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Bat Survey Report

Client

Gladman Developments Ltd

Project

Land off Cunnery Close, Barlestone

Date

October 2026

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Rev	Issue Status	Prepared/Date	Checked/Date	Approved/Date
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1.0 NON-TECHNICAL SUMMARY

Report Scope and Methodology

The following report has been prepared by FPCR Environment and Design Ltd. on behalf of Gladman Developments Ltd. for a proposed residential development at Land off Cunnery Close, Barlestone (OS Grid reference SK 42196 05423). This report covers the results of a suite of bat surveys undertaken on site.

The surveys were undertaken from October 2025 and ran until September 2026 covering the study area and all habitats within.

Ecological Baseline

No designated site was cited for their importance to bats in the Survey Area.

The majority of the habitat on Site was arable of limited conservation value. The Site contained four hedgerows, all of which were priority habitats and one of which constituted an Important Hedgerow. There was one individual tree within the Site boundary and a small portion of other neutral grassland was present to the north.

Surveys identified a single tree to have features that may support roosting bats. Activity surveys found common and widespread species utilising the site with common pipistrelle the most dominant. Other species recorded include soprano pipistrelle *Myotis* spp., noctule and low registrations of brown long-eared bat, *Nyctalus* spp, Leisler's bat and Nathusius' pipistrelle.

Assessment of Impacts

A single tree was assessed to have features that may support roosting bats. Tree T12 is located within H2 to the south of site and contained Potential Roost Features (PRFs), with Further Assessment Required (FAR) if impacted by the proposals. The tree is to be retained and buffered within green corridors across the site, such that should roosting bats be present they are unlikely to be adversely impacted by the development proposals.

Potential impacts relate to the introduction of artificial lighting. Without mitigation, lighting could deter light-averse species (such as brown long-eared and *Myotis* spp.) from using the retained boundary features for commuting and foraging, potentially impacting local bat populations.

The scheme retains and buffers the high-activity boundary habitats and incorporates extensive new greenspace and infrastructure which will provide good quality habitat for commuting and foraging bats.

The development scheme will provide enhancements for the local bat populations via the provision of an attenuation pond and creation of species-rich grassland, scrub and new tree planting, together with retained habitat features that have been incorporated into a green corridor to the south. Connectivity around the site perimeter linking to off-site habitats will thus be maintained.

Recommended Mitigation and Enhancements

The development scheme will provide enhancements for the local bat populations via the provision of an attenuation pond and creation of species-rich grassland, scrub and new tree planting.

Recommendations have been made to incorporate a sensitive lighting strategy and appropriate consideration to protecting retained hedgerows and trees in line with the Arboriculturists recommendations.

Enhancements include the installation of bat boxes to provide additional roosting opportunities for bats.

2.0 INTRODUCTION

- 2.1 The following report has been prepared by FPCR Environment and Design Ltd. on behalf of Gladman Developments Ltd. Its purpose is to present the results of bat surveys completed for a planning application at Land off Cunnery Close, Barlestone (OS Grid reference SK 42196 05423), herein referred to as the 'Site'.
- 2.2 This report informs an Ecological Impact Assessment (EclA) prepared for the outline planning application. The EclA report (FPCR, 2026) contains the Site context, proposals, broader ecological information and assessment for the Site, and therefore this report should be read in conjunction with it.

Site Context

- 2.3 The Site is 6.53ha in extent and comprised one field of intensively managed arable land, with two hedgerows and a ditch on the southern boundary, and two hedgerows on the north-east boundaries. One individual tree was present on the northern boundary of the Site.
- 2.4 The landscape beyond the Site to the east, south and west was predominantly rural, consisting of arable and pasture, with a small area of woodland/scrub immediately to the west. Residential areas associated with Barlestone were located immediately north and north-east, and the A447 was approximately 250m south-east of the Site.

