

HOGWOOD FARM, FINCHAMPSTEAD

DETAILED BAT MITIGATION STRATEGY – NEIGHBOURHOOD CENTRE

Prepared for CALA Homes Thames Ltd

by

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HDA ref: 868.1

December 2024

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1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes a Detailed Bat Mitigation Strategy in relation to the Neighbourhood Centre area of the development of approximately 110ha of land at Hogwood Farm, Finchampstead. The Neighbourhood Centre development area comprises approximately 0.9ha of land, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference SU 77146445. The Detailed Bat Mitigation Strategy was commissioned by CALA Homes Thames Ltd in May 2024.

1.1.2 The Neighbourhood Centre development parcel is located to the north-west of the village of Finchampstead, Berkshire. In general terms, it is dominated by ruderal vegetation with a line of mixed scrub along the southern site boundary and bare ground along the eastern site boundary. The Neighbourhood Centre site is bordered to the east by the Nine Mile Ride Extension South (NMRES); to the south by the Southern Bus Loop road with Parcel 10 of the wider site beyond; and to the north and west by the proposed primary school which will be delivered separately by Wokingham Borough Council (WBC). The location and boundary of the Neighbourhood Centre site is shown in *Appendix A*.

1.1.3 Neighbourhood Centre site is part of a larger area covering a total of 110ha, hereinafter referred to as the 'wider site'. The wider site includes residential properties associated with Parcel 1 and a construction site associated with Parcel 2 in the north-west and a SANG in the south which comprises a mix of wetland, species-rich grassland, scrub and woodland habitats. In general terms, the western area of the wider site is comprised of three fields of disturbed ground dominated by short ruderal vegetation with scattered areas of tall ruderal vegetation and large spoil heaps bordered by mature trees and woodland with scrub field margins. The central and eastern areas of the site are comprised of areas of hardstanding, construction/disturbed ground and grassland fields bordered by mature treelines and woodland. Woodland shaws and copses are located in the northern, western and central areas of the site, including mixed, broadleaved and broadleaved plantation woodland types, some of which are included on Natural England's Inventory of Ancient Woodland. Wetland habitats within the site include drainage ditches and small streams associated with the field boundaries and several ponds in poor condition are located across the site. The wider site is bordered to the north by a construction site, the Bohunt School and the Hogwood Industrial Estate; to the east by Park Lane beyond which lie residential dwellings and park homes; to the south by Park Lane and farmland; and to the west by A327 Reading Road and Sheerlands Road beyond which lie farmland and woodland. The wider area is dominated by agricultural land interspersed with woodland and residential properties.

1.1.4 Further information on the extent and composition of habitats across the Neighbourhood Centre site and the wider site is provided in *Appendix A* (HDA, 2024a).

1.2 Legislative context

1.2.1 All UK bat species are 'European Protected Species' (EPSs) protected under the 2017 Conservation of Habitats and Species Regulations (as amended). In relation to an EPSs, unless subject of an appropriate Natural England derogation licence the 2017 Regulations make it an offence to:

- Deliberately capture, injure or kill any wild animal of an EPS;
- Deliberately disturb wild animals of any such species, in particular any disturbance which is likely to: (i) impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or to hibernate or migrate; (ii) affect significantly the local distribution or abundance of the species to which they belong;
- Damage or destroy a breeding site or resting place of such an animal; and/or
- To (a) be in possession of, or to control; (b) to transport any live or dead animal or any part of an animal; (c) to sell or exchange or (d) offer for sale or exchange any live or dead animal or part of an animal of an EPS.

1.2.2 In addition, all UK bats are protected under the 1981 Wildlife and Countryside Act (as amended). All species are listed on Schedule 5 of the Act and are subject to the provisions of Sections 9.4b and 9.4c, which make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection; and/or
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat.

1.2.3 If works are planned that are likely to constitute an offence under the current legislation, an application for a derogation licence should be made to Natural England.

1.2.4 Seven species of bat (Barbastelle, Bechstein's, Noctule, Soprano Pipistrelle, Brown Long-eared, Greater Horseshoe and Lesser Horseshoe) are also identified as Species of Principal Importance under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. This requires planning authorities to regard these species as a material consideration in the planning process.

1.3 Development proposals

1.3.1 Planning permission (O/2014/2179 and 140764) was granted in January 2017 for a hybrid application. This comprises:

- Outline permission for demolition of all existing buildings on site; up to 1,500 new dwellings; employment floor space; a Neighbourhood Centre; a primary school; sports pitches and associated pavilion building; highways infrastructure; associated landscaping, public realm, open/green space and sustainable urban drainage systems; and

- Full permission for a 29.7ha Suitable Alternative Natural Greenspace (SANG) in the south of the site.

The hybrid planning permission was subsequently amended by a Section 73 application (181194) which was approved in November 2018.

