

Bat Survey

Nonsuch Estate, Westbrook,
Bromham, Chippenham
Wiltshire, SN15 2ED

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CROSSMAN ECOLOGY

Non-technical Summary

Background

In June 2024, Crossman Associates was commissioned by Boyce Group to undertake a bat survey of land and building at Nonsuch House, Westbrook Road, Bromham, near Chippenham, Wiltshire (Ordnance Survey grid reference: ST 963 660).

The site is proposed for repair and development into a new hotel and associated infrastructure.

Methods

Surveys included a daytime verification survey, evening emergence surveys of all suitable buildings and a period of automated monitoring in summer/autumn 2024 and spring 2025.

Results

The site at Nonsuch House, encompasses approximately 18 hectares of parkland, pasture, and woodland within a rural setting around 3 miles east of Melksham. It includes a Grade II* listed manor house—largely destroyed by fire in 2022—and several residential and agricultural buildings, gardens, and walled grounds.

The site supports common and soprano pipistrelle day roosts, two long-eared bat day roosts and a lesser horseshoe day and night roost.

At least nine species of bat are using the wider site for foraging/commuting.

Recommendations

The following are recommended for the site;

- Natural England bat licence, mitigation and compensation scheme
- New void and crevice bat roosts
- New landscape planting to improve overall bat habitat.
- Implementation of habitat management plan for bats

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1. Introduction

- 1.1. In June 2024, Crossman Associates was commissioned by Boyce Group to undertake bat surveys of the land and buildings at Nonsuch House, Westbrook Road, Bromham, near Chippenham, Wiltshire (Ordnance Survey grid reference: ST 963 660).
- 1.2. The surveys followed an ecological appraisal undertaken by Abricon, based on a site survey completed in September 2023 and reported in January 2024. The Abricon appraisal included a preliminary assessment of the buildings for roosting bats and identified confirmed bat roosts and potential roosting features within several buildings. It also identified the estate as providing suitable foraging and commuting habitat for bats and recommended further building emergence and activity surveys.
- 1.3. The objectives of the bat surveys undertaken by Crossman Associates were to:
 - establish the species, numbers and types of bat roosts present within buildings that could be affected by the proposals;
 - characterise the assemblage and relative levels of bat activity across the site, including the use of the habitats for foraging and commuting;
 - assess the importance of the buildings and habitats to the local bat population;
 - identify the relevant legal and planning-policy constraints; and
 - determine the mitigation, compensation and enhancement measures required to enable the proposed development to proceed.
- 1.4. Reference has been made to the Abricon ecological appraisal, together with the existing site plans and proposed development information supplied by Boon Brown Architects. The present report should therefore be read alongside the earlier

ecological appraisal, which provides more detailed descriptions of the buildings, habitats and wider ecological conditions recorded at the estate.

Proposals

- 1.5. Nonsuch House forms part of an historic country estate containing a fire-damaged Grade II* listed manor house and a diverse collection of residential, estate and agricultural buildings. These include former stables, cottages, estate offices, barns, garaging and smaller ancillary structures. The buildings vary in their age and construction but include traditional stone and brick structures with clay-tile or stone-slate roofs.
- 1.6. The proposals include the repair and conversion of Nonsuch House to form a boutique hotel. Other existing buildings would be converted or adapted to provide associated guest accommodation, spa, restaurant and estate facilities.
- 1.7. The central part of the site would be landscaped to include an ornamental reservoir with a boathouse and birdwatching platform, new paths, managed lawns, meadow areas and woodland planting. New residential accommodation and estate buildings are proposed in the eastern part of the site, together with associated access, parking and landscaping. The ancient woodland and the majority of the other priority habitats would be retained and protected through appropriate buffers and additional planting.
- 1.8. The proposals have the potential to affect bats through the repair, conversion or alteration of buildings containing confirmed or potential roosts. Changes to external lighting, vegetation and the arrangement of habitats could also affect commuting routes and foraging areas associated with those roosts. The bat surveys were therefore required to establish the nature and status of the roosts and to inform an appropriate avoidance, mitigation, compensation and enhancement strategy.

Site description

- 1.9. Nonsuch House and its associated estate extend across approximately 18 hectares within a rural setting around 3 miles east of Melksham. The estate includes the Grade II* listed manor house, which was severely damaged by fire in 2022, together with residential properties, traditional outbuildings, gardens, walled grounds and areas of managed grassland.
- 1.10. The main concentration of buildings lies within the northern and north-western parts of the estate. The range of building types, including older stone and brick structures with roof voids, stone-slate and clay-tile roofs, exposed wall plates and gaps within masonry, provides a variety of potential roosting conditions for crevice-dwelling and roof-void-dwelling bat species.
- 1.11. The wider site principally comprises managed modified grassland with occasional mature parkland trees, boundary hedgerows and areas of lowland deciduous woodland, including ancient woodland associated with Wyatt's Wood Local Wildlife Site. Other habitats include gardens, ponds, Clackers Brook and associated watercourses, and a traditional orchard. The A3102 forms the northern boundary, while agricultural land and woodland occur around the other site boundaries.
- 1.12. The combination of traditional buildings, mature trees, hedgerows, woodland edges and watercourses provides a connected mosaic of roosting, foraging and commuting habitat for bats. The boundary hedgerows, woodland and mature trees are likely to provide the most valuable foraging and navigational features, while the extensive, regularly mown, species-poor grassland provides a more limited foraging resource under its current management.

2. Methodology

Methodology

Bat assessment

- 2.1. The bat survey work was led by Alex Crossman MCIEEM, a licensed bat ecologist holding Natural England survey licence number 2015-17095-CLS-CLS. He was assisted during the daytime survey by Rob Spencer, who is also a licensed bat ecologist. The emergence and re-entry survey team comprised Alex Crossman, Rob Spencer, Fairbrass Knowles, Xavier Bell and Rosie Lockstone.
- 2.2. The surveys were informed by the Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition), together with professional judgement appropriate to the nature of the site, the existing survey information and the proposed development.

Daytime verification survey

- 2.3. A Preliminary Roost Assessment of the buildings had previously been undertaken by Abricon as part of an ecological appraisal completed in November 2023. Full details of the construction, condition, potential roost features and assessed suitability of the individual buildings are provided in the Abricon report and are not repeated in full here.
 - 2.4. Before the commencement of the 2024 emergence surveys, Alex Crossman and Rob Spencer undertook a daytime walkover and verification survey of the relevant buildings. The purpose of this survey was to confirm whether any material changes had occurred since the Abricon assessment that could alter the suitability of the buildings for bats or affect the design of the subsequent surveys.
 - 2.5. The survey included an external inspection of the buildings and accessible internal areas relevant to the proposed works. Particular attention was given to changes in
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the condition of roofs, walls, roof voids, access points and previously identified potential roost features. The survey also considered whether new evidence of bats was visible, including droppings, feeding remains, staining, scratch marks or bats themselves.

- 2.6. The verification survey confirmed that no significant changes had occurred to the condition or bat-roosting suitability of the buildings between the Abricon survey in autumn 2023 and the commencement of the Crossman Associates surveys in 2024. The Abricon appraisal was therefore considered to remain an appropriate basis for the design of the subsequent emergence and re-entry surveys.