Site Proposals

- 2.5 The proposals for the Site are for the erection of up to 158 dwellings (including affordable housing) with public open space, landscaping and sustainable drainage system (SuDS) and vehicular access point. All matters reserved except for means of access.
- 2.6 Public Open Space is to comprise species-rich neutral grassland, mixed scrub and tree planting, in addition to the retention of boundary habitats. Proposals also included public open space in the form of LEAP and LAP areas, and footpaths along the west, south and eastern boundaries.

Report Aims and Objectives

- 2.7 The report has been prepared to achieve the following objectives:
- Summarise the survey and assessment methodologies employed to assess the importance of the Site for bats.
 - Provide the desk study records of bats within a 2km radius of the Site.
 - Provide the results of bats surveys undertaken.
 - Assess the potential impacts of the proposals on the recorded bat assemblage.
 - Provide recommendations for avoidance, mitigation, compensation and/or enhancement to mitigate impacts of the proposals on bats.

3.0 LEGISLATION

- 3.1 All bats and their roosts are afforded legal protection under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife & Countryside Act 1981 (as amended). The purpose of the legislation is to maintain and restore protected species to a situation where their populations are favourable.
- 3.2 Under Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (as amended) it is an offence to deliberately capture, injure or kill; deliberately disturb (including intentionally or recklessly) all UK bat species. This includes disturbance which impairs their ability to: breed and rear young; migrate; and hibernate; or affects their local distribution and abundance.
- 3.3 Under the Wildlife and Countryside Act 1981 (as amended) it is illegal to:
- Recklessly or intentionally kill, injure or take any wild animals included in Schedule 5;
 - Recklessly or intentionally obstruct access to any structure or place which any wild animal included in Schedule 5 uses for shelter or protection; and/or
 - Recklessly or intentionally disturb any such animal while it is occupying a structure or place which it uses for shelter or protection.
- 3.4 Foraging habitat and commuting routes used by bats are not protected as such but impacts that could prevent bats from using a resource or commuting to or from a valued roosting site may be considered as an indirect impact on a roost or a significant disturbance effect and would therefore also need to be avoided or prevented.
- 3.5 Several bat species are listed as species of principal importance for the purpose of conserving biodiversity under the Natural Environment and Rural Communities (NERC) Act 2006. These species are barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, brown long-eared *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum*, lesser horseshoe bat *Rhinolophus hipposideros*, noctule *Nyctalus noctula* and soprano pipistrelle *Pipistrellus pygmaeus*.
- 3.6 Bats are recognised in the National Planning Policy Framework (NPPF) which advises that when determining planning applications, Local Planning Authorities should aim to conserve and enhance biodiversity by applying a set of principles including:
- *"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 the development should be refused;*
 - *Development proposals may incorporate biodiversity enhancements which exceed the statutory objective for biodiversity net gain, but this should only be a requirement where it is set out in up-to-date development plan policies for specific site allocations. Decision-makers should not give weight to other development plan policies which require biodiversity gains which go beyond the statutory framework, including where a policy requires gains for development proposals which are exempt."*

4.0 METHODOLOGY

Desk Study

4.1 A desk study was undertaken to collate existing information for the site and its surroundings in relation to bat species. This included a review of:

- Leicester & Rutland Environmental Records Centre (LRERC);
- Multi Agency Geographic Information for the Countryside (MAGIC - <https://magic.defra.gov.uk/MagicMap.html>); and
- Aerial photographs from Google Earth (www.maps.google.co.uk)

4.2 Full details are provided in the above-mentioned Ecological Impact Assessment.

Habitat Assessment

4.3 The on-site habitats were assessed for their suitability for foraging and commuting bats. This was informed by the desk study and a habitat survey on 15th October 2025.