1.4 Scope and purpose of the report

- 1.4.1 In December 2020, planning consent (202394) was granted for the demolition of the Hogwood Industrial Estate Buildings which were partially located within the site. A number of the buildings within the Hogwood Industrial Estate supported roosting bats, including maternity roosts for Brown Long-eared bat and Common Pipistrelle within B7 and low status, non-breeding roosts for Common Pipistrelle and Soprano Pipistrelle within B7, B17, B22, B25 and B30. An EPS licence (2022-60110-EPS-MIT) was subsequently granted for the demolition of the buildings supporting roosting bats and as part of the mitigation a replacement bat building was constructed (B39). Since then the industrial estate buildings have been demolished and the site is now dominated by tall ruderal vegetation (See *Appendix B* for the locations of these buildings).
- 1.4.2 Surveys of the Neighbourhood Centre site and wider site undertaken by Entec in 2008 and Amec in 2012 identified features suitable for roosting and foraging bats. During subsequent bat activity surveys, species recorded included Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle, *Myotis* sp., Brown Long-eared bat, Noctule and Serotine (Royal Haskoning DHV, 2014). Further survey work was carried out between 2017-2021 by HDA to assess the suitability of buildings and trees within the site and wider site to support roosting, foraging and commuting bats (HDA, 2019; HDA, 2020).
- 1.4.3 In recognition of the potential of the wider site to support bats, the time that has passed since the original surveys were undertaken and within the legislative context set out in *Section 1.2*, an updated Phase 1 bat roost scoping survey and Phase 2 bat activity survey were carried out by HDA in 2022 to assess the suitability of buildings and trees within the wider site to support roosting, foraging and commuting bats¹. Together with the work undertaken in 2008, 2012 and 2017-2021 this information has been used to inform this Detailed Bat Mitigation Strategy for the Neighbourhood Centre area of the proposed development.
- 1.4.4 This Detailed Bat Mitigation Strategy describes the results of the suite of bat surveys, provides an assessment of the likely effects of the proposed development on bats, and identifies measures to maintain and, where possible, enhance the value of the site for the local bat population. Specifically, the aims of the study are:

¹ At the time of the 2022 surveys, the Neighbourhood Centre site was dominated by bare earth and highly disturbed due to the adjacent NMRE construction site and as such it was considered of negligible suitability for bats.

- i) To identify potential bat roost sites within the Neighbourhood Centre site;
- ii) To determine the need for any further surveys prior to development commencing to identify the presence/likely absence of roosting bats within suitable features where affected by the proposed development, and identify species and numbers present;
- iii) To determine levels of bat foraging and commuting activity within habitat potentially affected by the Neighbourhood Centre development;
- iv) To determine the requirement, if any, for licensing in respect of bats; and
- v) To identify appropriate mitigation and/or enhancement measures to ensure that the Neighbourhood Centre development avoids adverse impacts on bats, and, where possible, provides enhancements to support the long-term favourable conservation status of bats in accordance with nature conservation legislation, planning policy and the 2006 NERC Act.

1.4.5 With respect to the Neighbourhood Centre development, this Detailed Bat Mitigation Strategy for the Neighbourhood Centre site also addresses Planning Condition 24, which requires that:

“Prior to or concurrent with the submission of a reserved matters application for any sub phase of the development a detailed bat mitigation strategy shall be submitted to and approved in writing by the local planning authority for that sub phase of the development. Each detailed bat mitigation strategy shall include an appropriate detailed lighting scheme that maintains the dark corridors as set out in Appendix 1 Recommended Dark Corridor Locations Plan of the submitted Hogwood Garden Village Bat Activity Survey Report - Revision: 02/Final (Royal Haskoning DHV, 10th September 2015) and should be in accordance with the submitted Hogwood Garden Village Bat Activity Survey Report - Revision: 02/Final (Royal Haskoning DHV, 10th September 2015). The mitigation, contingency and enhancement measures contained within each of the submitted detailed bat mitigation strategies shall be implemented in accordance with the approved plan unless otherwise approved in writing by the local planning authority.”

2 METHODOLOGY

2.1 Introduction

2.1.1 The methodology followed by HDA in relation to all updated bat survey work undertaken at the site is consistent with current legislation and good practice guidelines set out by the Bat Conservation Trust, at the time of the survey (BCT, 2016). The following sections detail the suite of surveys undertaken to date to inform the development of the Neighbourhood Centre site and the wider site and the results of these surveys are provided in *Section 3*.

2.2 Phase 1 bat scoping survey

2.2.1 Land to the immediate south of the site, as part of a survey of approximately 58.5ha of the wider site, was subject to a Phase 1 bat scoping survey by Fiona Muir of HDA on the 1st and 7th April, 4th May and 29th July 2022 (HDA, 2023). At the time of the 2022 surveys, the Neighbourhood Centre site was dominated by bare earth and highly disturbed due to the adjacent NMRE construction site and as such it was considered of negligible

suitability for roosting bats. No buildings or trees are currently located within the Neighbourhood Centre site (See *Section 1.4.1* above).

2.3 Phase 2 bat activity survey

Bat activity transects

- 2.3.1 Land to the immediate south of the site, as part of a survey of approximately 58.5ha of the wider site, was subject to a suite of dusk and dawn bat activity surveys most recently undertaken between May and September 2022. Due to the size of the survey area, the survey area was divided into two survey area transects of which land to the immediate south of the site was located within Transect 2. Surveyors carrying hand-held bat detectors walked transects of the wider site, with listening stops at regular intervals for periods of up to 5 minutes. Visual observations of bats and bat call registrations were noted, recording time, location, activity and, where known, species. Recordings of foraging and/or commuting activity made using digital devices were subsequently analysed to determine the identity of any unconfirmed species recorded during the surveys. Times and dates of surveys carried out are given in *Table 1* below, along with weather conditions.

Table 1: Details of bat activity surveys of Transect 2 (located to the immediate south of the Neighbourhood Centre site)

Date	Sunset / sunrise	Time	Weather conditions
04/05/2022	20.30	20.30 - 22.30	100% cloud cover, Beaufort Scale = 0, dry, 13-10°C
20/07/2022	21.08	21.08 - 23.08	100% cloud cover, Beaufort Scale = 2, light rain showers between 21.30 - 22.15, 20°C
13/09/2022	06.35	04.35 - 06.35	80% cloud cover, Beaufort Scale = 1, dry, 15°C

Automated surveys

- 2.3.2 Automated surveys were carried out as a supplement to the activity transect surveys and to gain further information on the species and frequency of bat activity at the Neighbourhood Centre site and wider site. Two programmable electronic bat detectors² were positioned in suitable habitat and left in place on three occasions between May and October 2022. The detectors were programmed to record all bat activity. Details of the times and dates of automated bat detector deployments are provided in *Table 2* below.