Emergence and re-entry surveys

- 2.7. Evening emergence and dawn re-entry surveys were undertaken between July and September 2024. Surveyors were positioned at locations selected to provide appropriate coverage of the relevant building elevations and potential roost access points. The survey locations are shown in Appendix I.
- 2.8. Evening emergence surveys commenced at sunset and continued for approximately two hours after sunset. Dawn re-entry surveys commenced approximately 1.5 hours before sunrise and continued until sunrise. Surveys were undertaken during suitable weather conditions, and the date, timing and weather conditions associated with each survey are provided with the results.
- 2.9. Surveyors recorded bats emerging from or re-entering the buildings, together with observations of bats commuting, foraging or interacting with potential roost features. Where an emergence or re-entry was observed, the species or species group, number of bats, time, access point and direction of flight were recorded where possible.
- 2.10. Anabat and Echo Meter Touch bat detectors were used to record and assist with the identification of bat echolocation calls. Identification was informed by a combination of acoustic characteristics and observations of flight pattern, size and behaviour.

- 2.11. Infrared, night-vision and thermal-imaging camera equipment was used to supplement the surveyors' visual observations. This equipment improved coverage of building elevations and potential roost features under low-light conditions and assisted in confirming the timing and location of bat emergences and re-entries.
- 2.12. The emergence and re-entry surveys were undertaken by Alex Crossman, Rob Spencer, Fairbrass Knowles, Xavier Bell and Rosie Lockstone. The number and positioning of surveyors on each occasion were determined by the size, form and visibility of the building being surveyed.

Targeted automated monitoring

- 2.13. Targeted automated bat monitoring was undertaken during summer and autumn 2024 and again during spring and summer 2025. The monitoring was used to supplement the daytime and emergence survey results by providing information on the species using the northern part of the site and the relative frequency of activity during the monitoring periods.
- 2.14. The commissioned scope did not extend to a comprehensive bat activity survey of the entire estate involving walked transects and multiple static detector locations. A proportionate, targeted monitoring exercise was therefore undertaken using a single automated bat detector.
- 2.15. The detector was positioned close to the northern boundary of the site at Ordnance Survey grid reference ST 963 661. This location was selected because it lies within the part of the site where the principal development activity is proposed and was considered suitable for recording bats using habitats in and around the main area of potential change.
- 2.16. The detector was programmed to record bat echolocation calls automatically during the overnight monitoring periods. The resulting recordings were subsequently analysed to identify the species, or species groups present and to provide an indication of their relative levels of activity.

- 2.17. Automated detector results are expressed as numbers of bat passes or recordings and do not represent numbers of individual bats. A single bat may produce several recordings, while bats flying beyond the effective detection range may not be recorded.
- 2.18. As only one static detector location was used, the results provide a targeted indication of bat activity within the northern development area rather than a comprehensive assessment of bat activity across the whole estate. The results should therefore be considered alongside the building surveys, emergence and re-entry surveys, habitat assessment and existing ecological information.

Site evaluation

- 2.19. The ecological importance of habitats and species was evaluated with reference to the Chartered Institute of Ecology and Environmental Management Guidelines for Ecological Impact Assessment in the UK and Ireland. The assessment considers the importance of ecological features within an appropriate geographical context.
- 2.20. Where appropriate, ecological features were evaluated at the following geographical levels:
- International;
 - National;
 - Regional;
 - County;
 - District;
 - Local or parish;
 - Site; or
 - Negligible ecological importance.
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2.21. The geographical level assigned to a feature does not necessarily correspond to the scale or severity of a potential development impact. The ecological importance of a feature and the magnitude and significance of any effect upon it are considered separately.

2.22. 2.22. The evaluation of the site and individual features for bats took account of:

- The diversity of bat species recorded;
- The presence of species with restricted distributions or elevated conservation status;
- The type, status and conservation importance of confirmed bat roosts;
- The number of bats recorded and the frequency with which roosts and habitats were used;
- The extent and quality of available roosting, foraging and commuting habitat;
- The connectivity of the site with woodland, hedgerows, water bodies and other habitats in the surrounding landscape;
- The role of individual roosts within the wider network of roosting opportunities available to local bat populations;
- The availability and replaceability of comparable habitats and roosting features in the surrounding area; and
- The degree of confidence and any limitations associated with the available survey information.

2.23. Professional judgement was applied when assigning ecological importance, with account taken of the survey results, published guidance, available contextual information and the nature and scale of the proposed development.

3. Results

Desktop Study

Planning Policy

- 3.1. National policy guidance is provided by National Planning Policy Framework (NPPF), which sets out the Government's planning policies for England and how they should be applied to planning applications.

Conserving and enhancing the natural environment

- Planning decisions should contribute to and enhance the natural and local environment by:
 - a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land

instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Habitats and Biodiversity

- When determining planning applications, local planning authorities should apply the following principles:
 - a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
 - c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
 - d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part

of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Field Survey

Bats

- 3.2. A daytime verification survey was undertaken by Alex Crossman MCIEEM (Natural England bat survey licence 2015-17095-CLS-CLS), assisted by Rob Spencer. This did not comprise a repeat preliminary roost assessment but was undertaken to confirm whether any material changes had occurred since the Abricon ecological appraisal and preliminary roost assessment. No significant changes to the buildings or their suitability for roosting bats were identified. Table 1 presents the combined survey results, including a summary of each building's construction and condition, the findings of the daytime inspection and emergence surveys, and an evaluation of the roost type and conservation importance, where relevant. Building numbers correspond with those shown on the site plans contained within the Abricon ecological appraisal.

Table 1: Summary of building condition, daytime inspection findings, emergence survey results and bat roost evaluation



Table 1: building descriptions and roost suitability

Building	Map Ref	Description + Findings	Roost Potential	Evening emergence surveys	Emergence survey results	Bat roost summary and conservation status
Nonsuch House	1	18th century Grade II* manor house. Severely damaged by fire in 2022. Currently has a temporary roof. Small number of PRFs present within walls.	Low	12 July 2024	Common pipistrelle emergence from wooden window panelling	1 x common pipistrelle day roost. Low
				17 August 2024	No emergence	

Building	Map Ref	Description + Findings	Roost Potential	Evening emergence surveys	Emergence survey results	Bat roost summary and conservation status
East Wing	2	Attached wing to main house. Severely damaged by fire in 2022. Currently has a temporary roof. Small number PRFs present within walls.	Low	12 July 2024	No emergence	No roost
				17 August 2024	No emergence	
The Stables	3	One storey converted stable block with 2-storey gabled centre. Built of ironstone rubble with ashlar dressings. Stone slate roof. No roof	High	4 August 2024	No emergence	No roost
				31 August 2024	No emergence	

Building	Map Ref	Description + Findings	Roost Potential	Evening emergence surveys	Emergence survey results	Bat roost summary and conservation status
		void present. Only external inspection carried out.		21 September 2024	No emergence	
Stable End	4	One storey stone/ashlar cottage with stone slate roof. No roof void present. Only external inspection carried out.	High	17 August 2024	Two common pipistrelle emergences from (east elevation)	1 x common pipistrelle day roost 1 x soprano pipistrelle day roost
				31 August 2024	Three confirmed emergences: one common pipistrelle and soprano pipistrelle from roof tiles/wall plate (east elevation)	
Barn A	5	Utilised as garage. Stone and brick	High	4 August 2024	No emergence	No bat roots