4.4 The Site was then categorised for its habitat suitability for foraging and commuting bats, which would inform the necessary survey effort. The habitat suitability was assessed using the latest best practice guidance¹ and professional judgement. The Site was then categorised as summarised below:

Table 1: Habitat Suitability Categories

Categories	Description	Further Surveys Required
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of year.	None
Negligible	No obvious habitat features on site likely to be used as flightpaths or foraging bats. However, a small element of uncertainty remains to account for non-standard bat activity.	
Low	Habitat that could be used by a small number of bats as flightpaths or for foraging e.g. gappy hedgerows, unvegetated streams, lone tree.	Seasonal* (Spring - April/May, Summer – Jun/Jul/Aug, Autumn - Sept/Oct) night-time walkover surveys Seasonal* automated static detector monitoring
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting and foraging e.g. tree lines, water, grassland, scrub.	Seasonal* night-time walkover surveys
High	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting and foraging bats e.g. woodland, tree-lined watercourses, hedgerows, tree lines.	Monthly (Apr-Sep) automated static detector monitoring

¹ Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*. The Bat Conservation Trust, London.

Tree Roost Assessment

4.5 Ground level tree assessments (GLTA) were undertaken on 15th October 2025 by suitably experienced ecologists with the aid of binoculars and high-powered torches. The trees were searched for potential roosting features (PRFs)² such as:

- Natural holes e.g. knot holes arising from naturally shed branches
- Man-made holes e.g. cavities that have developed from flush cuts
- Woodpecker holes
- Cracks/splits in stems or branches
- Partially detached or loose bark plates
- Cankers in which cavities have developed
- Compression forks with occluded bark
- Crossing stems or branches with a suitable space in between
- Ivy stems with diameters more than 50mm with suitable roosting space behind
- Bird, bat or dormouse boxes

4.6 Using professional judgement, the ground-based PRA assessment classified any trees identified based upon the presence of suitable features as set out in best practice guidance (BCT 2023), as summarised below:

Table 2: GLTA Bat Roost Potential Categories

Categories	Description
NONE	Either no PRFs found or highly unlikely to be any present
FAR	Further Assessment Required – to establish if PRFs are present
PRF	A tree with at least one PRF

Bat Activity

4.7 Bat activity surveys were undertaken as the Site was considered to provide moderate suitability for bats (see Results section). These surveys were undertaken to identify the value of the Site to foraging and commuting bats or areas which may be important for exhibiting various social behaviours so that the effects of the proposals can be assessed.

4.8 To inform an impact assessment, where possible, the bat activity surveys aim to identify:

- The presence or absence of bats, abundance and species using the Site whilst away from the roost;
- The usage of the habitats on the Site by bats;
- The temporal (both seasonally and nightly) and spatial distribution of recorded bat activity on site and any associations in terms of timings or particular features;
- Any connectivity in terms of habitats within the Site and/or the surrounding area;

² BS 8596:2015 Surveying for bats in trees and woodland – Guide. British Standards Institute.

- The effect of any existing lighting on the existing bat population.

4.9 Bat activity surveys were designed and lead by an ecologist with expertise meeting the BCT level 3 competency.

Night-time Bat Walkover Surveys

4.10 In line with current guidance (BCT 2023), each night-time bat walkover (NBW) was undertaken in two parts:

- Two surveyors were positioned at vantage points adjacent to habitats/features most likely to be used by commuting/foraging bats. Both points were located in the northern parcel of the Site due to the more suitable habitats present compared with the southern parcel, as well as for health and safety reasons. The surveyors remained stationary and observed any bat behaviour for up to an hour after sunset.
- Surveyors then walked a predetermined transect route together until 2-3 hours after sunset, sampling the habitats within the Site and noting any bat activity heard or observed.

4.11 Surveyors were equipped with Wildlife Acoustics Inc. Echo Meter Touch® bat detectors in conjunction with the Echo Meter Touch app and Samsung Galaxy Tab Active 3 during the surveys to detect bats and aid species identification.

