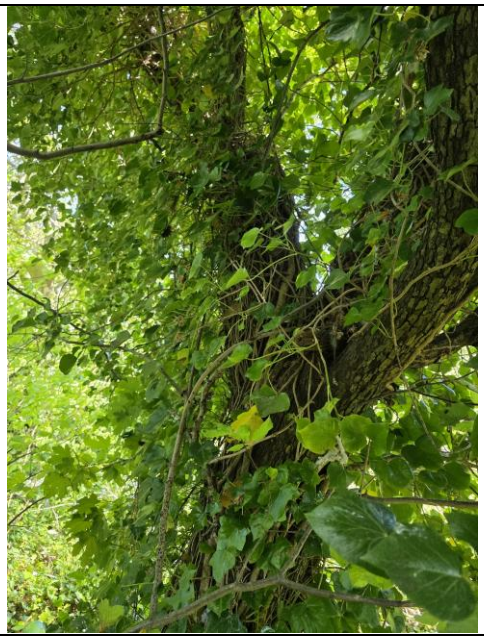
Tree ID	**T27**	
Location (GR)	**SJ 88268 96561**	
Species	**Sycamore (*Acer pseudoplatanus*)**	
Description	**Sycamore with thick ivy cover throughout trunk and branches.**	
PRF Aerial inspection complete	**No – Unsuitable for climbing. PRFs assessed from ground.**	
PRF Number	**PRF-1**	
Type	Ivy	
Aspect	Entire tree	
Height	Entire tree	
Entrance Height	3cm	
Entrance Width	3cm	
Depth	Unknown	
Competitor	Unknown	
Description	Thick ivy cover across entire tree trunk and lower branches. Small gaps present under the ivy which may support individual bats. Ivy too thick to be exhaustively searched from ground and may be obscuring PRFs, however there is no clear drop zone due to ivy cover therefore any PRFs are considered unlikely to be PRF-M.	
Suitability	PRF-I	

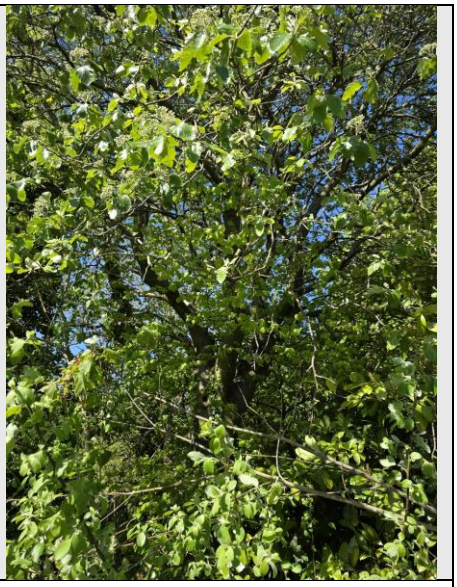
Photograph	 

Tree ID	**T28**
Location (GR)	**SJ 88267 96566**
Species	**Cockspur thorn**
Description	**Cockspur thorn with ivy cover.**
PRF Aerial inspection complete	**Yes – using ladder.**

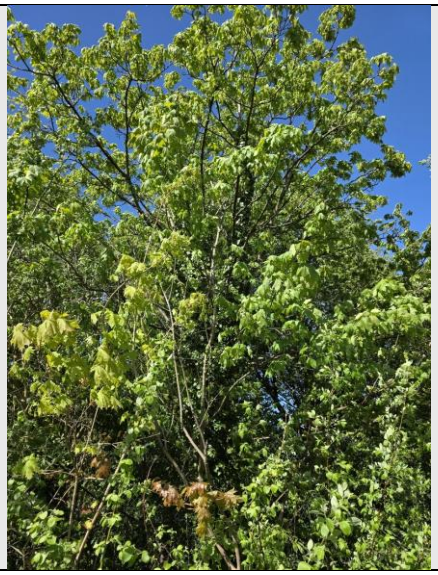


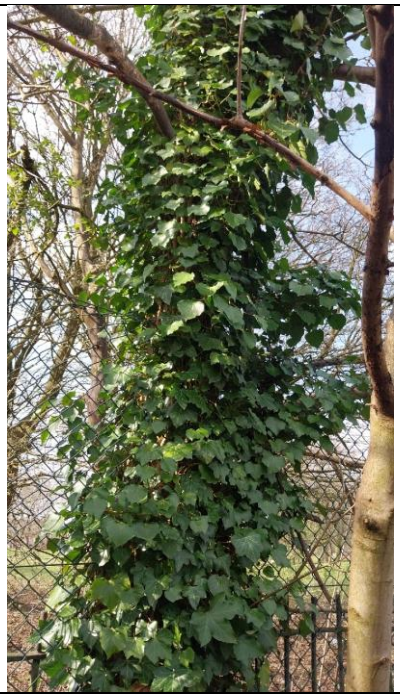
PRF Number	**PRF-1**
Type	Ivy
Aspect	Entire tree
Height	Entire tree
Entrance Height	3cm
Entrance Width	3cm
Depth	Unknown
Competitor	Unknown
Description	Ivy cover across entire tree trunk. Small gaps present under the ivy which may be suitable to support individual bats. Ivy loose and could be endoscope sufficiently.
Suitability	PRF-I