Table 2: Details of automated bat detector deployment

Location	Deployment and collection date	Sunset / Sunrise	Temp. Max. / Min. (°C)
A & B*	04.04.2022 – 05.04.2022	19:42 / 06:30	13 / 9
	05.04.2022 – 06.04.2022	19:43 / 06:28	11 / 8.
	06.04.2022 - 07.04.2022	19:45 / 06:26	9 / 7
	07.04.2022 - 08.04.2022	19:47 / 06:23	7 / 4

² Anabat Express with remote microphone and 'Analook' software.

Location	Deployment and collection date	Sunset / Sunrise	Temp. Max. / Min. (°C)
	08.04.2022 - 09.04.2022	19:48 / 06:21	8 / 2
	09.04.2022 - 10.04.2022	19:50 / 06:19	9 / 2
C & D	14.07.2022 - 15.07.2022	21:15 / 05:04	20 / 9
	15.07.2022 - 16.07.2022	21:14 / 05:05	21 / 11
	16.07.2022 - 17.07.2022	21:13 / 05:06	23 / 12
	17.07.2022 - 18.07.2022	21:12 / 05:08	24 / 14
	18.07.2022 - 19.07.2022	21:11 / 05:09	28 / 18
E & F	28.09.2022 - 29.09.2022	18:48 / 07:01	18 / 3
	29.09.2022 - 30.09.2022	18:46 / 07:02	15 / 4
	30.09.2022 - 01.10.2022	18:44 / 07:04	14 / 11
	01.10.2022 - 02.10.2022	18:41 / 07:05	16 / 12
	02.10.2022 - 03.10.2022	18:39 / 07:07	17 / 5

* The static at Location B recorded one less night than the static at Location A (i.e. until the 09.04.2022).

2.3.3 The results of the updated bat activity transect and automated detector surveys have been used to support the earlier assessment of bat foraging and commuting activity made in the Ecology Chapter of the Environmental Assessment submitted in support of the planning application (Royal Haskoning, 2014) and the bat activity surveys undertaken by HDA between 2017 to 2018 (HDA, 2019).

2.4 Limitations of surveys

2.4.1 Although the most recent bat surveys were associated with the land to the immediate south of the site, rather than the site itself, the site is dominated by ruderal vegetation with a line of mixed scrub along the southern site boundary and bare ground along the eastern site boundary (*Appendix A*). As such, there are no habitats suitable to support roosting bats and the habitat of highest interest for foraging and commuting bats associated with the site comprises the line of mixed scrub along the southern site boundary which would have been subject to survey during the bat activity transect survey of the wider site in 2022.

2.4.2 With due consideration to the limitation given above, all surveys followed best practice guidelines at the time of the surveys (BCT, 2016) and were conducted at an appropriate time of year, under favourable weather conditions and with an appropriate level of survey effort both in terms of the number of surveyors used and number of survey visits undertaken. Although periods of rain were experienced on one of the bat activity surveys, this was not found to have affected levels of bat activity and is not considered a constraint to the findings of the Phase 2 surveys. The surveys are therefore considered sufficient to allow a robust assessment of the likely effects of the proposed development on bats and to inform the recommendations provided in *Section 5* of this report.

3 RESULTS

3.1 Phase 1 bat roost scoping survey

3.1.1 No buildings or trees are currently located within the Neighbourhood Centre site.

3.2 Phase 2 activity transect surveys

3.2.1 Details of the date and time of bat activity transect surveys carried out, along with weather conditions and sunset/sunrise times, are provided in *Table 1*. The areas covered during each survey visit included the line of scrub along the southern boundary of the Neighbourhood Centre site, as part of a survey of the wider site.

3.2.2 A visual summary of bat foraging and commuting activity recorded during the surveys of the wider site has been provided in *Appendix C*. In total, one species was recorded during the transect surveys of this area: Noctule. A summary of Noctule activity and an estimation of numbers using the Neighbourhood Centre site and wider site during any one survey is provided in *Table 3* below.

Table 3: Summary of bat activity during transect surveys

Species	Activity summary	Approx. number recorded*
Noctule	Noctule activity was scattered across the wider site, with activity focused on a line of scrub and tall ruderal vegetation associated with the southern boundary of the Neighbourhood Centre site. Noctules were also recorded on a less frequent basis using hedgerows and woodlands bordering the grassland and arable fields in the remainder of the wider site. The remainder of recordings were largely associated with high level passes by individuals crossing the wider site. It is expected that up to 2 Noctule bat could have been using the Neighbourhood Centre site at any one time during the survey and that the Neighbourhood Centre site forms part of a much larger foraging range for a low number of individuals of this species.	2

**This is an approximation of the number of bats of any one species estimated to have been using the Neighbourhood Centre site during any one visit.*

3.3 Phase 2 automated activity surveys

3.3.1 The dates during which the automated detector was deployed, along with sunset/sunrise times and temperatures, are provided in *Table 2*.

3.3.2 The automated detectors were placed in six separate locations within the wider site to give an indication of the species and relative levels of activity throughout the night. A summary of bat activity recorded during the automated surveys in each location is provided below in *Table 4*. In total, five species/species groups were recorded during the automated surveys; Common Pipistrelle, Soprano Pipistrelle, Noctule, Brown Long-eared bat and *Myotis* sp. bat.