4.12 Due to the moderate habitat suitability of the Site for bats, NBWs were completed seasonally and only in suitable weather conditions:

Table 3: NBW Survey Timings and Weather Conditions

Survey Date	Survey Timings	Sunset Time	Weather Conditions	
			Start	End
21 October 2025	17:57 – 20:00	17:57	Temperature: 11°C Wind: 1 Rain: None Cloud Cover: 80%	Temperature: 11°C Wind: 2 Rain: None Cloud Cover: 20%
1 April 2026	19:40 – 21:48	19:40	Temperature: 11°C Wind: 2 Rain: None Cloud Cover: 90%	Temperature: 10°C Wind: 0 Rain: None Cloud Cover: 100%
24 June 2026	21:35 – 23:35	21:35	Temperature: 24°C Wind: 0 Rain: None Cloud Cover: 0%	Temperature: 23°C Wind: 0 Rain: None Cloud Cover: 0%

4.13 Post-survey, the bat calls recorded were analysed by experienced ecologists using Kaleidoscope software (Wildlife Acoustics Inc.) to verify the bat species and activity levels.

Static Detector Surveys

- 4.14 Wildlife Acoustic Inc. Song Meter SM4BAT FS detectors (hereafter referred to as “static detectors”) were deployed in habitats likely to be impacted by the development to record passing bats. Locations are shown in Figure 1.
- 4.15 Two detectors were deployed each month (October 2025 and April – September 2026) due to the moderate suitability of the habitats on Site for bats, in line with guidance (BCT 2023), and left to record for five consecutive nights. They were programmed to commence recording 30 minutes prior to sunset and record continuously throughout the night until 30 minutes after sunrise.
- 4.16 Following collection, the recordings were analysed using Sonobat software by experienced ecologists and were internally audited for quality control purposes. Each sound file was counted as a single bat registration for the species identified. The total number of registrations provided an indication of the relative importance of the Site and detector location for each species of bat.

Limitations

- 4.17 The static detectors do not discern between several bats passing the detector or a single bat making multiple passes. Therefore, the data recorded can only provide an indication of bat activity as bat registrations per unit time.
- 4.18 Due to the overlapping properties of bat echolocation calls from *Myotis* and *Nyctalus* species, it is not always possible to identify a call to species level. In most cases, identification to genus level is sufficient to assess potential impacts from the development.
- 4.19 The lower amplitude calls made by brown long-eared bats *Plecotus auritus* and barbastelle *Barbastella barbastellus* are more difficult to detect and may not be recorded by the directional microphones. As such, these species may be under-recorded and this is taken into consideration when assessing potential impacts and recommending mitigation, compensation and enhancements.

5.0 RESULTS

Desk Study

- 5.1 Consultation with LRERC identified 402 bat records within 2km of the Site. Species recorded include barbastelle, brown long-eared bat, soprano pipistrelle, common pipistrelle *Pipistrellus pipistrellus*, pipistrelle spp. *Pipistrellus* spp., myotis. *Myotis* spp., Leisler's bat *Nyctalus leisleri*, *Nyctalus* spp., Nathusius' pipistrelle *Pipistrellus nathusii*, noctule, serotine *Eptesicus serotinus*, whiskered bat *Myotis mystacinus*, Brandt's bat *Myotis brandtii*, and unidentified bat spp. The closest record to the Site was a common pipistrelle located within the Site boundary. Species records figures can be found in the EcIA (FPCR, 2026).
- 5.2 A search of MAGIC identified two EPS mitigation licences (EPSML) issued for bats by Natural England within 2km of the Site:

Table 4: Bat EPSML within 2km

Reference	Species	Purpose	Distance from Site
EPSM2009-481	Common pipistrelle	Destruction of resting place and breeding site	322m south-east
EPSM2010-2594	Common pipistrelle	Destruction of breeding site	322m south-east

Habitats

- 5.3 The perimeter hedgerows, treelines and ditch corridor were of value to bats for foraging and commuting, providing links around the site and into the wider area. The arable land was considered to be of limited value due to its homogenous nature and lack of diversity and is unlikely to provide a rich source of invertebrates as a foraging resource.