Building	Map Ref	Description + Findings	Roost Potential	Evening emergence surveys	Emergence survey results	Bat roost summary and conservation status
		barn with clay tiles. No evidence found. Multiple PRFs present mostly within roof.		31 August 2024	No emergence	
				21 September 2024	No emergence	
Estate Office	6	Brick built estate office building with clay pitched roof currently used for storage. 2 medium sized bat droppings found, and disused swallow's nest also noted.	Confirmed	4 August 2024	No emergence	1 x long-eared day roost
				24 August 2024	No emergence	
				25 September 2024	Long-eared emergence	

Building	Map Ref	Description + Findings	Roost Potential	Evening emergence surveys	Emergence survey results	Bat roost summary and conservation status
Estate Office	7	Brick built estate office building with clay pitched roof currently used for storage. 4 live Lesser horseshoe bats (LHB) found inside the loft. Droppings and DNA confirmed LHB and BLE presence.	Confirmed	24 August 2024	4 x common pipistrelle emergence from east elevation	Common pipistrelle day roost and lesser horseshoe day roost. Brown long-eared roost confirmed by eDNA of droppings. Moderate conservation value
				22 September 2024	3 x lesser horseshoe bats in roof of estate office	
Gate Cottage	8	Two storey rendered brick habited residence with concrete roof tiles. Only external inspection carried out.	Moderate	4 August 2024	No emergence	No bat roosts
				25 August 2024	No emergence	
Barn B	9	Wooden L-shaped stable block with corrugated asbestos roof. No evidence of bats	Moderate	4 August 2024	No emergence	No bat roosts

Building	Map Ref	Description + Findings	Roost Potential	Evening emergence surveys	Emergence survey results	Bat roost summary and conservation status
		found. Recent swallow's nests present. Multiple PRFs within walls or interiors.		24 August 2025	No emergence	
Dovecote	10	Two storey brick cottages with stone slate roof. Several patches of LHB droppings and feeding remains found. Attached lean-to with additional droppings and robin's nest.	Confirmed	31 August 2024	100 lesser horseshoe droppings in dovecote.	1 x night roost of lesser horseshoe bat Moderate conservation value
				26 September 2024	Lesser horseshoe entering building	
The Bungalow	11	Brick built detached habited residence with pitched tile roof. Only external inspection carried out.	Not assessed	N/A	N/A	N/A
Barn C	12	Brick and stone barn with clay tile roof and attached	Confirmed	12 July 2025	1 x long-eared bat within building	Long-eared bat day roost.

Building	Map Ref	Description + Findings	Roost Potential	Evening emergence surveys	Emergence survey results	Bat roost summary and conservation status
		open fronted lean-to. Droppings found and DNA confirmed common pipistrelle		17 August 2025	1 x long-eared bat emergence from east elevation	Low conservation value
				10 September 2025	No emergence	
Engine Shed	13	Small concrete block structure with corrugated asbestos roof. Patch of ~50 LHB droppings noted inside. Bird nests present.	Confirmed – not affected by works	N/A	N/A	Probable lesser horseshoe night roosts.
Summerhouse	14	Small Grade II listed rubble stone summerhouse with pyramidal, stone-slatted roof. Multiple PRFs present within roof.	Moderate	N/A (no alterations proposed)	N/A	N/A

Automated survey

- 3.3. Static detector monitoring was undertaken over two periods: 26 September–23 October 2024, comprising 28 consecutive nights, and 15 April–3 June 2025, comprising 50 consecutive nights. A total of 1,240 bat sound files/passes were assigned to nine species or species groups. These figures represent acoustic activity rather than numbers of individual bats.
- 3.4. During autumn 2024, 350 bat passes were recorded, equivalent to an average of 12.5 passes per night. Activity was dominated by bats of the *Nyctalus* genus, with 197 passes recorded across 26 of the 28 nights. Common pipistrelle and soprano pipistrelle accounted for 39 and 25 passes respectively. Myotis species were recorded relatively regularly, with 46 passes across 20 nights. Lower levels of activity were attributed to barbastelle, serotine, Plecotus species, greater horseshoe and lesser horseshoe bats.
- 3.5. During spring 2025, 890 bat passes were recorded, equivalent to an average of 17.8 passes per night. Common pipistrelle was the most frequently recorded classification, accounting for 353 passes across 38 nights, followed by *Nyctalus* species, with 331 passes across 42 nights. Soprano pipistrelle accounted for a further 54 passes, while 65 passes were attributed to Myotis species. As in autumn, lower levels of activity were attributed to barbastelle, serotine, Plecotus species and greater and lesser horseshoe bats.

Table 2: Combined results:

Species/species group	Autumn 2024	Spring 2025	Combined total
Barbastelle	12	8	20
Serotine	6	38	44
Myotis species	46	65	111
<i>Nyctalus</i> species	197	331	528
Common pipistrelle	39	353	392
Soprano pipistrelle	25	54	79
Plecotus species	9	8	17

Species/species group	Autumn 2024	Spring 2025	Combined total
Greater horseshoe	4	9	13
Lesser horseshoe	12	24	36
Total	350	890	1,240

Evaluation

Roosting bats

- 3.6. The bat surveys undertaken at Nonsuch House identified a moderate assemblage of bat species using the estate for roosting, foraging and commuting. Nonsuch House forms part of an extensive historic rural estate containing an extensively fire-damaged Grade II* listed manor house, residential cottages, former stables, traditional barns, estate offices and other agricultural and ancillary buildings. These structures are of varied age and construction but include numerous stone and brick buildings with clay-tile or stone-slate roofs, accessible roof voids, exposed wall plates and gaps beneath tiles and within masonry. Such a collection of traditional buildings, situated within a parkland setting containing mature trees, hedgerows and adjoining woodland, provides a range of roosting opportunities for different bat species.
- 3.7. The buildings do not support a single large or particularly high-status roost. Instead, the estate supports a dispersed network of small roosts used by several species. This is characteristic of a traditional rural estate where bats can move between buildings and roosting locations in response to season, weather conditions and the thermal characteristics of individual structures. The ecological value of the site therefore derives not only from each individual roost but also from the collective function of the buildings and surrounding habitats as an interconnected roosting and foraging resource.

Lesser horseshoe bat

- 3.8. Lesser horseshoe bats were confirmed roosting within the roof spaces of the Estate Office (Building 7) and the Dovecote, with additional droppings recorded within the Engine Shed. The Estate Office is a traditional brick-built building with a pitched clay-tile roof and an accessible loft, while the Dovecote comprises brick-built cottages with a stone-slate roof and accessible internal spaces. The Engine Shed is a small, open-access structure situated within the woodland. These buildings provide the enclosed, sheltered and relatively undisturbed internal spaces typically selected by lesser horseshoe bats, together with openings through which the species can enter in flight.
- 3.9. The evidence indicates that these buildings are used by small numbers of lesser horseshoe bats as summer day and night roosts. No evidence was obtained to indicate the presence of a maternity or hibernation roost. Nevertheless, the occurrence of the species in several buildings indicates that the estate forms part of a wider network of roosting locations, with individuals potentially moving between structures. The roosts are therefore considered to represent a minor but locally significant component of the species' local roosting resource. Their value is reinforced by the presence of connecting hedgerows, mature trees and woodland around the estate, although the regularly mown and currently ungrazed grassland provides less favourable foraging habitat for this species.

