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Bat Report

Client

Bloor Homes

Project

**Land off Bosworth Lane,
Newbold Verdon**

Date

July 2025

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Rev	Issue Status	Prepared/Date	Approved/Date
-	Final	CD / 22.07.2025	AJR / 28.07.25

1.0 INTRODUCTION

- 1.1 The following report has been prepared by FPCR Environment and Design Ltd. (FPCR) on behalf of Bloor Homes and provides the results of bat surveys undertaken to inform the proposed development located on Land off Bosworth Lane, Newbold Verdon, herein referred to as 'the site'.
- 1.2 This document should be read in conjunction with the submitted Ecological Appraisal (FPCR, July 2025).

Site Location and Context

- 1.3 The site is located to the north west of Newbold Verdon (central OS grid reference SK 441 042) and is bound by Bosworth Lane to the north, existing residential development to the east, Newbold Verdon School to the south, and further agricultural land to the west.
- 1.4 The dominant habitat within the site comprised cropland. Other habitats present included boundary hedgerows, of which one had associated trees. The site extends slightly into the adjacent residential development in two places, with an area of modified grassland and hardstanding linking to the northern end of White Park Avenue, and a strip of young / poor condition scrub linking to the northern end of Moat Close. A largely off-site block of young woodland is present to the east of the site, with a small slither in the middle and the southernmost extent of this feature present within the site boundary.

Development Proposals

- 1.5 The proposals are for an outline application (access only) for the erection of up to 200 dwellings, a community health and well-being hub (Use Class E(e)) or community shop (Use Class E(a)) of up to 108 sqm gross external area and provision of up to 0.5hectares of school playing fields and sport pitches, together with landscaping, open space, infrastructure and other associated works.

2.0 METHODOLOGY

Trees – Aerial Assessment

- 2.1 Any trees that were categorised as Further Assessment Required (FAR) or Potential Roost Feature (PRF) during ground level assessments (as set out in the Ecological Appraisal) were subject to further aerial inspection. This survey included a detailed inspection of trees for the presence of further PRF's and also for the level of suitability provided by PRF's.
- 2.2 This assessment was completed by suitably experienced and licensed ecologists (Natural England Class Licence Registration Number: 2024-12575-CL18-BAT) meeting the BCT competency requirements.
- 2.3 Two trees were subject to aerial tree assessments (T1 and T2) on 19th May 2025, with tree T1 subject to an additional two surveys on 17th May and 14th July 2025.
- 2.4 The aerial surveys involved accessing the tree using arborists tree climbing techniques (certified to Climb Trees (J/101/2449) and Perform Aerial Rescue (A/101/2450) – Level 2 (NPTC). The climbing methodology used follows that detailed within the Arboriculture and Forestry Advisory Group (AFAG) Tree Climbing Operations Leaflet (AFAG401) and included inspecting each PRF for suitability and evidence of current or past occupation by bats using endoscopes, mirrors, torches and cameras as necessary.
- 2.5 Each PRF was then categorised as outlined as set out in Bat Surveys for Professional Ecologists: Good Practice Guidelines (BCT, 20233) and summarised in Table 2.

Table 1: Bat Classification and Survey Requirements for Bats in Trees

Classification of Tree	Description of Category and Associated Features (based on Potential Roosting Features listed above)	Likely Further Survey work / Actions
Negligible/ No potential	Negligible/no habitat features likely to be used by roosting bats	None.
PRF-I	<p>A tree with one or more Potential Roosting Features that are suitable for only individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.</p> <p>Examples include (but are not limited to); loose/lifted bark, shallow splits exposed to elements or upward facing holes.</p>	No further survey is required but appropriate compensation must be provided in advance of impacts and a precautionary working method statement must be applied. ^A

³ Collins, J. (ed.) 2023. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*. The Bat Conservation Trust,.

