

PRELIMINARY ROOST APPRAISAL (PRA) REPORT

13th November 2023

97 Kingsway, Chandlers Ford, Eastleigh,
SO53 1FD

On behalf of: Mike and Emma Woods

Agent/planner: White and Gray Architecture

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Survey data lifespan

Information and data provided within this report is considered accurate at the time of writing. Bat survey data is considered valid for 18 months from the survey date for planning purposes only. However, as bats are a highly mobile species, update survey(s) will likely be required if (but not limited to):

- a) The condition of the building and/or general site changes; and/or*
- b) If the nature and/or extent of the proposed works change.*

If a Natural England bat licence is required (i.e., if a bat roost is identified during further surveys and impacts on the bat roost(s) will occur), update bat survey(s) will likely be required for the bat licence application. Preliminary Roost Appraisal (PRA) (i.e., building inspections) data is considered valid for 3 months prior to a bat licence application; and bat activity survey data (emergence/re-entry surveys) is considered valid within the then 'current' bat survey season.

Reporting and data validity

This report has been produced using all reasonable skill and care, and a Quality Assurance (QA) review process has been conducted prior to issue of this report. However, ABR Ecology Ltd cannot accept responsibility for any inaccuracies and/or discrepancies with third-party data supplied within this report.

This report aims to provide general advice on the constraints of roosting bats associated with the proposed development referred to within this report and includes recommendations for further survey; it is not intended that this report should be submitted with a planning application for development, unless supported by the results of further surveys and a detailed assessment of the effects of the proposed development on bats.

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Contents

Executive summary	3
1. Introduction	5
2. Legislation and planning policy	6
3. Methodology	8
4. Results	11
5. Further survey recommendations and biodiversity mitigation	14
6. References	17
Appendix 1: Site plan and existing plans	18
Appendix 2: Proposed plans	20
Appendix 3: Photographs	21
Appendix 4: Stag beetle log pyramid	22

Executive summary

- ABR Ecology Ltd were commissioned by Mike and Emma Woods to undertake a Preliminary Roost Appraisal (PRA) at 97 Kingsway, Chandlers Ford, Eastleigh, SO53 1FD to advise on the presence/absence of bats at the property. This report was requested to support a householder application for extensions to the property.
- The PRA was undertaken on the 27th October 2023 by Natural England class licensed bat ecologists Becci Smith MCIEEM and Sophie Morris.
- The survey revealed no evidence of bats however, the building was identified to hold '**moderate potential**' for roosting bats in line with BCT Survey Guidelines. This was due to the presence of potential bat ingress points and roosting provisions around the building. A minimum of two bat activity (emergence) surveys are now required upon the building to determine if roosting bats are present/likely absent.
- If no bats are present, a negative bat report will be provided. However, if a bat roost is recorded, a third activity survey will then be required upon the building to inform a bat mitigation report.
- The activity surveys must be conducted between May and August; and where roosting bats are recorded present, one survey may be conducted in September, the sub-optimal season.
- The survey(s) must be conducted prior to the application stage and cannot be conditioned as part of planning consent. If roosting bats are recorded, the survey information will determine whether there is a legal requirement for a Natural England bat European Protected Species (EPS) licence / Bat Mitigation Class Licence (BMCL).
- In the event a bat licence is required (where roosting bats are present and will be impacted upon), the licence can only be obtained following approval of all planning consent(s) and once the necessary survey work has been completed; the bat licence must be obtained prior to any works commencing to ensure works are lawful.
- There are bat records within 1km of the site. A 'bat-friendly' lighting strategy will be required following the survey(s) to ensure any additional lighting does not impede foraging and commuting bats which may be using the gardens and general surrounding area.
- To ensure the application is compliant with The National Planning Policy Framework (NPPF) and the Local Plan, ecological enhancements for roosting bats and/or nesting birds (such as integrated roost boxes / nesting boxes) will be required and will be determined following the further survey(s).

- There are records for hedgehogs and stag beetles within 1km of the site and these species may be impacted by the proposed development. Mitigation and enhancements for these species are detailed in Section 5 of this report.

1. Introduction

ABR Ecology Ltd were commissioned by Mike and Emma Woods to undertake a Preliminary Roost Appraisal (PRA) at Kingsway, Chandlers Ford, Eastleigh, SO53 1FD (central grid reference: SU 44334 21905) to advise on the presence/absence of bats at the property. This report was requested to support a householder application for extensions to the property.