Table 4: Summary of bat activity recorded by the automated detector

Location	Activity summary
A	The automated detector at Location A recorded bat activity along a woodland belt aligned east-west in the east of the wider site, approximately 355m to the south of the Neighbourhood Centre site. A total of 336 bat passes were recorded over 6 nights; an average of 56 bat recordings per night. Soprano Pipistrelle the most frequently recorded species (63.1% of the bat recordings), with occasional to regular foraging activity recorded during every night. Common Pipistrelle was the second most frequently recorded species (22.9% of the bat recordings), with occasional foraging activity recorded during every night. Occasional passes by Noctule and <i>Myotis</i> sp. bat were also recorded (12.5% and 1.5% of passes, respectively).
B	The automated detector at Location B recorded bat activity associated with a woodland belt aligned north-south in the west of the wider site, approximately 500m to the west of the Neighbourhood Centre site. A total of 684 bat passes were recorded over 5 nights; an average of 137 bat recordings per night. Common Pipistrelle was the most frequently recorded species (55.7% of the bat recordings), with occasional to regular foraging activity recorded during every night. Soprano Pipistrelle was the second most frequently recorded species (32.6% of the bat recordings) with occasional to regular foraging activity recorded during every night in which bats were recorded. Occasional passes by Noctule, Brown Long-eared bat and <i>Myotis</i> sp. bat were also recorded (7.9%, 2.9% and 0.9% passes, respectively).
C	The automated detector at Location C recorded bat activity at the junction of a woodland belt and adjoining hedgerow in the east of the wider site, approximately 420m to the south-east of the Neighbourhood Centre site. A total of 609 bat passes were recorded over 5 nights; an average of 122 bat recordings per night. Common Pipistrelle was the most frequently recorded species (80.8% of the bat recordings), with occasional to regular foraging activity recorded during most night. Soprano Pipistrelle was the second most frequently recorded species (17.7% of the bat recordings), with occasional foraging activity recorded during most nights. Occasional passes by Brown Long-eared bat and <i>Myotis</i> sp. bat were also recorded (0.5% and 0.1% of passes, respectively).

Location	Activity summary
D	The automated detector at Location D recorded bat activity along a woodland margin located in the centre of the wider site, approximately 310m to the south of the Neighbourhood Centre site. A total of 1194 bat passes were recorded over 5 nights; an average of 239 bat recordings per night. Soprano Pipistrelle was the most frequently recorded species (69.3% of the bat recordings), with occasional to regular foraging activity recorded during most nights. Common Pipistrelle was the second most frequently recorded species (31.4% of the bat recordings), with occasional foraging activity recorded on all nights. Occasional passes by Brown Long-eared bat, Noctule and <i>Myotis</i> sp. bat were also recorded (0.8%, 0.3% and 0.1% of passes, respectively).
E	The automated detector at Location E recorded bat activity associated with a tree group in the centre of the wider site, approximately 130m to the west of the Neighbourhood Centre site. A total of 49 bat passes were recorded over 5 nights; an average of 10 bat recordings per night. Common Pipistrelle and Soprano Pipistrelle were the most frequently recorded species (44.9 and 30.6% of the bat recordings), with occasional foraging activity recorded during most nights. Occasional passes by Noctule and Brown Long-eared bat were also recorded (14.3% and 10.2% of passes, respectively).
F	The automated detector at Location F recorded bat activity associated with the treeline and hedgerow in the south-east of the wider site, approximately 760m to the south of the Neighbourhood Centre site. A total of 46 bat passes were recorded over 5 nights; an average of 9 bat recordings per night. Common Pipistrelle was the most frequently recorded species (80.4% of the bat recordings) with occasional foraging activity recorded during every night. Soprano Pipistrelle being the second most frequent recorded species (17.4% of bat recordings) with occasional foraging activity recorded during most nights. Occasional passes by <i>Myotis</i> sp. bat were also recorded (2.2% of passes).

3.3.3 In summary, the static detectors recorded Common Pipistrelle and Soprano Pipistrelle at all locations the remote detectors were deployed. *Myotis* sp. bat were recorded at all locations except Location E. Noctule bats were recorded at all locations except from Locations C and F. Brown Long-eared bats were recorded at all locations except from Locations A and F.

3.3.4 The greatest number of bat recordings was recorded at Location D and the highest diversity of bat species was recorded at Location B and D. The fewest number of bat recordings per night and lowest diversity of bat species was recorded at Location F. Soprano Pipistrelle and Common Pipistrelle were the most frequently recorded species

relating to 47.8% and 46.7% of all bat passes recorded, respectively, with all locations being used by foraging bats of these species on at least an occasional basis on each night. Noctule, followed by Brown Long-eared bat and *Myotis* sp. bats, were the next most recorded bat species/species groups (3.6%, 1.4% and 0.5% of all bat recordings, respectively), with similar patterns of activity to the Soprano and Common Pipistrelle bats however at much lower numbers.

4 SUMMARY AND IMPACT ASSESSMENT

4.1 Bat roosting habitat

4.1.1 In relation to the Neighbourhood Centre site, no features with the potential to support roosting bats are now present within the site. Current knowledge therefore suggests that no bat roosts will be lost as a result of the proposed development

4.2 Foraging and commuting activity

4.2.1 Moderate levels of Noctule foraging activity has been recorded in proximity to the Neighbourhood Centre site, with up to two individuals considered to be using the site at any one time. The plan in *Appendix C* provides an overview of bat activity recorded during the transect surveys.

4.2.2 During the automated detector surveys (and transect surveys of the wider site), Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared bat and *Myotis* sp. bats were also recorded and it is anticipated that these species/species group may use the Neighbourhood Centre site on an occasional basis as a small part of a much wider foraging territory for individuals of this species/species group.