Brown long-eared bat

- 3.10. Brown long-eared bats were confirmed roosting within the Estate Office and Barn C, where droppings and DNA analysis confirmed their presence. The accessible roof and internal spaces associated with these traditional estate buildings provide suitable sheltered roosting conditions for this species. Brown long-eared bats frequently use the roof voids of older rural buildings and may use a number of separate roosting locations within a relatively small area.
- 3.11. The available evidence indicates that the buildings support small day roosts used by individual bats or small groups, rather than a maternity or other high-status roost. Nevertheless, brown long-eared bats are strongly associated with traditional buildings and are relatively sensitive to the loss, alteration and illumination of their

roosting locations. Their quiet echolocation calls also mean that the species can be under-represented during acoustic activity surveys. The confirmed roosts are therefore considered to be of local conservation importance and should be retained where practicable or appropriately compensated for as part of the development.

Pipistrelle bats

- 3.12. Common and soprano pipistrelle bats were confirmed roosting within several buildings, including Nonsuch House, Stable End and the Estate Offices. The range of buildings present provides numerous crevice-type roosting opportunities beneath roof tiles, behind wall plates and within gaps in masonry. Stable End, a traditional stone and ashlar cottage with a stone-slate roof, supports multiple roosting points, with bats regularly emerging from wall plates and beneath roof tiles on its eastern elevation.
- 3.13. The survey results indicate that the estate supports a dispersed network of pipistrelle day roosts used by individual bats and small numbers of animals. Unless a larger emergence count or other supporting evidence was obtained, these should be described as day or transitional roosts rather than possible maternity roosts. Common and soprano pipistrelles were also recorded foraging across the site, particularly in association with gardens, mature trees, hedgerows and woodland edges.
- 3.14. Although common and soprano pipistrelles are widespread species, the number and distribution of confirmed roosting points demonstrate that the estate provides an established local roosting resource. The retention of suitable roosting features and dark connectivity between the buildings and surrounding tree lines will therefore be important to maintaining the function of the site for these species.

Bat habitat

- 3.15. The site mostly comprises an extensive area of managed, species-poor grassland, with occasional mature trees and boundary hedgerows and woodland. The detector was positioned towards the northern part of the site, set slightly away

- from a hedgerow on a fence post and directed over the grassland. The results are therefore likely to include bats crossing or foraging over the open grassland as well as animals associated with the nearby hedgerow. The data cannot be used to distinguish conclusively between these types of activity.
- 3.16. The managed grassland is considered to provide some foraging opportunities for bats, particularly generalist and open-air species such as common and soprano pipistrelles and *Nyctalus* species. However, its species-poor and regularly mown condition is likely to limit its floristic and invertebrate diversity. It is therefore likely to be of lower value than the boundary hedgerows, woodland edges and mature trees.
- 3.17. The absence of grazing further reduces the likely value of the grassland to horseshoe bats, which frequently forage on invertebrates associated with grazed pasture and livestock dung. This is consistent with the comparatively low number of horseshoe bat passes recorded. The grassland does not appear to represent an important or concentrated horseshoe bat foraging resource under its current management.
- 3.18. The hedgerows and woodland boundaries are likely to be the more valuable habitat features. These provide sheltered foraging habitat, linear commuting routes and connectivity between the buildings, mature trees and the wider landscape. Their importance is increased by the known presence of lesser horseshoe, pipistrelle and long-eared bat roosts within the site. Long-eared bats are also relatively quiet and can be under-recorded by static detectors, so the low number of *Plecotus* registrations should not necessarily be interpreted as evidence of negligible use.
- 3.19. The principal development area in the north of the site is occupied by existing buildings, gardens and hardstanding. These habitats are generally of lower intrinsic foraging value, although the buildings themselves are important because they support confirmed bat roosts. The proposed extensions would occupy areas of managed grassland. Given the grassland's existing condition and the generally modest activity recorded over it, the loss of a limited area would be unlikely to
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remove an important bat foraging resource, provided the wider grassland and important boundary features are retained.

3.20. The most important considerations are therefore likely to be:

- protection and appropriate mitigation or compensation for the confirmed building roosts;
- retention of boundary hedgerows, woodland and mature trees;
- maintenance of dark and unobstructed commuting routes between the roosts and surrounding habitats; and
- avoidance of increased artificial illumination of roost entrances, hedgerows and woodland edges.

3.21. Subject to these measures, the development of existing built land and limited areas of managed species-poor grassland would be unlikely to materially reduce the overall availability of bat foraging habitat on the site. The boundary habitats and connectivity around the known roosts are of greater ecological importance than the central mown grassland.

4. Recommendations

- 4.1. The recommendations set out below are intended to ensure that important ecological features and protected species are safeguarded during the proposed development. They include measures to avoid and minimise ecological impacts, compensate for impacts that cannot be avoided, and enhance the ecological value of the site.
- 4.2. Section 40 of the Natural Environment and Rural Communities Act 2006, as amended by the Environment Act 2021, places a duty on public authorities to conserve and enhance biodiversity when exercising their functions. Public authorities must consider what actions they can properly take to further the general biodiversity objective and must have regard to relevant local nature recovery strategies, species conservation strategies and protected site strategies.
- 4.3. The National Planning Policy Framework requires planning decisions to minimise impacts on biodiversity and provide net gains. If significant harm resulting from development cannot be avoided, adequately mitigated or, as a last resort, compensated for, planning permission should be refused. Opportunities to incorporate biodiversity improvements within and around developments should also be integrated into their design.
- 4.4. The site contains a range of habitats of ecological value, including mature trees, woodland, hedgerows, grassland and water bodies. It also supports protected species, including several confirmed bat roosts. The recommendations below should be secured through appropriately worded planning conditions and incorporated into the detailed design and construction programme.

Construction Ecological Management Plan

- 4.5. A Construction Ecological Management Plan (CEMP) will be prepared by a suitably qualified ecologist and approved by the local planning authority before substantive development works commence.
- 4.6. The CEMP will set out the measures required to protect bats and other protected species and important ecological features throughout the construction period. It will include, where relevant:
- The location and protection of retained woodland, trees, hedgerows, water bodies and other important habitats;
 - Ecological constraints and exclusion zones;
 - The timing and sequencing of works;
 - Measures to control construction lighting, noise, dust and pollution;
 - Precautionary working methods for bats and other protected species;
 - Requirements for ecological supervision and pre-commencement checks;
 - Procedures to be followed if protected species are encountered unexpectedly; and
 - The responsibilities of the principal contractor, site manager and supervising ecologist.
- 4.7. Long-term habitat creation, enhancement and management measures should be set out in a Landscape and Ecological Management Plan or equivalent management document.

Species recommendations

Bats

Legal protection



- 4.8. All species of bat occurring in the UK and their breeding sites and resting places are protected under the Wildlife and Countryside Act 1981, as amended, and the Conservation of Habitats and Species Regulations 2017, as amended. It is an offence, among other matters, to deliberately capture, injure or kill a bat; deliberately disturb bats in circumstances specified by the legislation; or damage or destroy a bat breeding site or resting place.