Classification of Tree	Description of Category and Associated Features (based on Potential Roosting Features listed above)	Likely Further Survey work / Actions
PRF-M	<p>A tree with PRF's which could support multiple bats and may therefore be used by a maternity colony.</p> <p>Examples include (but are not limited to); woodpecker holes, larger cavities, hollow trunks, hazard beams, etc.</p>	<p>Three aerial assessments of PRF's by appropriately licensed/ accredited tree climbers to determine presence or likely absence of roosting bats. Surveys were undertaken between May and September (with at least two surveys between May and August and spread at least three weeks apart).^C</p> <p>If roost sites are confirmed and the roost is affected by proposals a licence from Natural England will likely be required.</p> <p>After completion of survey work (and the presence of a bat roost is discounted), a precautionary pre-felling survey or working method statement may still be appropriate.</p>

^A In circumstances where there are lots of trees grouped together with PRF-I then further surveys may still be appropriate.

^B Nocturnal surveys using NVA's may be appropriate if a tree or PRF cannot be sufficiently accessed or fully assessed.

^C If the initial aerial inspection was undertaken during the optimum survey period, this can count as one of the three surveys

Activity Surveys – Static Monitoring Survey

- 2.6 Monthly bat activity surveys (April to July) in the form of static monitoring surveys have been undertaken. The purpose of these is to assess the value of the site to foraging and commuting bats, and to enable the potential effects of the proposals to be more fully considered.
- 2.7 The main aims of the bat activity surveys were to identify:
- The presence or absence of bats, and the abundance and species using the site;
 - The temporal (both seasonally and nightly) and spatial distribution of recorded bat activity on site and any associations in terms of timings or particular habitat features; and
 - Any key connectivity in terms of habitats within the site and/or the surrounding area.
- 2.8 Static (passive) monitoring was undertaken using an automated logging system (Wildlife Acoustics Inc. Song Meter® SM4BAT FS bat detectors with SMM-U2 microphones). This entailed using two static recording devices at different locations within the site to simultaneously record bat registrations for at least five consecutive nights per month (Figure 1).
- 2.9 The static detector locations were subjectively predetermined using professional judgment in consideration of likely impacts and such that they were positioned at least 15m away from any known or likely roost site. Static detectors were placed in the same location on each survey occasion (see Figure 1) during suitable weather conditions that were typical for the month of deployment. The detectors were programmed to activate 30 minutes before sunset and recorded continuously until 30 minutes following sunrise.

- 2.10 Static detectors were deployed during the following periods: 15.04.25-20.04.25, 14.05.25-19.05.25, 11.06.25-16.06.25 and 09.07.25-14.07.25.
- 2.11 The resulting data was analysed using the Sonobat™ 30.1 (SonoBat™ Inc.) software package to assess the amount of bat activity on site by recording the number of bat registrations. Data were initially run through the auto-analysis function of the software with manual vetting taking place of every call with the exception of common pipistrelles and soprano pipistrelles. Measurements including peak frequency, inter-pulse interval, call duration and end frequency were taken to aid in species identification. This analysis was completed by a suitably experienced ecologist as above.

3.0 RESULTS

Trees

Tree Assessment

- 3.1 As detailed within the Ecological Appraisal, two trees (T1 and T2) were assessed as having the potential to support roosting bats during ground level assessments in August and December 2024.
- 3.2 Although initially considered unsafe to climb (due to nearby power lines), upon reassessment tree T1 was deemed safe to climb. During the initial climb, tree T1 was assessed as having a single PRF-I feature and two PRF-M features. As such, this tree was subject to an additional two climbs, with three climbs in total, during which no evidence of roosting bats was recorded.
- 3.3 Tree T2 was recorded to support a single PRF-I feature.

Activity Surveys

Static Monitoring

- 3.4 The results from the two detectors for April to July 2025 are summarised in Tables 2 and 3 with the detector locations shown on Figure 1.

Table 2: Automated Static Bat Detector Survey Results For April to July.