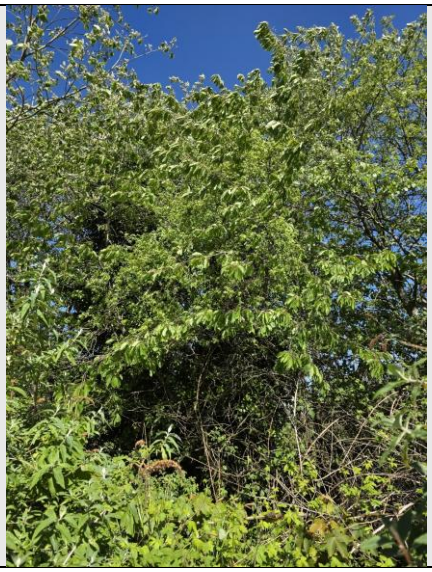
Photograph	

Tree ID	**T29**	
Location (GR)	**SJ 88266 96572**	
Species	**Swedish whitebeam**	
Description	**Mature Swedish whitebeam with two knot holes.**	
PRF Aerial inspection complete	**Yes – using ladder.**	
PRF Number	**PRF-1**	**PRF-2**
Type	Knot hole	Knot hole
Aspect	East	East
Height	5m	5m
Entrance Height	5cm	3cm
Entrance Width	4cm	3cm
Depth	5cm	2cm
Competitor	Woodlice	Woodlice
Description	Open and exposed, fairly shallow knot hole. Opportunistic for 1 bat. Damp	Open and exposed. Very shallow making it unlikely to be suitable for bats.

	with lots of sap. Some very narrow cracks in back, too narrow for bats.	
Suitability	PRF-I	None
Photograph		No photo.

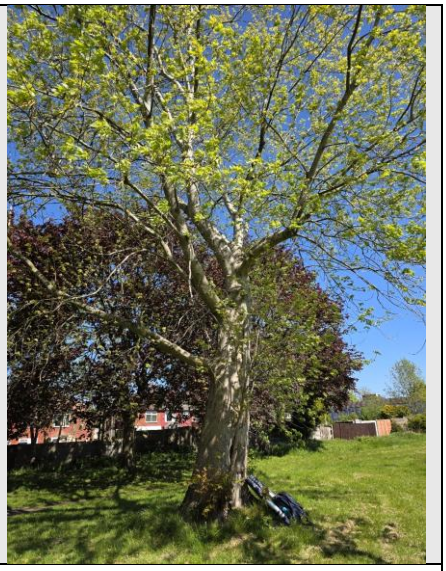
Tree ID	**T33**	
Location (GR)	**SJ 88269 96587**	
Species	**Sycamore**	
Description	**Sycamore with ivy cover.**	
PRF Aerial inspection complete	**No – Outside of boundary.**	
PRF Number	**PRF-1**	
Type	Ivy	
Aspect	Entire tree	
Height	Entire tree	
Entrance Height	3cm	
Entrance Width	3cm	
Depth	Unknown	
Competitor	Unknown	
Description	Ivy cover across entire tree trunk. Small gaps present under the ivy. Ivy loose and sufficiently endoscoped.	

Suitability	PRF-I
Photograph	

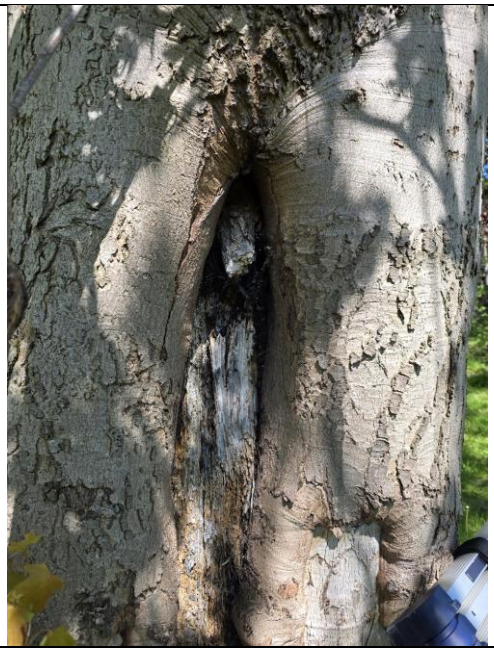
Tree ID	**T37**	
Location (GR)	**SJ 88274 96612**	
Species	**Swedish whitebeam**	
Description	**Swedish whitebeam with dense ivy cover.**	
PRF Aerial inspection complete	**No – Outside of boundary.**	
PRF Number	**PRF-1**	
Type	Ivy	
Aspect	Entire tree	
Height	Entire tree	
Entrance Height	3cm	
Entrance Width	3cm	
Depth	Unknown	
Competitor	Unknown	