Tree Assessment

- 5.4 T12, a mature ash tree within hedgerow H2, was assessed from ground level and noted to contain Potential Roost Features (PRFs), with Further Assessment Required (FAR) if impacted by the proposals. The rest of the trees on Site were also assessed and were of negligible suitability for roosting bats (NONE). See Figure 2 for the location of T12.



Photograph 1: Tree T12

Night-time Bat Walkover Surveys

- 5.5 Three species were recorded during the 2025 and 2026 NBW surveys: common pipistrelle, soprano pipistrelle, and noctule. See Figures 2 and 3 for more detail.

Table 5: NBW Survey Summary

Date	Total Bat Contacts	Total Contacts per Species	Total Contacts at Vantage Points	Total Contacts on Transect
Autumn 21 October 2025	15	Common pipistrelle: 13 Soprano pipistrelle: 1	Common pipistrelle: 4	Common pipistrelle: 10 Soprano pipistrelle: 1
Spring 1 April 2026	32	Common pipistrelle: 22 Soprano pipistrelle: 7 Noctule: 2	Common pipistrelle: 4 Soprano pipistrelle: 1 Noctule: 2	Common pipistrelle: 18 Soprano pipistrelle: 6
Summer 24 June 2026	4	Common pipistrelle: 4	Common pipistrelle: 1	Common pipistrelle: 3

- 5.6 Bat activity was recorded during all three surveys, with the highest level of activity recorded during the Spring 2026 survey (32 contacts), compared to 15 contacts during the Autumn 2025 occasion and 4 contacts in Summer 2026.
- 5.7 Common pipistrelle was the dominant species throughout the survey period, accounting for the majority of bat contacts. Soprano pipistrelle was also regularly recorded, whilst noctule activity was recorded during the Spring 2026 survey only.
- 5.8 Activity was recorded both at the vantage points and along the walked transect during all three surveys. However, the majority of bat contacts were recorded along the walked transect during each survey, accounting for 11 of 15 contacts in Autumn 2025, 24 of 32 contacts in Spring 2026, and 3 of 4 contacts in summer 2026. This indicates that bat activity is largely associated with linear commuting and foraging features within and adjacent to the Site.
- 5.9 The summer 2026 survey recorded the lowest level of activity and species diversity, with only common pipistrelle recorded. The spring 2026 survey recorded the highest number of contacts and the greatest species diversity, including common pipistrelle, soprano pipistrelle and noctule.
- 5.10 The common and soprano pipistrelle records suggest that the Site is used primarily by widespread common species. The limited noctule activity recorded during the spring 2026 survey suggests occasional commuting or foraging use of the wider landscape by this species.

Static Detector Surveys

- 5.11 Automated static bat detector surveys undertaken between October 2025 – September 2026 recorded a total of 13,150 registrations from 8 bat species/groups commuting and foraging within the Site. Activity was dominated by common pipistrelle, which accounted for 80.54% of all registrations. The following species and species groups were recorded:
- Common pipistrelle: **80.54%**
 - Soprano pipistrelle: **8.23%**
 - *Myotis* spp.: **3.28%**
 - Noctule: **1.71%**
 - Brown long-eared bat: **0.79%**

- *Nyctalus* spp.: **0.37%**
- Leisler's bat: **0.09%**
- Nathusius' pipistrelle: **0.03%**

Table 6: Static Survey Summary

Dates	Species	Static Location 1	Static Location	Total
1-6 April 2026	Common pipistrelle	545	100	645
	Soprano pipistrelle	41	0	41
	<i>Myotis</i> spp.	3	1	4
	Brown long-eared	13	3	16
	Total	602	106	708