Date	Unit number and location	Avg. registrations per hour	Total registrations	Most recorded species (no of registrations)	Other species recorded (no of registrations)
15.04.25-20.04.25	Unit 5 – Hedgerow with trees H1, cereal crops	0.81	44	Common pipistrelle (24)	Soprano pipistrelle (9) Myotis species (7) Noctule (4)
16.04.25-21.04.25	Unit 6 – broadleaved woodland, cereal crops	0.07	4	Common pipistrelle (3)	Soprano pipistrelle (1)
14.05.25-19.05.25	Unit 31 – Hedgerow with trees H1, cereal crops	5.28	240	Common pipistrelle (178)	Soprano pipistrelle (19) Brown long-eared (16) Nyctalus species (13) Noctule (11) Nyctalus/Eptesicus (2) Myotis species (1)
14.05.25-19.05.25	Unit 30 – broadleaved woodland, cereal crops	21.42	973	Common pipistrelle (390)	Soprano pipistrelle (46) Myotis species (33) Noctule (6) Nyctalus species (6) Brown long-eared (6)
11/06/25-16/06/25	Lock Unit 5 – Hedgerow with trees H1, cereal crops	9.07	371	Common pipistrelle (267)	Soprano pipistrelle (71) Nyctalus species (14) Noctule (12) Pipistrelle species (4) Myotis species (3)

Date	Unit number and location	Avg. registrations per hour	Total registrations	Most recorded species (no of registrations)	Other species recorded (no of registrations)
11/06/25-16/06/25	Unit 5 – broadleaved woodland, cereal crops	11.98	490	Common pipistrelle (261)	Soprano pipistrelle (173) Myotis species (34) Pipistrelle species (6) Noctule (5) Brown long-eared (5) Nyctalus species (4) Serotine (2)
09/07/25-14/07/25	Unit 34 – Hedgerow with trees H1, cereal crops	24.85	1063	Common pipistrelle (857)	Soprano pipistrelle (175) Noctule (12) Myotis species (8) Nyctalus species (6) Pipistrelle species (3) Brown long-eared (2)
09/07/25-14/07/25	Unit 35 – broadleaved woodland, cereal crops	20.01	856	Common pipistrelle (668)	Soprano pipistrelle (104) Myotis species (59) Noctule (16) Pipistrelle species (4) Nyctalus species (3) Brown long-eared (2)

3.5 The following is a summary of the static activity tabulated above:

- The static data was dominated by common pipistrelle (with over 77% of total registrations recorded), followed by soprano pipistrelle (c.14%) and myotis species (c.3.5%). All other species were below 2% of the total data each (see table 3 below).
- The activity ranged between 4 and 1063 registrations per survey. Although the highest levels recorded during an individual survey was along the hedgerow, in general lower registrations were recorded along it across the total survey work undertaken to date and greater numbers recorded along the woodland (see figure 1 for static locations). Generally speaking a significantly higher number of contacts were noted in July.
- No annex II species of bats were identified during this survey. Serotine, an uncommon bat species for the area, was recorded in June (comprising 2 registrations)..

Table 3: Species Breakdown of Static Survey

Species	Percentage
Common Pipistrelle	77.555%
Soprano Pipistrelle	14.798%
Myotis Species	3.588%
Noctule	1.633%
Nyctalus Species	1.138%
Brown Long-eared	0.767%
Pipistrelle Species	0.421%
Nyctalus / Eptesicus	0.049%