Description	Ivy cover across entire tree trunk. Small gaps present under the ivy. Ivy loose and sufficiently endoscoped.
Suitability	PRF-I
Photograph	 

Tree ID	**T46**
Location (GR)	**SJ 88274 96612**
Species	**Silver maple (*Acer saccharinum*)**
Description	**Maple with large cavity on southern side of trunk.**
PRF Aerial inspection complete	**PRF assessed from ground.**



PRF Number	**PRF-1**
Type	Butt-rot/hollow trunk
Aspect	South
Height	1m
Entrance Height	6cm
Entrance Width	5cm

Depth	40cm
Competitor	Worms, slugs and woodlice
Description	Sheltered cavity with entrance at the bottom of the tree which extends up into the trunk. Due to the location being within a recreational area that sees a lot of activity from the public and the low height of the feature a large bat roost is unlikely.
Suitability	PRF-I
Photograph	

Tree ID	**T61**	
Location (GR)	**SJ 88358 96473**	
Species	**Common lime (*Tilia x europea*)**	
Description	**Common lime with two knot holes.**	
PRF Aerial inspection complete	**Yes - using ladder.**	
PRF Number	**PRF-1**	**PRF-2**
Type	Knot hole	Knot hole
Aspect	North	North
Height	2m	2m
Entrance Height	4cm	8cm
Entrance Width	2cm	6cm
Depth	3cm	6cm

Competitor	None	Snails
Description	Knot hole that does not extend up or down the trunk. Suitable for use by individual bat.	Knot hole is 6cm deep but open at the top so not suitable for roosting. Ledge. Potential use as a feeding perch.
Suitability	PRF-I	None
Photograph		

Appendix 2: British Bats

Introduction

A summary of the biology of British bats and the legislation and policy that protects them is provided below.

Biology

There are 18 British species of bats, belonging to two families; the horseshoe bats (*Rhinolophidae*) and vesper bats (*Vespertilionidae*). Of the 18 species, two species are horseshoe bats and belong to the genus *Rhinolophus*, The remaining 16 species are vesper bats and are sub-divided between six genera; *Myotis, Cnephaeus, Nyctalus, Pipistrellus, Plecotus* and *Barbastella*. Whilst there are many differences in the biology of the different species, all share certain characteristics and these are described below.

Roosting

Bat species utilise roost sites of varying character; some preferring tree roosts whilst others are thought to be almost entirely dependent on built structures. Most bats will have a number of available roosting sites within their range, which they move between throughout the year. They are generally faithful to their roosts and a colony of bats may use the same roost site(s) year after year.

Bats hibernate during the winter and will often gather to hibernate communally, remaining in the same hibernation roost from November to February/March. Hibernation roost sites typically have a constant low temperature and high humidity levels. Sites include caves, mines, thick walled buildings and hollow trees. With the arrival of spring, the ambient temperature and day length increase and bats begin to leave their hibernation roosts, either moving immediately to summer roost sites or occasionally, to a transitional roost.

By June, breeding females will begin to congregate in maternity roost sites where they will give birth to and nurture their young. Male bats are also occasionally found roosting in maternity roosts but during this period they mostly roost alone. Maternity roost sites include hollowed out trees, buildings and bridges. Male bats may use similar sites but also cracks and crevices in trees, under loose tiles or even amongst dense ivy growth during the summer period. Similar sites may be used by bats for brief periods during the night when they are resting or feeding on recently caught prey. In autumn, male bats establish mating roosts and are visited by females. A variety of roost sites may be used until the bats return to their hibernation roosts.

Foraging

All British bat species feed on invertebrates, with flies, beetles, moths and other insects making up much of their diet. Areas with an abundance of insect prey, such as woodlands, scrub, wetlands, river corridors and flower rich grasslands are therefore favoured foraging sites for bats. Habitats such as intensively farmed arable land, and amenity grassland support a much lower invertebrate abundance and are therefore less favoured foraging habitats for bats.