Dates	Species	Static Location 1	Static Location	Total
5-10 May 2026	Common pipistrelle	440	1596	2036
	Soprano pipistrelle	34	74	108
	<i>Nyctalus</i> spp.	6	0	6
	<i>Myotis</i> spp.	21	36	57
	Noctule	4	1	5
	Brown long-eared	7	0	7
	Nathusius' pipistrelle	1	0	1
	Total	910	1309	2219
3-8 June 2026	Common pipistrelle	1846	236	2082
	Soprano pipistrelle	76	9	85
	<i>Nyctalus</i> spp.	2	0	2
	<i>Myotis</i> spp.	48	6	54
	Leisler's	2	0	2
	Noctule	18	5	23
	Brown long-eared	10	1	11
	Total	2030	260	2290
1-6 July 2026	Common pipistrelle	1126	236	1362
	Soprano pipistrelle	133	9	22
	<i>Nyctalus</i> spp.	7	0	7
	<i>Myotis</i> spp.	46	6	52
	Leisler's	2	0	2
	Noctule	20	5	25
	Brown long-eared	9	1	10
	Total	1248	257	1505
3-8 August 2026	Common pipistrelle	80	532	612
	Soprano pipistrelle	5	123	128
	<i>Nyctalus</i> spp.	1	1	2
	<i>Myotis</i> spp.	1	12	13
	Leisler's	2	3	5
	Noctule	36	38	74
	Brown long-eared	3	43	46
	Total	128	752	880
2-7 Sept 2026	Common pipistrelle	2241	117	2358
	Soprano pipistrelle	206	130	336
	<i>Nyctalus</i> spp.	26	2	28
	<i>Myotis</i> spp.	163	6	169
	Leisler's	2	1	3
	Noctule	88	25	113
	Brown long-eared	30	13	43
	Total	2799	294	3050

Dates	Species	Static Location 1	Static Location	Total
15-20 October 2025	Common pipistrelle	370	666	1036
	Soprano pipistrelle	181	179	360
	<i>Nyctalus</i> spp.	1	2	3
	<i>Myotis</i> spp.	36	48	84
	Noctule	0	1	1
	Brown long-eared	2	12	14
	Total	590	908	1498

- 5.12 The two survey locations recorded differing patterns of bat activity throughout the survey season. The eastern survey location (location 2) generally recorded higher activity during spring and early summer, with totals of 1,309 registrations in May, 752 registrations in August and 908 registrations in October. This was mostly common pipistrelle activity indicating habitats in the eastern part of the Site provide valuable foraging opportunities and commuting routes for this species.
- 5.13 In contrast, the western survey location (location 1) recorded substantially higher activity during September, with 2,799 registrations compared with 294 registrations at the eastern survey location. This increase was mainly species common pipistrelle, soprano pipistrelle and *Myotis* spp., suggesting that habitats within the western part of the Site are used more during late summer and early autumn.
- 5.14 Common pipistrelle activity was consistently high across both survey locations throughout the survey season and was the dominant species recorded. Soprano pipistrelle was the second most frequently recorded species, with activity peaking during September and October. *Myotis* spp. were recorded during all survey periods and showed highest activity during September. Brown long-eared bat was recorded regularly throughout the survey season, while noctule, *Nyctalus* spp. and Leisler's bat were recorded at lower levels, suggesting occasional use of the Site by these species.
- 5.15 The distribution of activity across the Site demonstrates that common widespread bat species are utilising suitable habitats around the Site rather than concentrating around a single feature. The results indicate that the Site forms part of a wider network of commuting and foraging habitat, with boundary and associated linear features such as hedgerows, likely providing important commuting and foraging corridors for bats within the surrounding landscape.