4.0 DISCUSSION AND EVALUATION

Legislation Summary

- 4.1 All bat species and their roosts are afforded full 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.
- 4.2 Under Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (*as amended*) it is illegal to:
- Deliberately capture, injure or kill any wild animal of a European Protected Species (EPS),
 - Deliberately disturb wild animals of an EPS (affecting ability to survive, breed or rear young) – disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young,
 - Deliberately disturb wild animals of an EPS (impairing ability to migrate or hibernate) – disturbance of animals includes in particular any disturbance which is likely to impair their ability in the case of hibernating or migratory species to hibernate or migrate,
 - Deliberately disturb wild animals of an EPS (affecting local distribution and abundance) – disturbance of animals includes in particular any disturbance which is likely to affect significantly the local distribution or abundance of the species to which they belong,
 - Deliberately disturb wild animals of an EPS (whilst occupying a structure or place used for shelter or protection) – intentionally or recklessly disturb any wild animal while it is occupying a structure or place which it uses for shelter or protection,
 - Damage or destroy a breeding site or resting place of a wild animal an EPS.
- 4.3 Under the Wildlife and Countryside Act 1981 (*as amended*) it is illegal to:
- Recklessly or intentionally kill, injures 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,
 - Recklessly or intentionally disturb any such animal while it is occupying a structure or place which it uses for shelter or protection.
- 4.4 The impact that this legislation has on the planning system is outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation – Statutory obligations and their impact within the Planning System.
- 4.5 This guidance states that as the presence of protected species is a material consideration in any planning decision, it is essential that the presence or otherwise of protected species, and the extent to which they are affected by proposals is established prior to planning permission being granted. Furthermore, where protected species are present and proposals may result in harm to the species or its habitat, steps should be taken to ensure the long-term protection of the species, such as through attaching appropriate planning conditions for example.

Bat Roosts

Trees

- 4.6 Tree T1 and T2 were identified during the ground level tree assessments to have potential roosting features, with T1 confirmed as having PRF-M features and tree T2 as having PRF-I features following aerial assessment. No evidence of roosting bats was recorded during the aerial inspections.
- 4.7 Tree T1 is retained within the proposed development and will be buffered from the built development by scrub planting. It is recommended, however, that a sensitive lighting scheme be implemented to minimise any light spill onto this tree and the potential roosting features.
- 4.8 Tree T2 will be lost to the proposed development to facilitate access to the site. Therefore, in line with the BCT guidelines, it is recommended that a pre-fell inspection is undertaken to confirm no bats are present at the time of works and remove the risk of harming any individuals. In the unlikely event a bat is found, all work must cease immediately and further advice sort from a suitably qualified Ecologist.
- 4.9 In any case, roosting opportunities within the site will be enhanced in the long term through the provision of bat boxes on the external walls of new buildings within the built development and on retained trees. These will comprise approximately 20 bat boxes, located a minimum of 3m high and facing a southeast, south or southwest direction. Where possible, boxes will face areas of green infrastructure / retained boundary vegetation.

Bat Activity Assessment

- 4.10 The application site is dominated by arable land, considered to have low value to foraging and commuting bats. Habitats at the site boundaries however, comprising hedgerows, hedgerows with trees and broadleaved woodland provide valuable habitat linkages and foraging opportunities as well as providing habitat connections to habitats within the wider area.
- 4.11 Mitigation and habitat provision measures will ensure the continued permeability of the hedgerow network as a commuting and foraging resource for bats locally, with these discussed within the below sections. As such, the losses of hedgerow is unlikely to impact significantly on the local bat population.
- 4.12 The bat population recorded utilising the site's boundary habitats comprised largely common and widespread species, included common pipistrelle, soprano pipistrelle, noctule, *Myotis* species and brown long-eared bat, that are frequently associated with the habitat types present with the site and surrounding landscape. The levels of activity associated with these species are consistent with their known abundance at a regional and national scale and are not considered to be significant within the context of the site and its setting.
- 4.13 No Annex II species were recorded during the survey work undertaken, however Serotine, an uncommon species in Leicestershire was recorded on a single night (two registrations on 13/06/25) during the static surveys. The low number of registrations, recorded on a single night suggests that it was a single Serotine commuting through once and not an area of importance to this species locally.
- 4.14 On the basis of field data compiled to date, it is considered that the site likely forms a relatively minor part of a network of foraging and commuting areas within the wider landscape and that

the proposed development would not significantly impact the Favourable Conservation Status of these bat species