4.2.3 Overall the level of bat activity recorded was generally considered to be low, relative to the size of the site, and similar and higher quality foraging and commuting opportunities are relatively widespread in the wider area. As a whole the Neighbourhood Centre site is therefore considered to be of no more than site interest for foraging bats.

4.2.4 Notwithstanding this, development proposals should seek to maintain and, where possible, enhance roosting, foraging and commuting opportunities for bats using the site in accordance with nature conservation legislation, planning policy and the 2006 NERC Act. Recommendations to maintain and enhance the value of the Neighbourhood Centre site for bats are provided in *Section 5* below.

5 MITIGATION STRATEGY

5.1 This section identifies measures to be implemented during development of the Neighbourhood Centre site in order to avoid, mitigate and compensate potential impacts on bats, and to maintain the favourable conservation status of the local bat population.

These measures will be implemented unless otherwise agreed with Natural England and/or the local planning authority. In addition, measures for long-term maintenance and enhancement of opportunities at the Neighbourhood Centre site for roosting, foraging and commuting bats are included in accordance with the 2024 National Planning Policy Framework (NPPF) and the 2006 NERC Act.

5.2 Roosting bats

- 5.2.1 No buildings or trees suitable for roosting bats were recorded within the Neighbourhood Centre site. Current knowledge therefore suggests that no bat roosts will be lost as a result of the proposed development.

Enhancement of opportunities for roosting bats

- 5.2.2 Development of the site will provide opportunities to enhance its current value for roosting bats in accordance with planning policy and the 2006 NERC Act through the provision of a range of new bat roosting features. CALA Homes Thames Ltd have an 'Urban Wildlife Strategy' in place for all their new developments. As part of this strategy CALA Homes Thames Ltd will incorporate at least one bat roosting features within each house and apartment block. The Neighbourhood Centre will include new residential apartments and subsequently bat roosting features will be provided on the Neighbourhood Centre. In order to provide a variety of bat roosting opportunities suitable for a range of bat species, roost enhancement will consist of (or similar):

- 3 x bat boxes on the Neighbourhood Centre comprising lbstock bat boxes, Wildcare soffit bat boxes or Beaumaris Woodstone bat boxes will be incorporated into/on the building (suitable for crevice dwelling bat species).

The locations of these is shown on the *Neighbourhood Centre: Species Enhancements Plan* provided in *Appendix D*.

- 5.2.3 By providing a variety of roosting opportunities in different locations and orientations across the new building, a range of roost spaces with varied microclimates will be provided by the new development, which would offer roosting opportunities for bats throughout the year and enhance the future long-term potential of the Neighbourhood Centre site (and wider site) to support roosting bats.

5.3 Foraging and commuting bats

- 5.3.1 The Neighbourhood Centre site is considered as a whole to be of no more than site importance for foraging bats. The site comprises a low proportion of foraging habitat for low numbers of Noctule bats and provides foraging habitat for individual Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared bat and *Myotis* sp. bats on a more occasional or infrequent basis.

- 5.3.2 A number of the bat species identified within the Neighbourhood Centre site and wider site (Soprano Pipistrelle, Noctule and Brown Long-eared bat) are listed as Species of Principal Importance under Section 41 of the 2006 NERC Act and therefore the effects of development on foraging and commuting habitat are a material consideration in the planning process.
- 5.3.3 The development proposals indicated on the *Neighbourhood Centre: Species Enhancements Plan* in *Appendix D* show that the line of scrub associated with the southern site boundary will be lost. In order to maintain habitat connectivity within the site and wider site, planting has been included within the soft landscape proposals for the Neighbourhood Centre development area. Although no new hedgerow or scrub planting is proposed, tertiary green corridors including lines of tree will be provided across the built development area and additional hedgerow planting (along with other linear habitats such as woodland and scrub) have been incorporated into the SANG, Green Corridor and other phases of the development.
- 5.3.4 A lighting assessment has been produced for the site and wider site (MMA Lighting Consultancy, 2018) which assessed that the site currently has limited light spill from off-site residential areas (MMA Lighting Consultancy assessed the site as having an E2 - Low District Brightness Areas). The lighting assessment details measures to achieve a minimum level of lighting required for public amenity and safety whilst restricting horizontal or vertical light spill into non-target areas. External lighting will be limited to the carpark, road and footpath network and be designed to accord with WBC specifications to ensure public safety. Within the necessary safety requirements, in accordance with the lighting design and light spill plans set out in the MMA lighting report (MMA Lighting Consultancy, 2018), an Illustrative Lighting Parameters Plan (HDA, 2018) has been prepared that identifies Lighting Exclusion Zones and Lighting Restriction Zones. The Neighbourhood Centre is not proposed to be within either the Lighting Exclusion Zones or Lighting Restriction Zones, and instead will be sensitively designed to achieve a minimum level of lighting required for public amenity and safety whilst restricting horizontal or vertical light spill into non-target areas. Within the Neighbourhood Centre site measures to achieve a minimum level of lighting required for public amenity and safety whilst restricting horizontal or vertical light spill into non-target areas will include:
- LED lighting with a correlated 'warm' colour temperature of 4000 Kelvin, which will be lowered to 2700 Kelvin (where practical).
 - LED light sources contain no UV wavelengths and the warmer colour temperatures reduce the light emitted beyond the 550 nanometer wavelengths. These requirements are consistent with the current research on the impact of artificial lighting on bats as published by the Bat Conservation Trust and Institution of Lighting Professionals (BCT & ILP, 2023);

- The lighting columns will be 8m for the prime spine road and 6m for subsidiary roads;
- Rear spill guards can be employed to focus light onto target areas;
- LED luminaires are suitable for dimming. A Remote Monitoring System will be considered for lighting in sensitive locations to allow luminaires to be dimmed to an appropriate level and then dimmed back further after a late night curfew (c. 23:00) (or alternatively the luminaires will be switched off entirely when not in use); and
- Pedestrian only footpaths/cycleways will be unlit with the exception of bollard lighting at nodal points, fitted with LED luminaires and rear spill guards/louvres/cowls, as appropriate.