The PRA was undertaken on the 27th October 2023 by Natural England class licensed bat ecologists Becci Smith MCIEEM and Sophie Morris. Existing elevations are provided in Appendix 1 and proposed elevations are provided in Appendix 2.

Site context

The application site comprises a residential property consisting of a detached house in Chandlers Ford, Eastleigh. The immediate surrounding landscape comprises residential housing and gardens. The wider surrounding landscape comprises similar residential properties with associated gardens, woodland to the north, east and west of the site, a lake to the west and wood pasture and parkland to the north. The surrounding landscapes are considered to provide good foraging opportunities and commuting corridors for bats.

Aims and scope of this report

This report is based on the results of the PRA and bats data search supplied by Hampshire Biodiversity Information Centre (HBIC, 2023), which was principally aimed at determining if a bat roost is present within the property and/or whether the building hold 'potential' to support roosting bats in line with The BCT Good Practice Survey Guidelines (Collins, 2016).

This report aims to establish whether the proposed works hold the potential to impact on roosting bats and identifies whether there is a requirement for further bat activity (emergence/re-entry) surveys, which may inform the need for a bat European Protected Species (EPS) licence or Bat Mitigation Class Licence (BMCL) to allow the works to proceed lawfully following planning approval.

2. Legislation and planning policy

Legislation and UK BAP priority bat species

Legislation

In England, all bats are legally protected under Schedule 5 of the Wildlife and Countryside Act (1981) (as amended). Additionally, all bats are fully protected under Annex IV of the EC Habitats and Species Directive (1992), which is transposed into UK law under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

The legislation protects bats from many activities and acts, including to:

1. Deliberately take, injure or kill a wild bat.
2. Intentionally or recklessly disturb a bat in its roost or deliberately disturbing a group of bats.
3. Destroy or damage a place used by bats for breeding or roosts (even if bats are not occupying them at the time).
4. Intentionally or recklessly obstruct access to a bat roost.
5. Possess or advertise/sell/exchange a bat species found in the wild in the EU (dead or alive) or any part of a bat.

UK BAP priority bat species

Several species are listed under the UK Biodiversity Action Plan (UK BAP) (JNCC, 2016) as priority species due to their vulnerability or rarity as listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006), and Section 40 places a duty to conserve biodiversity on all public authorities.

These include bats including barbastelle (*Barbastella barbastellus*), Bechstein's bat (*Myotis bechsteinii*), brown long-eared bat (*Plecotus auritus*), both species of horseshoe bat (*Rhinolophus spp.*), soprano pipistrelle (*Pipistrellus pygmaeus*) and noctule (*Nyctalus noctula*).

National and local policy

NPPF – The National Planning Policy Framework

The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities & Local Government, 2021) sets out the Government's planning policies for England and how these should be applied. In the context of this report, Section 15 of NPPF is relevant and applicable, Section 15 states:

‘Planning policies and decisions should contribute to and enhance the natural environment by, minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.’

New developments and projects are supported where plans promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue measurable net gains for biodiversity.

To ensure this application is compliant with Section 15 of NPPF, ecological enhancements are required as part of the project/development.

The Eastleigh Borough Local Plan

The Eastleigh Borough Local Plan (Eastleigh Borough Council, 2014) Strategic Policy DM9 ‘Nature Conservation’ states:

‘Development which is likely to adversely affect the integrity of an international or European nature conservation site will not be permitted. Development which is likely to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI) will not be permitted, unless the Borough Council is satisfied that the reasons for the development clearly outweigh the harm to the nature conservation value of the site. Development will not be permitted if it is likely to have a direct or indirect adverse effect on a Site of Importance for Nature Conservation (SINC) or Local Nature Reserve as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre), or on protected or priority habitat or species, or on any other feature of importance for wild fauna and flora, unless it can be demonstrated to the satisfaction of the Borough Council that i. the benefits of the development clearly outweigh the adverse effects on the nature conservation value of the site; ii. the adverse impacts are unavoidable; and iii. measures can be taken to mitigate or, if this is not possible, compensate for the adverse effects, such that the development will result in at least no net loss of biodiversity’.

It is the applicant’s/landowner’s responsibility to ensure that the proposed development proceeds in full compliance with this report and/or any update version report thereafter, that works are undertaken lawfully, in compliance with national and local policy, and in accordance with all conditions of the obtained planning consent.

3. Methodology

Desktop data search

Hampshire Biodiversity Information Centre (HBIC, 2023) was contacted to provide any records of bats and any bat roosts within a 1km radius of the application site. These records were used to inform the assessment of the site in its potential to support roosting bats and identifying any potential cumulative impacts on bats from the proposed development.