European Protected Species Mitigation Licence

- 4.9. Confirmed bat roosts have been identified within buildings affected by the proposals. Consequently, works that would damage, destroy, obstruct or disturb these roosts cannot lawfully proceed without an appropriate licence from Natural England.
- 4.10. Due to the number and nature of the roosts present, the works will require a full European Protected Species mitigation licence from Natural England, commonly referred to as a full European Protected Species development licence. The works are not considered suitable for registration under the Bat Mitigation Class Licence for low-impact roosts.
- 4.11. The licence must be obtained before any substantive works affecting the relevant buildings or bat roosts commence. The licence application will be supported by the necessary survey information, impact assessment, method statement, work schedule and plans showing the affected roosts and proposed mitigation and compensation.
- 4.12. All licensed works will be undertaken in accordance with the approved licence method statement and under the direction of the named ecologist. The exact timing and sequence of works, the level of ecological supervision and any seasonal restrictions will be confirmed through the licence.

Precautionary methods of working

- 4.13. Before licensed works commence, the supervising ecologist will provide a toolbox talk to relevant contractors. This will explain the legal protection afforded to bats,

the locations and types of roost present, the approved working methods, the role of the ecologist and the procedure to follow if a bat is encountered.

- 4.14. Works affecting confirmed or potential roost features will be undertaken carefully using precautionary “soft-strip” techniques. Roof tiles, slates, ridge tiles, flashing, fascia boards, soffits, bargeboards, timberwork and other potential roost features will be removed carefully by hand where required by the licence method statement.
- 4.15. A suitably licensed ecologist will attend the works at the stages specified in the licence. Any bats found will be handled only by an appropriately licensed person and dealt with in accordance with the approved method statement.
- 4.16. If a bat or previously unidentified bat roost is discovered when the supervising ecologist is not present, work in the affected area will stop immediately. The feature will be left undisturbed and the supervising ecologist contacted for advice. Works will not recommence until the ecologist confirms that it is lawful and appropriate to do so.

Replacement roost provision

- 4.17. The site supports both void-dwelling and crevice-dwelling bats. Replacement roosting provision will therefore include a purpose-built bat barn for void-dwelling species, integrated bat boxes within new buildings and additional bat boxes on retained mature trees.
- 4.18. All replacement roosts required as compensation will be completed and available to bats before the corresponding existing roosts are damaged, obstructed or destroyed. The timing and phasing will be confirmed through the Natural England licence.

Void-dwelling bats

- 4.19. A bespoke bat barn will be constructed in the southern part of the site (refer to site plan, Appendix I, location reference 3.1.5). This location is considered

preferable because it is close to existing woodland and will be surrounded by new woodland planting, providing sheltered and well-connected flight routes between the replacement roost and surrounding foraging habitat.

- 4.20. The bat barn will be a substantial, durable timber-framed structure with a clay-tiled or slate roof. It will measure at least 4 m by 4 m internally and provide an unobstructed internal roosting space at least 2 m high.
- 4.21. The internal design will provide sufficient flight space and suitable hanging and roosting surfaces for lesser horseshoe bats. It will provide suitable conditions for both day and night roosting and will incorporate sufficient internal volume, temperature variation and roosting opportunities to provide future potential for use as a lesser horseshoe maternity roost.
- 4.22. The detailed design will be agreed with the licensed ecologist and Natural England through the licence application. It will include:
- An open and uncluttered internal flight space;
 - Suitable roughened timber or masonry hanging surfaces;
 - A traditional roof construction that avoids unnecessary internal trusses or other obstructions;
 - A suitable entrance allowing lesser horseshoe bats to fly directly into the internal space;
 - A dark and sheltered flight approach connected to woodland habitat;
 - Appropriate ridge, eaves and wall features providing a range of thermal conditions;
 - Appropriate roofing underlay that does not present an entanglement risk to bats;
 - Secure access for future inspection and monitoring; and

- Measures preventing access by cats and other predators.

- 4.23. The bat barn and its entrance will not be illuminated. New woodland planting will provide connectivity and shelter, but the immediate flight approach and entrance will be maintained sufficiently open to allow unimpeded access by lesser horseshoe bats.
- 4.24. The bat barn will be constructed and made fully functional before bats are excluded or displaced from any existing void roost affected by the development.

Crevice-dwelling bats

- 4.25. Five Habibat 001 integrated bat boxes, or an equivalent long-lasting model agreed with the project ecologist, will be incorporated into the external masonry of new or converted buildings.
- 4.26. The integrated boxes will be installed on suitable south-, east- or west-facing elevations, close to eaves or gable apexes and away from windows, doors, flues and external lighting. The final orientation and position of each box will be agreed in consultation with the project ecologist once the detailed architectural and lighting plans are available.
- 4.27. The integrated boxes will remain unobstructed and will not be illuminated. Their entrances must not be covered by render, cladding, vegetation or other building finishes.
- 4.28. In addition, at least 20 Woodcrete bat boxes will be installed on retained mature trees within the site and boundary woodland. A range of models will be used to provide varied roosting conditions, including Schwegler 1FF and Schwegler 2F boxes or suitable equivalents.
- 4.29. Tree-mounted boxes will be installed in small groups at different heights and orientations. They will be positioned with clear flight access, close to woodland edges and other sheltered commuting features, and away from artificial lighting.

Boxes will be installed using appropriate fixings that allow for tree growth and do not cause unnecessary damage to the trees.

Habitat enhancement for bats

- 4.30. The proposals include substantial new woodland and tree planting. This will increase the structural diversity of the site, strengthen connections between existing woodland and boundary habitats and provide additional sheltered commuting and foraging opportunities for bats.
- 4.31. The creation and enhancement of species-rich grassland will increase plant diversity and is expected to support a greater abundance and diversity of nocturnal invertebrates. This will improve the available foraging resource for bats using the site.
- 4.32. The proposed drainage features, ponds and lake will provide additional wetland and open-water habitats. These features are expected to support substantial insect populations and provide valuable foraging habitat for pipistrelle, Myotis and other bat species.
- 4.33. Taken together, the retention of existing woodland and boundary habitats and the proposed woodland, grassland and wetland creation will substantially improve the extent, diversity and connectivity of bat habitat within the site. These habitats should be managed in accordance with the approved long-term landscape and ecological management plan.

Lighting

- 4.34. The development will introduce new buildings, access routes and external lighting into the site. In relation to the overall size of the estate, the effects of lighting are considered capable of being satisfactorily avoided and controlled because the principal boundary features and woodland will be retained and substantial new woodland and tree planting will provide additional buffering and shelter.

- 4.35. Nevertheless, poorly designed lighting could affect confirmed bat roosts and important commuting and foraging habitat. A detailed lighting assessment and lighting contour plan should therefore be prepared by a suitably qualified lighting professional, in consultation with the project ecologist, and secured as a condition of planning permission.
- 4.36. The lighting design will demonstrate that bat-barn entrances, retained and replacement roosts, woodland edges, hedgerows, water bodies and principal commuting corridors will remain dark and connected. The assessment should show predicted horizontal and vertical illuminance and identify the location, height, direction, output and specification of every external luminaire.
- 4.37. The external lighting scheme will follow the current Institution of Lighting Professionals and Bat Conservation Trust guidance and incorporate the following principles:
- Lighting will be provided only where it is necessary for safety and access;
 - Unnecessary decorative, façade, landscape and feature lighting will be avoided;
 - Luminaires will use warm-white LEDs with a correlated colour temperature of 2,700 K or lower wherever practicable;
 - Luminaires will have negligible ultraviolet output;
 - Lighting will be mounted at the lowest practicable height;
 - Fully shielded and directional fittings will be used to prevent upward light and unnecessary lateral spill;
 - Building-mounted lights will be directed downwards and away from roost entrances, trees, woodland, hedgerows and water bodies;
 - Lighting will be controlled by passive infrared sensors, timers or other systems that minimise its duration;
-

- Sensor-controlled lights will have short activation periods and will not be repeatedly triggered by vegetation or normal wildlife movement;
 - Bollard lighting will be avoided where it would create uncontrolled horizontal light spill; and
 - Light levels will be reduced to the lowest level required for the intended function.
- 4.38. No external lighting will be directed towards or positioned immediately adjacent to the new bat barn, integrated bat boxes, tree-mounted bat boxes or known roost entrances.
- 4.39. The final lighting assessment and contour plan will be reviewed by the project ecologist before installation. Following installation, the local planning authority may require post-completion verification to demonstrate that the approved lighting limits and dark corridors have been achieved.