5.3.5 Furthermore, in addition to the above measures to maintain opportunities for foraging and commuting bats within and adjacent to the site, the proposed areas of informal public open space and SANG will provide extensive opportunities to enhance these areas of the wider site for bats through the creation and enhancement of meadow grassland, scrub, hedgerow and woodland habitats and the creation of new wetland features.

6 CONCLUSION

6.1 The bat survey work carried out at the site identified low activity within the Neighbourhood Centre site. Development proposals seek to enhance opportunities for roosting bats within the site as described in *Section 5* above, through the provision of newly created roosting opportunities on the Neighbourhood Centre building.

6.2 Measures are also described for the maintenance of current opportunities provided by the site for foraging and commuting bats. These include sensitive lighting design and planting and habitat creation works. The development area is currently dominated by ruderal vegetation and bare ground with a line of mixed scrub along the southern site boundary of limited value for foraging bats and it is likely that these measures could maintain the value of the site in the long-term for this group.

6.3 Subject to the implementation of the measures described in *Section 5*, it is considered that the favourable conservation status of the local bat population would be maintained and, through long-term provision of higher quality roosting habitats, potentially enhanced. This would ensure compliance with the nature conservation objectives of the 2017 Conservation of Habitats and Species Regulations (as amended), the 2006 NERC Act and the guidance underpinning the 2024 National Planning Policy Framework.

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HDA Document Control and Quality Assurance Record

Project Title: Arborfield Eco
Project Reference: 868.1
Document Title: Detailed Bat Mitigation Strategy – Neighbourhood Centre
Commissioning Party: CALA Homes Thames Ltd

Issue	Description	Date of Issue	Signed
1	Detailed Bat Mitigation Strategy – Neighbourhood Centre	December 2024	

	Personnel	Position
Author	Clare Bird MCIEEM	Associate Ecologist
Approved for issue	Sarah Thornton-Mills MCIEEM	Principal Ecologist

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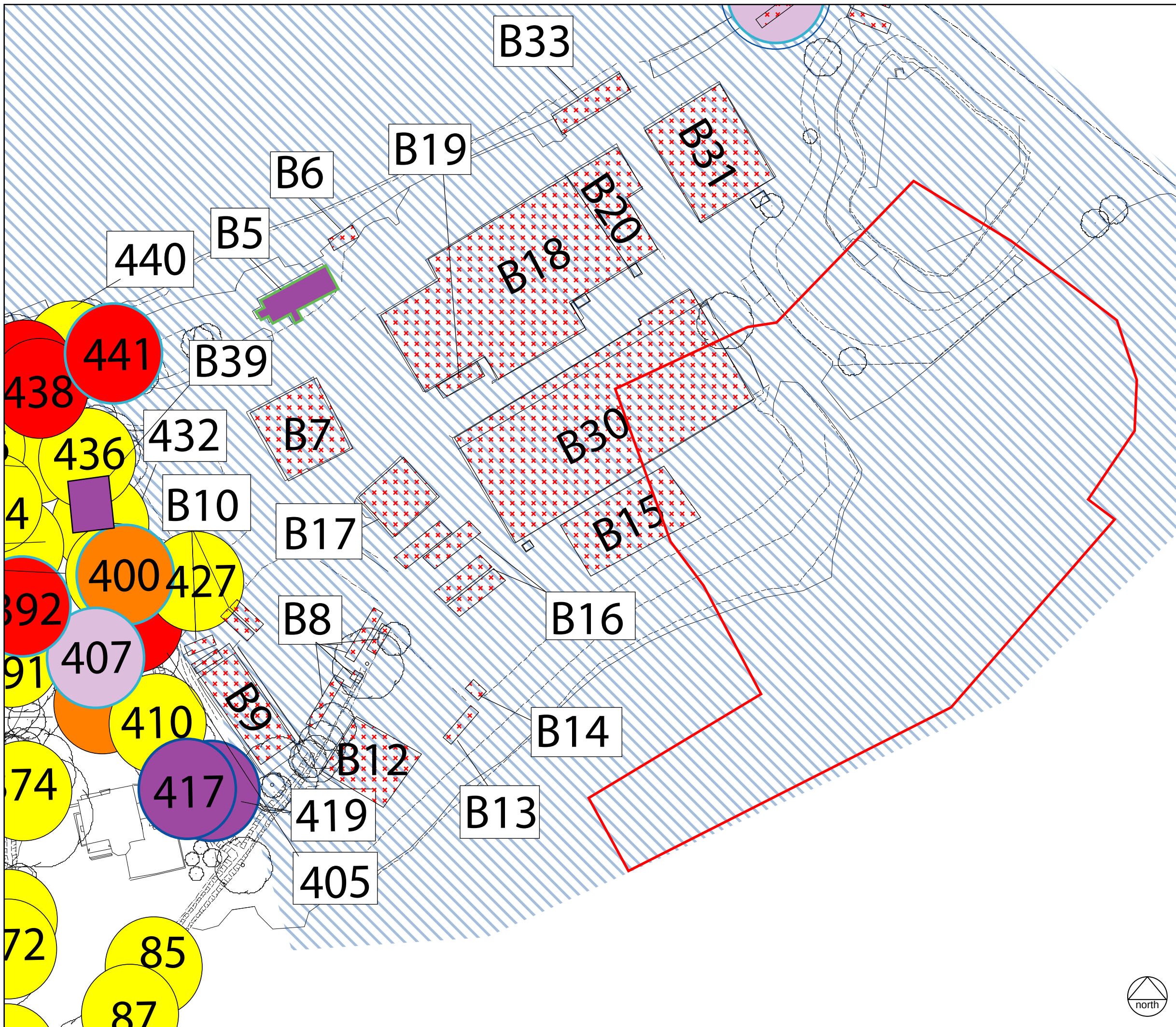
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APPENDIX A