Commuting

Bats favour roost sites in close proximity to suitable foraging habitat, however, given variation in prey availability, land-use change, and competition with other bats, for at least part of the year bats must commute between their roosts and foraging habitat.

Commuting routes tend to follow linear features in the landscape such as hedgerows, woodland edges, rivers and other watercourses, particularly when crossing areas of less favourable habitat. The distance that bats commute between roost sites and foraging areas is dependent on local geography and also the species of bat. Some species will travel up to 18km, though shorter distances are more typical.

Site Designation

All bat roosts in the UK receive protection under the following legislation:

- Conservation of Habitats and Species Regulations 2017 as amended (which replaces the Conservation (Habitats &c) Regulations 1994 as amended)
- Wildlife and Countryside Act 1981, as amended;
- The Countryside and Rights of Way Act 2000 (which amends the Wildlife and Countryside Act); and
- Natural Environment and Rural Communities Act 2006 (which amends the Wildlife and Countryside Act).

This is described in more detail under 'Species Protection' below. In addition, the most important sites for certain bat species in the UK receive further statutory protection through designation of Special Areas of Conservation (SACs) and/or Sites of Special Scientific Interest (SSSIs).

Four UK bat species, the greater and lesser horseshoe, barbastelle and Bechstein's bats, are included on Annex II of the European Community Directive of the Conservation of Natural Habitats and of Wild Fauna and Flora, referred to as the Habitats Directive. The Habitats Directive was transposed into UK law by the Conservation of Habitats and Species Regulations 2017 as amended. The Habitat Regulations, amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, now form stand-alone legislation for England and Wales, independent of the Directive. This legislation requires that areas are designated as SACs to protect populations of these four bat species. These sites for part of the National site network and are considered to be of international importance for the bat populations they support.

Sites designated under the Wildlife and Countryside Act 1981 (WCA) are known as SSSIs. SSSIs received further protection under the Countryside and Rights of Way Act 2000 (CRoW) and the Natural Environment and Rural Communities (NERC) Act 2006.

Some SSSIs are designated for the population(s) of bats that they support. The criteria for selecting SSSIs on the basis of their bat populations are provided in Guidelines for the Selection of Biological SSSIs (NCC, 1989):

- Greater horseshoe bat – all main breeding roosts and all winter roosts with 50 or more adult bats;
- Lesser horseshoe bat - all main breeding roosts containing 100 or more adult bats and all winter roosts containing 50 or more bats;
- Barbastelle, Bechstein's and grey long-eared bats – any traditional breeding roosts;
- Natterer's, Daubenton's, whiskered, Brandt's, serotine, noctule and Leisler's bats – only exceptionally large breeding roosts or those with a long history of use; and
- Mixed Roost sites – all hibernacula containing four or more species and more than 50 individuals or three species and 100 or more individuals or two species and 150 or more individuals, though these criteria may be lower in some parts of the UK.

Sites that qualify as SSSIs for the bat populations they support are considered to be of at least national importance.

Sites designated for nature conservation at the county level may also include bat populations as part of the site qualifying criteria, although the criteria used may vary from county to county. Such sites are protected through the planning system and there is generally a presumption against development that affects such sites in local authority development plans.

Planning Policy

The National Planning Policy Framework (NPPF) 2019, gives further direction with respect to biodiversity conservation and land use change / development. The NPPF encourages local planning authorities to identify, conserve and restore, ecological networks, which should benefit bats, and it also states that planning permission should be refused if significant harm to biodiversity cannot be avoided, mitigated or compensated. In addition, the Government Circular 06/05, which relates to biodiversity conservation, states that all protected species, such as bats, are a material consideration for the planning authority when considering proposed developments.

Species Protection

Legislation

All bat species are protected by the Conservation of Habitats and Species Regulations 2017 as amended. The Regulations make it an offence, with very few exceptions, to:

- Deliberately capture, injure or kill a bat;
- Deliberately disturb a bat in such a way as to be likely:

    i. to impair its ability to survive, to breed or reproduce, or to rear or nurture its young; or

    ii. to impair its ability to hibernate or migrate; or

    iii. to affect significantly the local distribution or abundance of the species to which they belong.

- Damage or destroy a breeding site or resting place of a bat; or
- Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead bat, or any part of, or anything derived from a bat.

In addition to the protection given to bats under the Conservation of Habitats and Species Regulations 2017 as amended already described, bats are also partially protected in England under the Wildlife and Countryside Act 1981 (as amended), which adds the following offences (with certain exceptions):

- Disturbance while it is occupying a structure or place which it uses for shelter or protection; or
- Obstructing access to any structure or place used for shelter or protection.