Preliminary Roost Appraisal (PRA)

Natural England class licensed bat ecologists Becci Smith MCIEEM and Sophie Morris undertook the PRA of the property on site. Timing and weather conditions for the survey are provided in the table below:

Survey date	Time of survey	Surveyor(s)	Equipment used	Weather conditions		
27/10/2022	10:30am	Becci Smith MCIEEM and Sophie Morris	High-powered torch, extendable ladder, and binoculars	Temp:	Okta cloud cover:	Beaufort wind force:
				13°C	3/8	1/12

The survey was undertaken in accordance with the Bat Conservation Trust (BCT) Good Practice Survey Guidelines (Collins, 2016). A thorough search for evidence of bats was undertaken in any internal loft spaces or voids and on any external features of the buildings, notably any windowsills, walls, floors and flat surfaces. Evidence of roosting bats include:

- Presence of live/dead bats;
- Bat droppings - distinguished from rat/mouse droppings by their crumbly texture;
- Staining from fur around access points; and
- The presence of feeding remains, such as insect wings and casings.

The building was identified as a 'confirmed' bat roost if evidence of roosting bats was recorded. If bat droppings were present, a sample of droppings were collected and sent to Swift Ecology Ltd for DNA analysis to confirm the species of bat present.

Most native bats in the UK are crevice-dwelling species, with bats roosting in remote areas, such as between tiles and membrane, behind cladding, at wall tops, in cavities, soffits and behind lead flashing, to name a few examples. Evidence of these species is often concealed and/or inaccessible due to the remote nature of the roost. Therefore, where no evidence of roosting bats was recorded, an

assessment on the availability of potential roosting areas and bat access points around the building, as well as the quality/availability of surrounding bat habitat, was conducted. The building were then assigned a category based on a sliding scale of 'negligible' to 'high potential', in accordance with the BCT Guidelines (Collins, 2016):

Bat roosting potential	Description
'High potential'	A building with one or more potential roosting sites that are highly suitable for use by many bats on a regular basis and for a longer period of time.
'Moderate potential'	A building with one or more potential roosting features that could be used by bats due to appropriate conditions but are unlikely to support a bat roost of important conservation status (roost type only, not species).
'Low potential'	The building features one or more potential roosting features that could be used by bats opportunistically. These features do not provide the appropriate conditions to be used on a regular basis by large numbers of roosting bats.
'Negligible potential'	The features of the building are negligible and are highly unlikely to be used by roosting bats.

Survey limitations

Preliminary Roost Appraisal (PRA) – property survey

Potential evidence of crevice-dwelling bats may have been missed due to the nature and remote location of potential roosting areas. However, binoculars were used to identify any potential bat droppings on the exterior features of the buildings, where possible.

The site visit provides a 'snapshot' of the site and does not take into account seasonal variation. Species may have been overlooked due to the constraints of the season and time in which the survey was undertaken. A lack of evidence of a species does not confirm its absence from site, rather there was no indication of its presence at the time of survey.

Data validity

The data within this report should not be seen as comprehensive. Data obtained from the HBIC (HBIC, 2023) data search is unlikely to provide a complete record of species within the search area. It is therefore possible that a bat species may occur within the vicinity that has not previously been identified within the data search.

This report is considered valid for 18 months from the survey date for planning purposes only; and is only intended for the proposed plans outlined within this report. If any material changes to the building/site occur or if the nature and/or extent of the proposed development changes, an update visit to reassess the building will be required, as any conclusions provided herein may not be valid.

4. Results

Desktop data search

HBIC (HBIC, 2023) provided records of bats, bat roosts and species of interest within a 1km radius of the site, and the results of which are provided below.

Species	Number of records	Most recent record	Closest record to site
<i>Bats</i>			
Brown long-eared bat	12	2022	305m northeast
Common pipistrelle	12	2022	285m southeast
Daubenton's bat	2	2003	135m west
Lesser noctule	2	2022	680m northwest
Long-eared bat sp.	6	2022	380m northeast
Myotis sp.	5	2020	310m southwest
Noctule	8	2022	310m southwest
Pipistrelle sp.	11	2019	125m southeast
Serotine	12	2022	35m southwest
Soprano pipistrelle	11	2022	310m southwest
<i>Other species</i>			
Stag beetle	128	2021	30m northwest
West European Hedgehog	62	2020	145m southwest

There are records for a number of bat species within 1km of the property, as bats are known to be within the area, a 'bat-friendly' lighting strategy will be required.