Phase 1 Habitat Survey Plan (showing Neighbourhood Centre development area and wider site)

APPENDIX B

Bat Roost Survey Summary Plan – Neighbourhood Centre



KEY

- Site boundary
- Areas of the wider site not subject to updated bat surveys in 2022*
- Tree/building subject to emergence/re-entry survey in 2020 by HDA
- Tree/building subject to emergence/re-entry survey in 2020 by Stantec
- Tree/building subject to emergence/re-entry survey in 2023 by HDA

BUILDINGS

- Confirmed bat roost
- Location of demolished building **

TREES

- Confirmed bat roost
- Possible bat roost
- High bat roosting potential
- Moderate bat roosting potential
- Low bat roosting potential

* The site was not subject to an updated Phase 1 bat scoping survey in 2022 however there are no buildings or trees within the site.

**In December 2020, planning consent (202394) was granted for the demolition of the Hogwood Industrial Estate Buildings some of which were historically associated with this site. Following which an EPS bat licence was obtained for the demolition of buildings supporting roosting bats. Since then the industrial estate buildings have been demolished, a replacement Bat Building was constructed (B39) and the site is now dominated by tall ruderal vegetation.

Roosting categories relate to roost potential in accordance with the BCT 2016 guidelines.

CLIENT:
CALA Homes Thames Ltd

PROJECT:
Hogwood Farm, Finchampstead

TITLE:
Bat Roost Survey Summary Plan:
Neighbourhood Centre

SCALE AT A3:
Not to scale

DATE:
December 2024

868.1 / 115

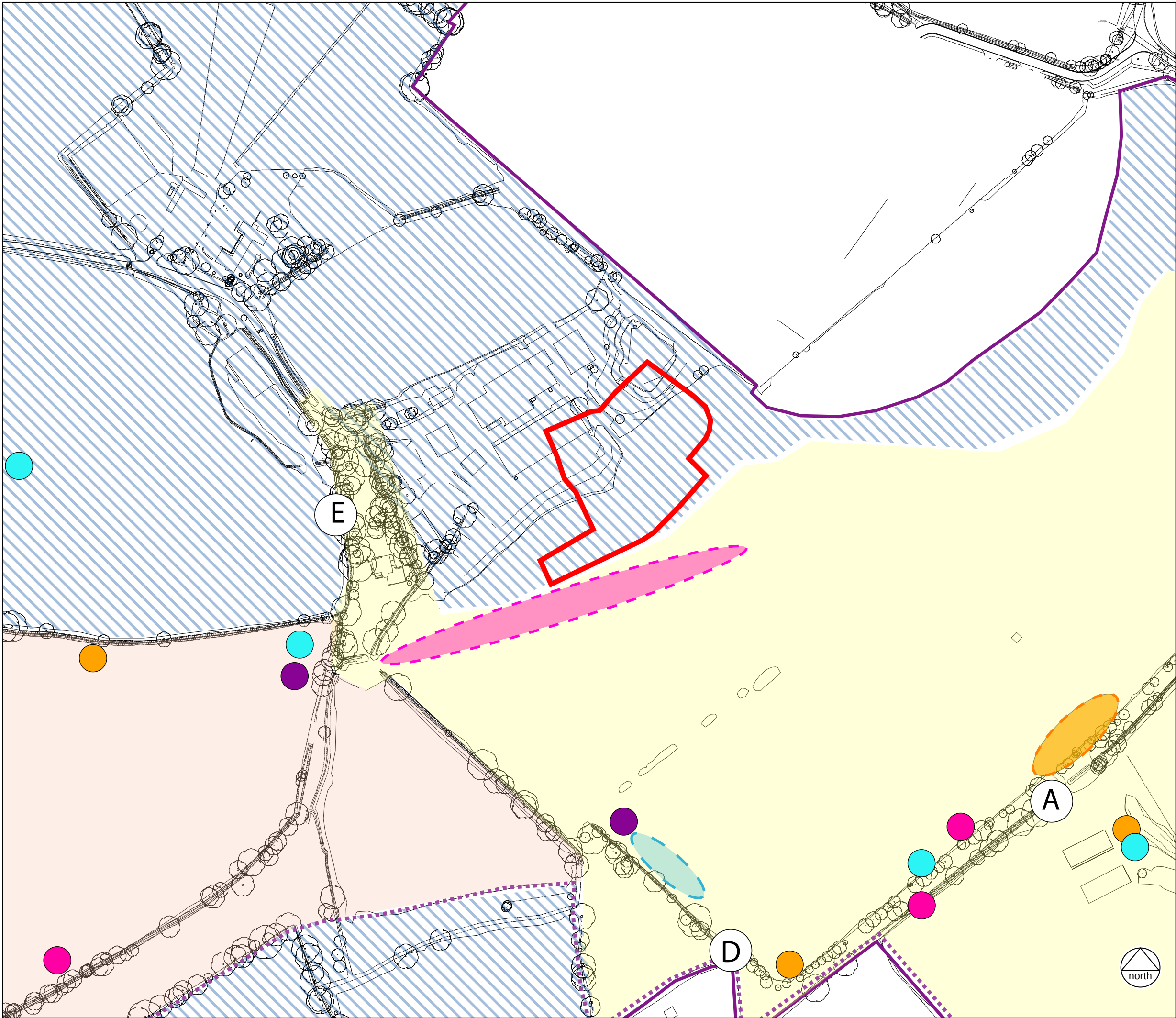
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APPENDIX C