Habitat Provision

- 4.15 The loss of the arable land as a result of development will have negligible impact on the local bat population and will not affect the favourable conservation status of those species recorded using the site.
- 4.16 The boundary hedgerow network and broadleaved trees within the site are utilised by local bat populations for foraging and commuting purposes, although the surveys did not record significant numbers of bats within the site.
- 4.17 The majority of H1 is to be removed as a result of the proposed development to facilitate access and associated vis-splays. With the retention of the majority of other boundary / offsite hedgerows and woodland, and the proposed creation of new habitat suitable for foraging and commuting bats (including grassland, scrub, woodland and native hedgerows) within the proposed green infrastructure around the edge of the development footprint, a dark corridor will be maintained for commuting bats. The proposed new habitats within the green infrastructure will provide a more varied and enhanced foraging resource for bats than currently present. In addition, a new native hedgerow is proposed along the northern site boundary, either side of the new access. As such any impact on the local bat assemblage is anticipated to be minor and temporary, reducing to a negligible impact once the new hedgerow along the site frontage establishes.

Lighting

- 4.18 It is recommended that an appropriate lighting scheme, in full accordance with the current industry guidance⁴, is implemented during the construction phase so as to minimise light spill onto retained boundary habitats. This should include directing light away from retained and newly planted structural vegetation to avoid or otherwise minimise light spill onto potential commuting/foraging routes.
- 4.19 The post-construction lighting scheme should also be sensitively designed with reference to the recommendations detailed within the above guidance such that dark corridors are maintained around the site. Dark corridors should be subject to no or minimal light spill in order to avoid impacting the activity of bats and other crepuscular/ nocturnal fauna. Furthermore, it is recommended that light sources be LED with no UV content, where possible, and mounting heights or luminaire shields used where necessary.

Summary

- 4.20 The level of bat activity recorded on site is considered consistent with, and typical of the habitats present within the context of the geographical location and habitats present within the wider area. Habitats including hedgerows and broadleaved woodland were identified as the main corridors of movement for commuting and foraging bats.

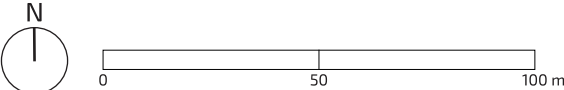
⁴ Bat Conservation Trust and The Institute of Lighting Professionals 2023. *Guidance Note GN08/23 Bats and Artificial Lighting At Night*.

Voigt, C.C, C. Azam, J. Dekker, J. Ferguson, M. Fritze, S. Gazaryan, F. Hölker, G. Jones, N. Leader, D. Lewanzik, H.J.G.A. Limpens, F. Mathews, J. Rydell, H. Schofield, K. Spoelstra, M. Zagmajster 2018. *Guidelines for consideration of bats in lighting projects*. EUROBATs Publication Series No. 8. UNEP/EUROBATs Secretariat, Bonn, Germany.

- 4.21 The development proposals will result in the loss of existing arable land of negligible value to local bat populations, and a large section of hedgerow H1 and small section of H4. The proposals will, however, retain and buffer the majority of the perimeter vegetation. In addition, the proposals include structurally diverse landscaping in the form of native trees, woodland, scrub and species rich grassland that will serve to improve habitat linkages throughout the site and into the wider landscape, increasing the value of the site for commuting and foraging bats in the long term.
- 4.22 No bat roost sites were identified during the aerial tree inspections. Tree T2 however supports potential roost features and as such should be subject to a pre-fell check. The provision of bat boxes on new dwellings and retained trees will provide a range of long-term roosting opportunities for bats across the site where currently there are none.
- 4.23 The use of lighting during construction and the lighting scheme for the development should be in accordance with best practice and will seek to avoid or otherwise minimise the illumination of potential flightlines and foraging habitats, maintaining suitable dark corridors to facilitate the movement of bats throughout the site and to neighbouring habitats in the wider area.
- 4.24 With the implementation of the above, any residual effects on the local bat population as a result of the proposed development are anticipated to be negligible in the short term, with long-term benefits for bats in terms of enhanced foraging, commuting and roosting opportunities at the site level as the planting scheme matures. The Favourable Conservation Status of all bat species identified would therefore be maintained.