Preliminary Roost Appraisal (PRA)

Building description

A description of the building surveyed for roosting bats are provided in the table below and photographs of the building are provided in Appendix 3:

Building name	Description
House	- The property comprises a detached house constructed from rendered brick elevations. - The roof is pitched and hipped and constructed from clay roof tiles. - The soffits, window and door frames are constructed from uPVC. - Two dormer windows are present on the rear elevation with pitched roofs and hanging tiles constructed from clay. - A dormer window is present on the front elevation the same as above. - The second storey on the west elevation is covered in clay hanging tiles. - A brick base conservatory is present on the rear elevation with uPVC and rubber roof with a skylight. - An internal chimney sealed with lead flashing is present on the west elevation. - A single storey extension is present on the east elevation with a slanting roof constructed from clay roof tiles. - Two internal loft voids are present within the property and a description of each is provided below:

	- Void 1 - The enclosed loft void measures approximately 8m in length, 5m in width and 2.5m in height to the apex. - The roof is lined with burlap sack. - The loft void is constructed from purlins and a wooden ridge beam. - The loft void is boarded with fibreglass insulation present. - An internal chimney breast is present. - Void 2 - The closed void measures approximately 6m in length, 3m in width and 1.2m in height to the apex. A 0.5m tunnel connects the two loft voids. - The roof is lined with breathable membrane. - No boarding is present. - Fibreglass insulation is present. - The loft void is constructed from purlins and a wooden ridge beam.
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Evidence of bats recorded

A summary of any bat evidence recorded during the visit is provided in the table below:

Building name	PRA results
House	▪ No evidence of roosting bats such as droppings, staining or feeding remains were identified during the survey.

Building assessment – potential bat roosting areas and bat access points

An inspection of the internal and external features of the building was undertaken to identify any potential bat access points and potential areas where bats could roost, and these are summarised below:

Building name	Potential bat access points	Potential roosting provisions	Potential of the building
House	• Gaps under the hanging tiles on the west elevation. • Gaps under the hanging tiles and under the lead flashing around the dormer windows. • Gaps under the roof tiles.	• Crevices between the hanging tiles and the membrane. • Crevices between the roof tiles and the roof membrane. • Crevices under the lead flashing.	‘Moderate potential’ for roosting bats

The house was assessed against the BCT Good Practice Survey Guidelines (Collins, 2016) and was deemed to hold ‘moderate potential’ for roosting bats due to a moderate number of potential bat roosting provisions and/or bat access points around the building’s exterior.

Despite no physical evidence of bats recorded during the survey, crevice-dwelling bats utilise external roof features which do not lead into the loft spaces/voids; typical roosting areas include between the tiles and roofing felt/membrane, at wall tops and under the ridge tunnel. The presence of felt and external building

materials can often prevent bat droppings from entering the loft space and ‘trap’ droppings in the external fabric of the building, thereby concealing any potential evidence of bats during the PRA survey. Furthermore, the surrounding habitats do provide suitable bat foraging and commuting habitat, which can increase the likelihood of roosting bats within the building.

On this basis, the presence of roosting bats cannot be ruled out based on the initial PRA assessment. In line with the BCT guidelines (Collins, 2016), a minimum of two bat activity (emergence/re-entry) surveys are now required to determine if roosting bats are present/likely absent within the building. Further information is provided in Section 5 overleaf.

Hedgehogs

There are 62 hedgehog records within 1km of the site (HBIC, 2023), and the site is suitable for this species. Sheltering habitat is present in the form of ornamental planting and trees on site, and it is likely hedgehogs would utilise the site for foraging and commuting purposes. Therefore, mitigation for this species is detailed in Section 5 below.

Stag beetles

A total of 128 records for stag beetles have been recorded within 1km of the site, the nearest record being 30m northwest of the site (HBIC, 2023). It is likely stag beetles are present on site in the ornamental planting/trees at the end of the rear garden and mitigation for this species is detailed in Section 5 below.

5. Further survey recommendations and biodiversity mitigation

Bat activity survey(s) now required to inform planning application

The PRA of the house was undertaken, and the building was identified to hold 'moderate potential' for roosting bats due to a moderate number of potentially suitable bat roosting provisions and potential access points around the property. A minimum of two bat activity surveys must now be undertaken upon the building to inform the planning application.