5. Limitations

- 4.1. This report records wildlife found during and may not record any plants or animals that may appear at other times of the year and were therefore not evident at the time of visit.
- 4.2. The advice contained in this report relate primarily to factual survey results and general guidance only. On all legal matters you are advised to take legal advice.

6. References

Bat Conservation Trust (2018) *Bats and Artificial Lighting in the UK: Guidance Note 08/18*. Bat Conservation Trust, London.

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UK Biodiversity Group (1995) *Biodiversity: The UK Steering Group Report* (Vols. 1 & 2). HMSO, London.

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Stace, C. (2019) *New Flora of the British Isles* (4th Edition). C&M Floristics, Middlewood Green.

Ministry of Housing, Communities and Local Government (2023) *National Planning Policy Framework*. TSO, London.

HMSO (2006) *Natural Environment and Rural Communities Act 2006*. HMSO, London.

Appendix I – Site Figures



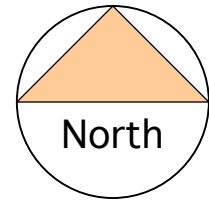
CROSSMAN ECOLOGY



1 PROPOSED SITE LAYOUT
Scale: 1:1000 @ A1



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PLANNING ISSUE

SCHEDULE OF ACCOMMODATION

- | | | |
|---------|---|---|
| 1.1.1 | - | Nonsuch House |
| 1.1.2 | - | East Wing |
| 1.1.3 | - | Stable Wing (1) |
| 1.1.4 | - | Stable Wing (2) |
| 1.2.1 | - | Gate Cottage - Farmhouse |
| 1.2.2 | - | Gate Cottage - Office |
| 1.2.3 | - | Gate Cottage - Store |
| 1.2.4 | - | Dovecote |
| 1.2.5 | - | The Bungalow |
| 1.2.6 | - | Barn A (The Tractor Barn) |
| 1.2.7 | - | Barn B (The Stables) |
| 1.2.8 | - | Barn C (The Piggery) |
| 1.3.3 | - | Tennis & Padel Courts |
| 1.4.1 | - | Toilet/ Shower Block |
| 1.4.2 | - | Outdoor Kitchen |
| 1.4.4 | - | Summerhouse |
| 2.1.1.1 | - | Welcome Building - Restaurant |
| 2.1.1.2 | - | Welcome Building - Health and Wellbeing |
| 2.1.1.3 | - | Welcome Building - Reception |
| 2.1.1.4 | - | Gym |
| 2.1.2 | - | Gate House |
| 2.1.3 | - | Yoga Studio/ Goat House |
| 2.2.1 | - | Boat House |
| 3.1.1 | - | Managers Residence |
| 3.1.2 | - | Forestry / Agricultural - Office |
| 3.1.3 | - | Forestry / Agricultural - Workshop |
| 3.1.4 | - | Forestry / Agricultural - Tractor Store |
| 3.1.5 | - | Bat House |
| 3.1.6 | - | Camera Obscura |
| 3.1.7 | - | Acoustic Bund Wall |
| 4.8.1 | - | New Road Entrance |

LANDSCAPING
INDICATIVE ONLY -
REFER TO SPECIALIST
INFORMATION

Access amended	15/07/2026	RHB	A
Revision Description	Date	Check	Rev



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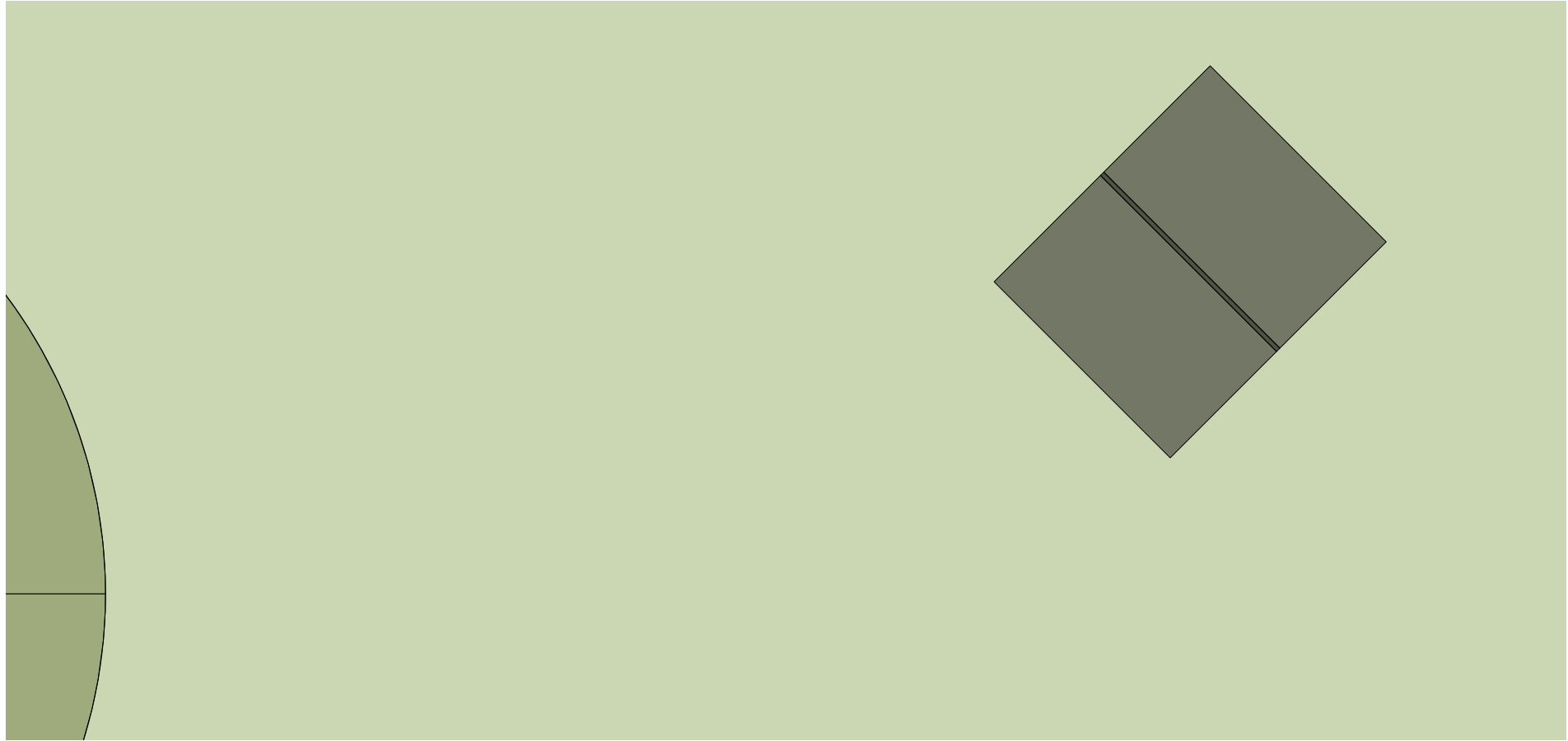
Project :