Bat Activity Survey Summary Plan – Neighbourhood Centre



KEY

- Site boundary
- Wider site boundary
- Not subject to updated survey in 2022
- Automated detector location
- Transect 1
- Transect 2

Bat foraging and commuting activity

Common Pipistrelle

- Single bat pass
- Occasional bat pass/foraging
- Moderate bat foraging

Soprano Pipistrelle

- Single bat pass
- Moderate bat foraging

Noctule

- Single bat pass
- Moderate bat foraging

Brown Long-eared bat

- Single bat pass

Myotis sp. bat

- Single bat pass

CLIENT:
CALA Homes Thames Ltd

PROJECT:
Hogwood Farm, Finchampstead

TITLE:
**Bat Activity Survey Summary Plan:
Neighbourhood Centre**

SCALE AT A3:
Not to scale

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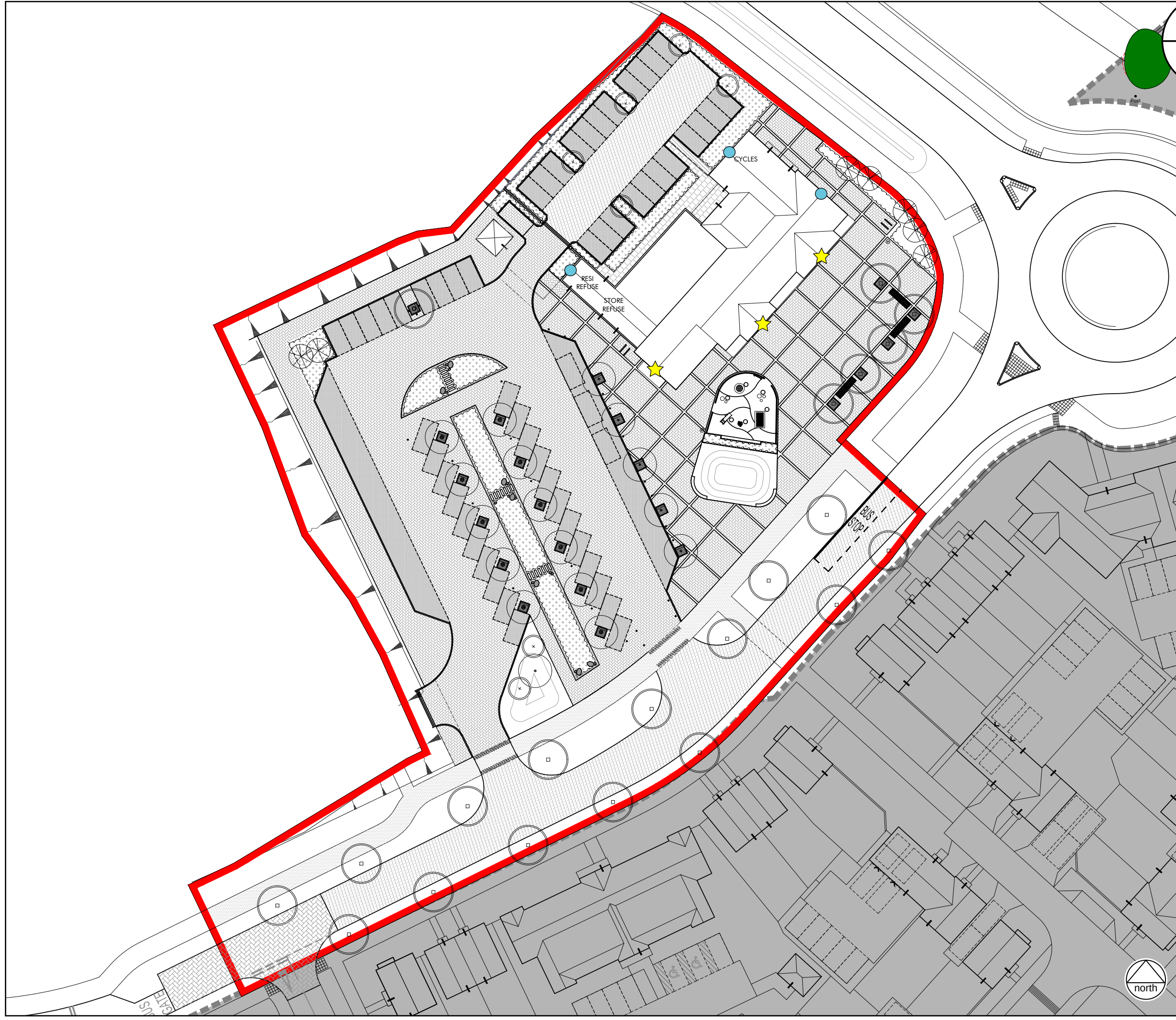
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APPENDIX D

Neighbourhood Centre: Species Enhancement Plan



KEY

-  Neighbourhood Centre site boundary
-  Bat box location*
-  Bird box location*

* Position indicative

CLIENT:
CALA Homes Thames Ltd

PROJECT:
Hogwood Farm, Finchampstead

TITLE:
Neighbourhood Centre: Species
Enhancements Plan

SCALE AT A3:
NTS

DATE:
December 2024

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