6.0 DISCUSSION

- 6.1 The proposals are to create a residential development with associated Public Open Space. This will result in the loss of a small area of other neutral grassland and the dominant arable habitat. All hedgerows and trees will be retained within the proposal.
- 6.2 Public Open Space is to comprise species-rich other neutral grassland, mixed scrub and tree planting, in addition to the retention of boundary habitats. Proposals also included public open space in the form of LEAP and LAP areas, and mown grassland footpaths along peripheries of site.
- 6.3 The majority of trees on Site were considered to have negligible roosting bat potential. However, T12 was identified on Site as supporting PRFs. This tree is currently retained within the scheme and buffered from development within green space. However, if plans change and T12 requires removal or pruning for health and safety reasons, then further surveys will be required. These would include aerial tree climbing assessments and/or nocturnal emergence surveys, where appropriate.
- 6.4 In the absence of mitigation, the retained trees do however have the potential to be impacted by artificial lighting, which can deter bats from utilising roosting features. However, during construction, appropriate precautions will be incorporated into a Construction Environmental Management Plan (CEMP) which will be implemented to control the works. The CEMP will include details of protection of retained habitats during construction. The CEMP should include a lighting strategy in line with current best practice to ensure that retained and new habitat features that are suitable roosting bats are not degraded by new lighting.

Activity

- 6.5 Both the NBW and static surveys found common and widespread species using the Site, and activity was dominated by common pipistrelles. This would be expected given the urban edge and dominant arable habitat. The species identified on Site are consistent with species found on local records.
- 6.6 Other species recorded included soprano pipistrelle, brown long-eared bat, noctule, *Myotis* spp., and *Nyctalus* spp., demonstrating that the Site is used for both commuting and foraging by a range of bat species characteristic of the local landscape.
- 6.7 The highest levels of bat activity were recorded along the Site boundaries, particularly where mature trees and hedgerows provide foraging opportunities. Activity was notably higher within the western part of the Site, where boundary vegetation and connectivity to surrounding habitats create favourable commuting and foraging conditions. All hedgerows, trees and other boundary habitats that support the highest levels of bat activity will be retained and incorporated into the green infrastructure network enhancing their value. These features will continue to provide important commuting routes and foraging habitat, maintaining connectivity between the Site and the wider landscape.
- 6.8 Bat activity within the eastern part of the Site was generally lower and was concentrated around boundary features rather than the arable habitats. This pattern reflects the preference of bats for linear landscape features that provide shelter from wind and predation while facilitating movement across the landscape. The proposed development has been designed to

retain key boundary habitats and incorporate them into areas of public open space, ensuring that ecological connectivity is maintained.

- 6.9 The proposals will result in the loss of a small area of other neutral grassland and the dominant arable habitat which currently forms much of the Site and provides only limited value for bats. The proposals include the creation and enhancement of green infrastructure throughout the Site, including species-rich grassland, native tree and shrub planting, and strengthened hedgerow networks. These habitats will increase the structural and botanical diversity of the Site, resulting in greater invertebrate abundance and enhanced foraging opportunities for bats. The retention and enhancement of boundary habitats, together with the provision of connected green corridors, will strengthen habitat connectivity across the Site and improve opportunities for bats to move through the landscape compared with the existing baseline conditions.

Mitigation

- 6.10 A sensitive lighting scheme should be designed for the Site with regards to good practice guidance³. This is particularly important for light-averse bat species using the Site, including brown long-eared bat and *Myotis* spp. Recommendations include:
- Dark corridors along the woodland and southern boundary to maintain foraging and commuting corridors for all species of bat. Along the northern woodland, the lighting strategy will be designed to prevent lighting increases above 1 lux.
 - The avoidance of direct lighting of trees, hedgerows and woodland during both construction and operation. Around trees identified as supporting bat roosts, the lighting strategy will be designed to prevent lighting increases above 1 lux.
 - Lighting should comprise low pressure sodium lights, as they emit a single wavelength and attract fewer insects.
 - Directional lighting should be used to avoid upward lighting and light spillage.
 - Lighting columns should be as short as possible.
- 6.11 Should proposals change and hedgerows be impacted and cut through for the creation of access, 'hop-overs' should be created to help maintain the integrity of the hedgerows as commuting routes for bats.
- 6.12 To avoid accidental damage to trees, hedgerows and woodland, appropriate fencing should be utilised, in line with Arboriculturist recommendations.