Nonsuch Estate
Westbrook, Bromham
Chippenham
Wiltshire
SN15 2ED

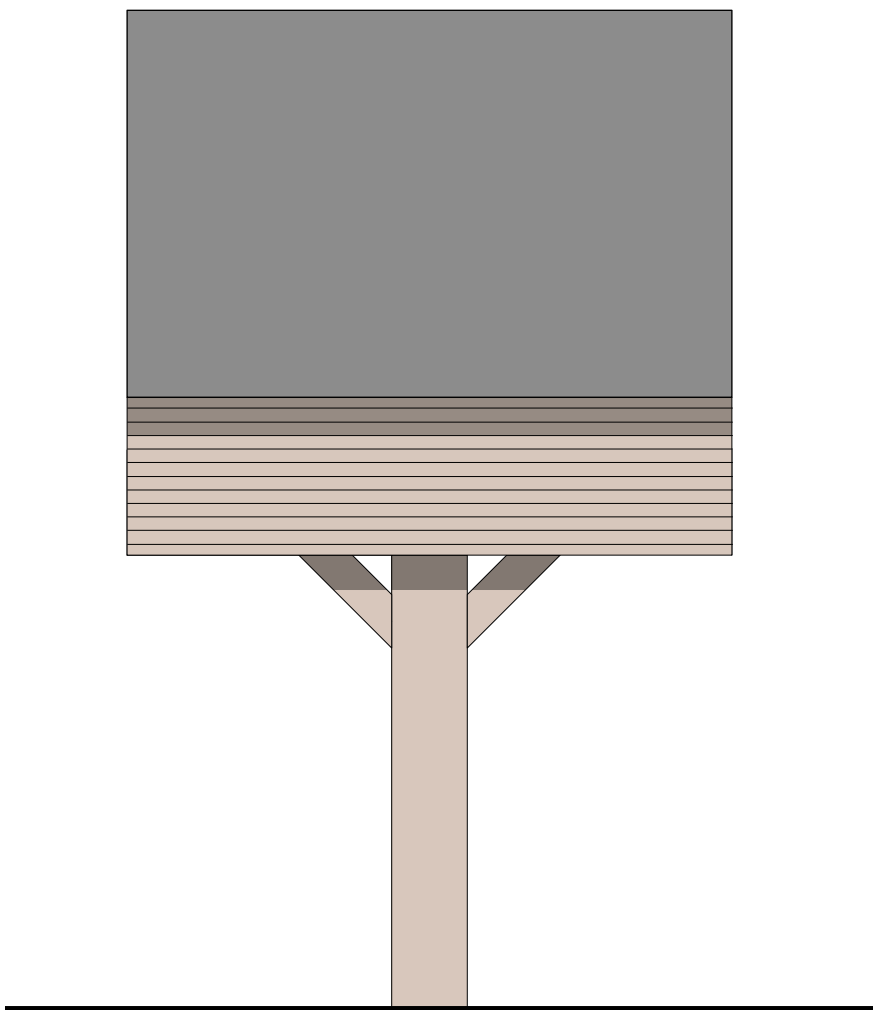
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Proposed Site Layout

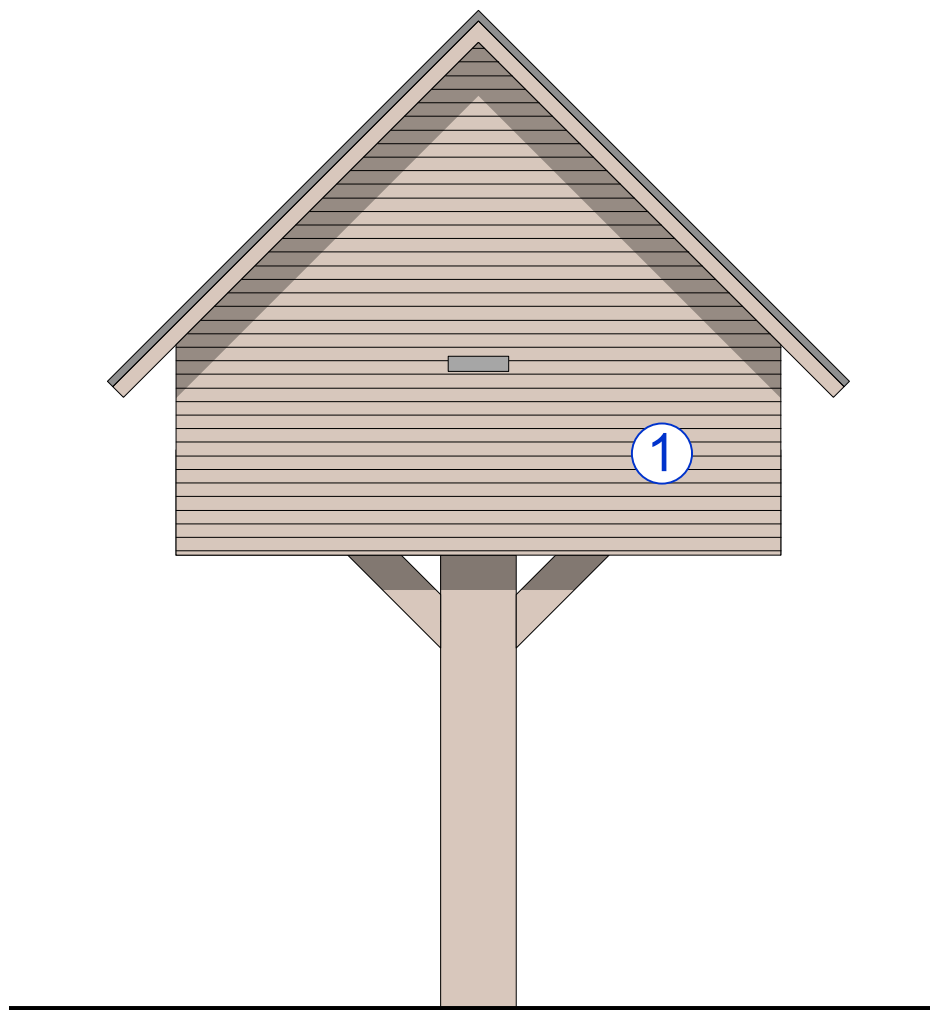
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PLANNING	OCT 2025	RHB
Drawing No.	Revision	Scale
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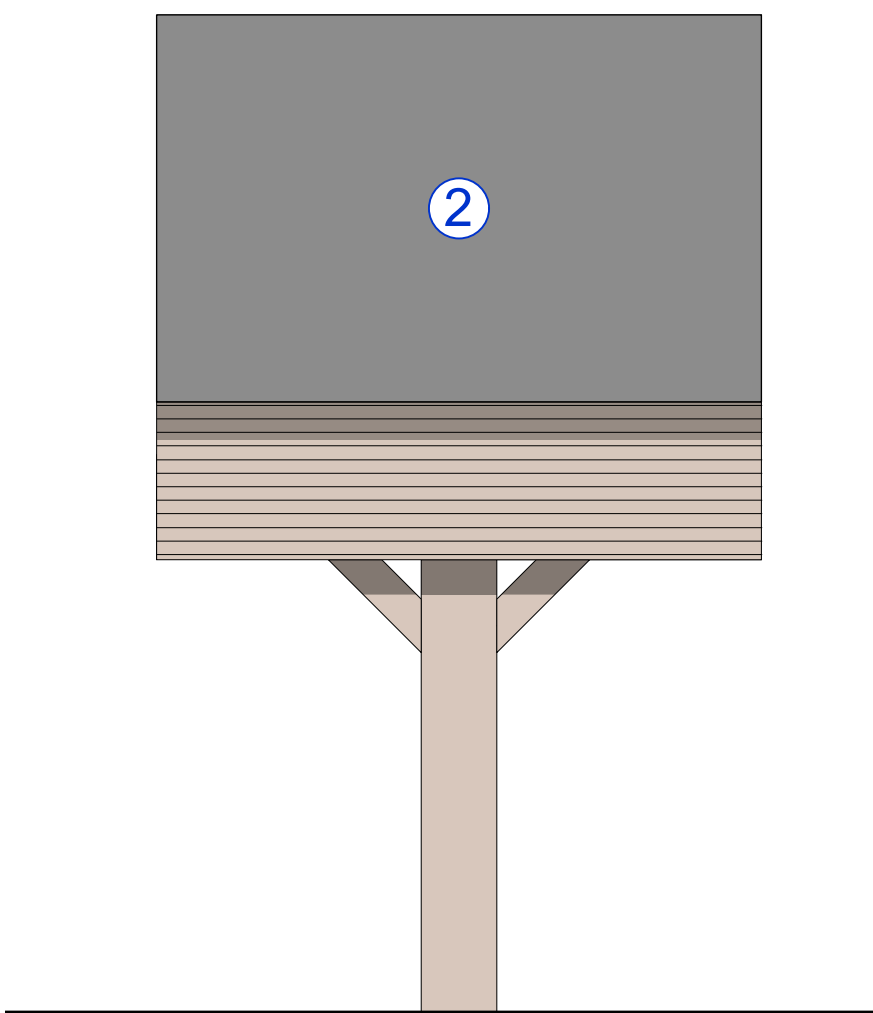
5 **ROOF PLAN - BAT HOUSE**
Scale: 1:100 @ A1