A roost is any structure or place used by bats for shelter or protection. As bats tend to re-use the same roosts year after year, the roost is protected whether bats are present or not, at the time.

In this context of the legislation, ‘damage’ would include such operations as treatment of wood with toxic preservatives or use of rodenticides near roosting bats while ‘disturbance’ includes any work in or affecting a bat roost.

If proposed actions, such as redevelopment of an existing building may lead to an offence under the above legislation, appropriate mitigation which seeks to avoid these impacts should be devised and implemented under licence from Natural England to allow the activity to proceed legally.

In addition to the above legislation, all bats are protected under the Bonn Convention, within which the Agreement on the Conservation of Bats in Europe (1991) or EUROBAT, establishes a mechanism for international collaboration to conserve bats and their habitats, including foraging habitats. All European bat species are covered under Appendix II of the Conservation of Migratory Species of Wild Animals (CMS).

The Hedgerow Regulations 1997 provide for the conservation of 'important' hedgerows and their constituent trees. The presence of a protected species such as bats is included in the assessment of whether a hedgerow is considered 'important' and applications to remove such hedgerows must be made to the planning authority.

UK Post-2010 Biodiversity Framework and Species of Principal Importance

Published by the Joint Nature Conservation Committee (JNCC) and the Department for Environment, Food and Rural Affairs (Defra) in July 2012, the UK Post-2010 Biodiversity Framework identifies UK-scale activities and priority works that are required to deliver the EU Biodiversity Strategy. Following a process of devolution, the framework is underpinned by country level strategies which are now largely responsible for continuing the work carried out under the former UK Biodiversity Action Plans (UK BAP). JNCC guidance dictates that UK BAP background information on priority species and habitats still remains relevant and it now forms the basis of country specific priority lists, which for England, are specified under Section 41 of the Natural Environment and Rural Communities Act 2006 (the NERC Act). Targets for England's biodiversity strategy 'Biodiversity 2020': A strategy for England's wildlife and ecosystem services, are informed by this list.

Seven species of bats (barbastelle, Bechstein's, greater and lesser horseshoe, brown long-eared, noctule and soprano pipistrelle) have been adopted as Species of Principal Importance for the Conservation of Biodiversity in England. This places a duty on all government departments to have regard for the conservation of these species and on the Secretary of State to further, or promote others to further, the conservation of these species. Furthermore, the NPPF states that local planning authorities should promote the protection and recovery of priority species populations linked to national and local targets, which presumably means those listed under the Section 41 of the NERC Act, the former UK BAP and on Local or Regional priorities species lists.

References

Altringham, J. (2003) British Bats. New Naturalist Series No. 93.

Entwistle, A. C., Harris, S., Hutson, A., Racey, P., Walsh, A., Gibson, S., Hepburn, I., and Johnston, J. (2002) Habitat management for bats: A guide for land managers, land owners and their advisors. JNCC, Peterborough.

Her Majesty's Stationery Office (HMSO) (2017). The Conservation of Habitats and Species Regulations 2017 as amended. https://www.legislation.gov.uk/uksi/2017/1012/contents/made

Her Majesty's Stationery Office (HMSO) (2019) Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

Her Majesty's Stationery Office (HMSO) (1981). Wildlife and Countryside Act 1981. Chapter 69. https://www.legislation.gov.uk/ukpga/1981/69

Her Majesty's Stationery Office (HMSO) (2006). Natural Environment and Rural Communities Act 2006. https://www.legislation.gov.uk/ukpga/2006/16/introduction

Highways Agency (1999 et seq) Design Manual for Roads and Bridges, Volume 10 Environmental Design and Management,Section 3 The Good Roads Guide- Nature Conservation, Part 6 Nature Conservation Management Advice in Relation to Bats.

Collins, J. (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). Bat Conservation Trust, London.

JNCC and Defra (on behalf of the Four Countries' Biodiversity Group). (2012). UK Post-2010 Biodiversity Framework. Available from: http://jncc.defra.gov.uk/page-6189.

Mitchell-Jones, A.J. & McLeish, A.P. (1999). Bat Workers' Manual (2nd Edition). Joint Nature Conservancy Committee, Peterborough

NCC (1989) Guidelines for Selection of Biological SSSIs. Nature Conservancy Council, Peterborough

Office of the Deputy Prime Minister (2005) Planning Policy Statement 9; Biodiversity and Geological Conservation.

Reason, P.F. and Wray, S. (2025). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield

Russ, J. (1999). The Bats of Britain and Ireland. Alana Ecology, Shropshire.