APPENDIX A: AUTOMATED BAT STATIC DETECTOR RESULTS

Recording Period	Unit No.	Start Date	End Date	Survey Hours	Total Av. per hour	Total Registrations	Common Pipistrelle			Soprano Pipistrelle			Myotis Species			Noctule			Nyctalus Species			Brown Long-eared			Pipistrelle Species			Nyctalus / Eptesicus			Serotine		
							Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour
April	U5	15/04/25	20/04/25	54:00	0.81	44	24	21	0.44	9	7	0.17	7	4	0.13	4	2	0.07	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00
April	U6	16/04/25	21/04/25	53:41	0.07	4	3	2	0.06	1	1	0.02	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00
May	U31	14/05/25	19/05/25	45:24	5.28	240	178	52	3.92	19	7	0.42	1	1	0.02	11	4	0.24	13	5	0.29	16	11	0.35	0	0	0.00	2	1	0.04	0	0	0.00
May	U30	14/05/25	19/05/25	45:24	21.43	973	876	362	19.29	46	15	1.01	33	9	0.73	6	3	0.13	6	2	0.13	6	3	0.13	0	0	0.00	0	0	0.00	0	0	0.00
June	LU5	11/06/25	16/06/25	40:53	9.07	371	267	106	6.53	71	25	1.74	3	2	0.07	12	8	0.29	14	6	0.34	0	0	0.00	4	2	0.10	0	0	0.00	0	0	0.00
June	U5	11/06/25	16/06/25	40:53	11.98	490	261	104	6.38	173	46	4.23	34	14	0.83	5	2	0.12	4	2	0.10	5	3	0.12	6	4	0.15	0	0	0.00	2	2	0.05
July	U34	09/07/25	14/07/25	42:45	24.86	1063	857	420	20.04	175	127	4.09	8	4	0.19	12	5	0.28	6	4	0.14	2	1	0.05	3	2	0.07	0	0	0.00	0	0	0.00
July	U35	09/07/25	14/07/25	42:45	20.02	856	668	194	15.62	104	28	2.43	59	17	1.38	16	4	0.37	3	1	0.07	2	1	0.05	4	2	0.09	0	0	0.00	0	0	0.00
Totals:				365:50	11.05	4041	3134	420	8.57	598	127	1.63	145	17	0.40	66	8	0.18	46	6	0.13	31	11	0.08	17	4	0.05	2	1	0.01	2	2	0.01



Key

- Red Line Boundary
- Static Detector Locations
 - Location 1
 - Location 2
- Individual tree
 - Existing Large Rural Tree
 - Existing Medium Rural Tree
 - Existing Small Rural Tree
- Hedgerow
 - Native hedgerow
 - Native hedgerow with trees - associated with bank or ditch
 - Species-rich native hedgerow

Location, unit number and month of static detectors used

Location	Unit No.	Month
1	Unit 34	July
1	Unit 5	April
1	Unit 31	May
1	Lock Unit 5	June
2	Unit 35	July
2	Unit 6	April
2	Unit 30	May
2	Unit 5	June

date	23/07/25	drwn/chkd	CD / AJR
client	Bloor Homes		
project	Land South of Bosworth Lane, Newbold Verdon		
title	STATIC, TREE AND HEDGEROW LOCATION PLAN	scale	1:1,750 @ A3
number	FIGURE 1	rev	-

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