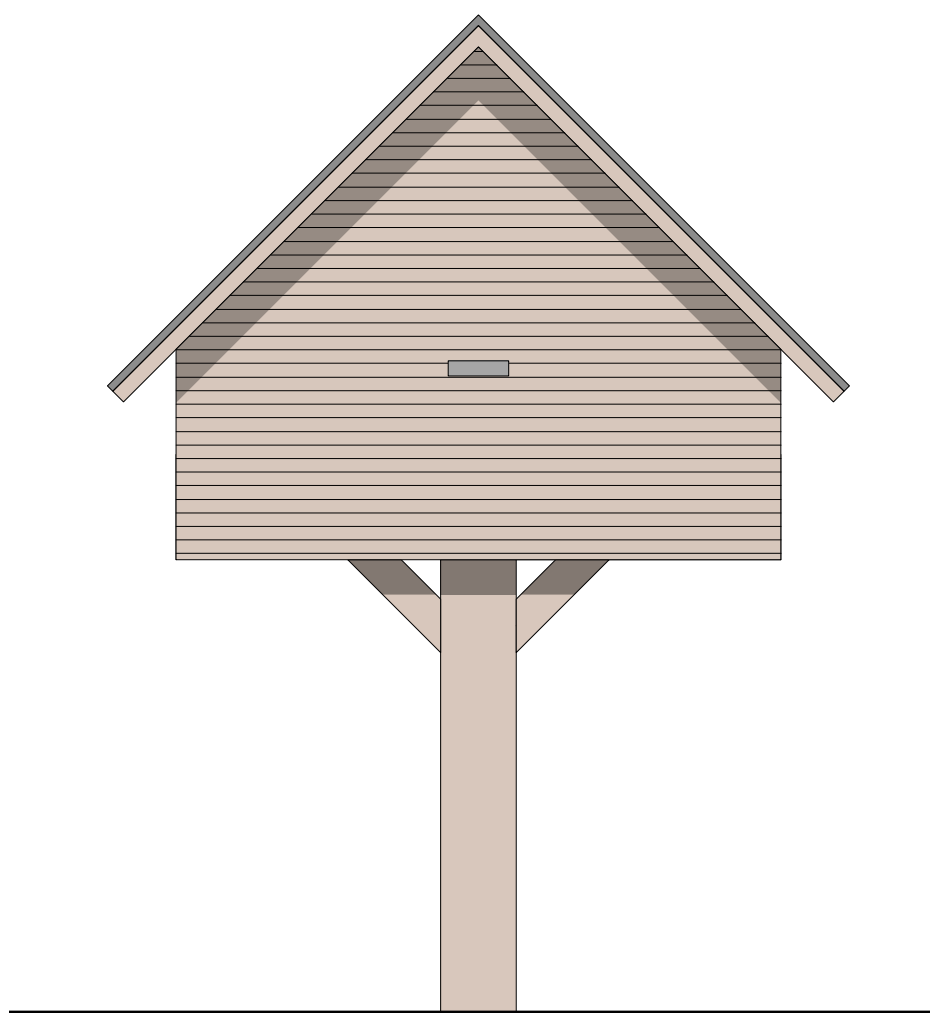
1 **NORTH ELEVATION - BAT HOUSE**
Scale: 1:50 @ A1



2 **EAST ELEVATION - BAT HOUSE**
Scale: 1:50 @ A1



3 **SOUTH ELEVATION - BAT HOUSE**
Scale: 1:50 @ A1

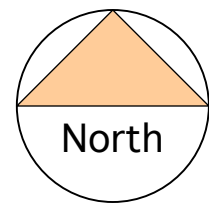


4 **WEST ELEVATION - BAT HOUSE**
Scale: 1:50 @ A1



BAT HOUSE - PROPOSED

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PLANNING ISSUE

STRUCTURAL INFORMATION INDICATIVE ONLY
SHOWN FOR CO-ORDINATION PURPOSES

PLEASE REFER TO STRUCTURAL ENGINEERS
SPECIFICATION

PLEASE NOTE NO MANHOLES WERE LIFTED
THROUGH SURVEYING THE PROPERTY.
CONTRACTOR IS REQUIRED TO INSPECT
DRAINAGE SYSTEM TO CHECK THEY WORK PRIOR
TO COMMENCEMENT

-  **EXISTING FABRIC**
-  **PROPOSED FABRIC**
-  **ENABLING WORKS**

MATERIAL KEY:

- ① **TIMBER CLADDING**
- ② **NATURAL SLATE**

Revision	Description	Date	Check	Rev
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Drawing Title :

Bat House - Proposed

Status PLANNING	Date OCT 2025	Drawn By RHB
Drawing No. 4992 -1401	Revision	Scale 1:50 @ A1