Enhancement

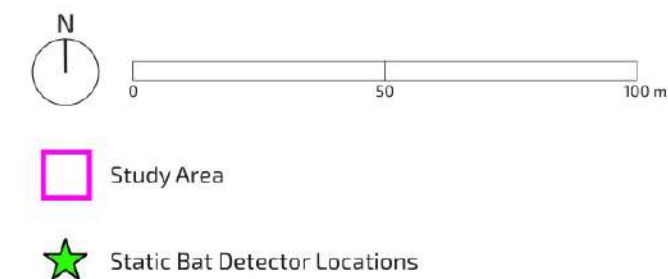
- 6.13 Hedgerows to the south are to be enhanced as a bat commuting and foraging habitat through the replacement of poor-quality arable habitat with higher quality species-rich other neutral grassland habitat, improving the foraging capacity of the hedgerows. New tree planting and the creation of a SuDS will also improve the area for foraging bats.
- 6.14 The proposed development can be further enhanced to maximise the biodiversity net gain and bat utilisation by including the following measures:

³ Institute of Lighting Professionals (2023) *Guidance Note 8 Bats and Artificial Lighting*. BCT, ILP.

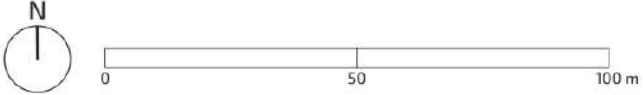
- SuDS should retain some water all year round, if possible, as this would benefit several species and provide additional prey for bats.
- Installation of bat boxes on retained mature trees and/or bat tubes within the new buildings to provide additional roosting opportunities for bats.

7.0 CONCLUSION

- 7.1 The bat activity on Site consists of common and widespread species consistent with the urban edge setting. All boundary linear features present will be retained and enhanced. New habitat creation such as grassland, scrub and tree planting improves green corridors for bats post-development.
- 7.2 Retained trees, hedgerows and new green spaces within the scheme will be buffered from lighting, through a sensitive lighting scheme throughout the Site.
- 7.3 Recommendations for compensation and enhancement have been made to improve the habitats on-site post-development and ensure the favourable conservation status of bats in the local area.



drawn date	01/06/26	drawn/checked	LH / RCO
client	Gladman Developments		
project	Land off Cunners Close, Barlestone		
title	STATIC BAT DETECTOR LOCATION PLAN	scale	1:1,500 @ A3
number	FIGURE 1	rev	-



- Study Area
- Flightline Survey - Surveyor Locations
- Flightline Survey - Bat Contacts
 - Spring
 - Summer
 - Autumn
- Tree with Bat Potential (with reference)
 - FAR
- Flightline Survey - Flight Paths
 - Commuting
- Species
 - Ppi Common pipistrelle
 - Nnoc Noctule
 - Ppy Soprano pipistrelle

Non-visual Bat Contacts - SP1

Species	Spr	Sum	Aut
Noctule			+
Common Pipistrelle	+	+	+
Soprano Pipistrelle	+		

Non-visual Bat Contacts - SP2

Species	Spr	Sum	Aut
Noctule	+		+
Soprano Pipistrelle		+	+
Common Pipistrelle	+	+	

date

24/09/26

drawn/checked

LH / SP

client

Gladman Developments

project

Land off Cunners Close, Barlestone

title

BAT FLIGHTLINE SURVEY RESULTS PLAN

scale

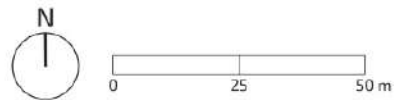
1:1,500 @ A3

number

FIGURE 2

rev

-



Study Area

Transect Route

Start and Finish Points

Spring

Summer

Autumn

Bat Contacts

Spring

Summer

Autumn

Species

Paar Brown long-eared

Ppi Common pipistrelle

Ppy Soprano pipistrelle

date
24/09/26

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project
**Land off Cunners Close,
Barlestone**

title
**BAT TRANSECT SURVEY RESULTS
PLAN**

scale
1:1,500 @ A3

number
FIGURE 3

rev
-

FPCR | environment
& design