Reporting and planning process

If no roosting bats are recorded during the activity surveys, the surveys will inform a final negative bat report. If roosting bats are recorded, a third activity survey will then be required upon the building to inform a bat mitigation report.

The final report will include enhancements for bats and/or nesting birds to ensure the development is compliant with The National Planning Policy Framework (NPPF) and local planning policy.

The bat activity surveys cannot be conditioned as part of planning consent and must be conducted pre-application, as bats are legally protected and are therefore a material consideration in the planning process. The final report version must be informed by the results of the further surveys.

Survey timings

The bat activity surveys must be conducted between May and August, inclusive, which is the considered the 'optimal' survey season; and where roosting bats are identified, one of the three surveys may be conducted in September, if a transitional roost is suspected on a case-by-case basis, which is considered the 'transitional' survey period.

Each survey will need to be spaced a minimum of three weeks apart and all surveys must be conducted in optimal weather conditions for bats (i.e. low wind speed and no precipitation). Where a maternity roost is identified/suspected then the surveys must be at least four weeks apart to optimise counts both pre and post birth.

If bats are present, the surveys will determine if a maternity bat roost (i.e. where females give birth and raise their young to independence) is present in the house and will also aim to establish the species of bat present, the numbers of bats and the locations of any bat access points. The surveys will be crucial in informing the bat mitigation strategy, such as timing constraints on works, a works method

statement, and requirements for any temporary/permanent replacement bat roosts. The surveys will identify if a bat European Protected Species (EPS) licence or Bat Mitigation Class Licence (BMCL) from Natural England is required following planning approval to allow works to proceed lawfully.

Survey methodology

To cover all aspects of the building, two surveyors will be required per survey. A minimum of two dusk emergence surveys will be required. The dusk surveys will commence approximately 15 minutes before local sunset time and end between 1.5 hours – 2 hours after sunset. If roosting bats are present an additional third dusk survey will be required.

The surveyors will observe the external features of the property, watching for any sign of bats entering or leaving the building. A note will be made of the location(s) of any bat access points/roosting areas, the species encountered and the behaviour of bats. A note on any general bat activity will also be made, including any bat passes, social calls and foraging behaviour.

The surveyors will use specialised recording equipment that will detect any echolocating bats, which will help determine the species of bat encountered, and will be positioned in prime locations around the building, ensuring the best view of roof elevations and aspects.

The survey methodology will be conducted in accordance with the Bat Conservation Trust (BCT) Good Practice Survey Guidelines (Collins, 2016).

Provisional survey dates

The bat activity surveys have been provisionally booked for the following dates (subject to confirmation and suitable weather conditions) (if bats are present, a further date will be provided once the results of the first two surveys are obtained):

- 9th May 2024 – Dusk emergence survey (evening)
- 29th May 2024 – Dusk emergence survey (evening)

Hedgehogs

Hedgehogs are considered likely to be foraging on site. The following mitigation strategy will be fully implemented:

- To prevent hedgehogs from becoming entrapped, any trenches must have a ramp installed / covered over in order to prevent overnight entrapment.

Stag beetles

A total of 128 records of stag beetles are noted within 1km of the site (HBIC, 2023). The following strategy will be followed to ensure mitigation and enhancement for stag beetles present on site (see Appendix 4 for design):

- A stag beetle log pile will be constructed at the end of the rear garden in the ornamental planting; the guidelines from the People's Trust for Endangered Species (PTES) (PTES, 2020) will be followed in how to make a log pyramid (<https://ptes.org/wp-content/uploads/2020/05/Build-a-log-pyramid-for-stag-beetles.pdf>):
 - Log pyramids can be built at any time of year.
 - Use wood from any broadleaved tree.
 - The logs should be at least the thickness of an adult's arm.
 - Site the logs in partial shade, if possible, to prevent them drying out.
 - Partially bury the logs in the soil so that they don't dry out.
 - Allow plants to grow over the log pyramid to retain moisture and provide shade.
- Any vegetation/trees required to be removed to facilitate the proposed works will be carefully removed using hand tools and if beetle larvae are found, these must be carefully dug up by hand and as much rotting wood that they were found in must be reburied in the soil around the log pile. They must be covered in cool, moist soil.
- Once construction is completed, the log pile will be retained and maintained by the homeowners.

6. References

Collins, J (ed) (2016). Bat Surveys for Professionals Ecologists: Good Practice Guidelines (3rd Edition). The Bat Conservation Trust, London.

Department for Communities and Local Government (2005). Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.

Eastleigh Borough Council (2014). The Eastleigh Borough Local Plan.

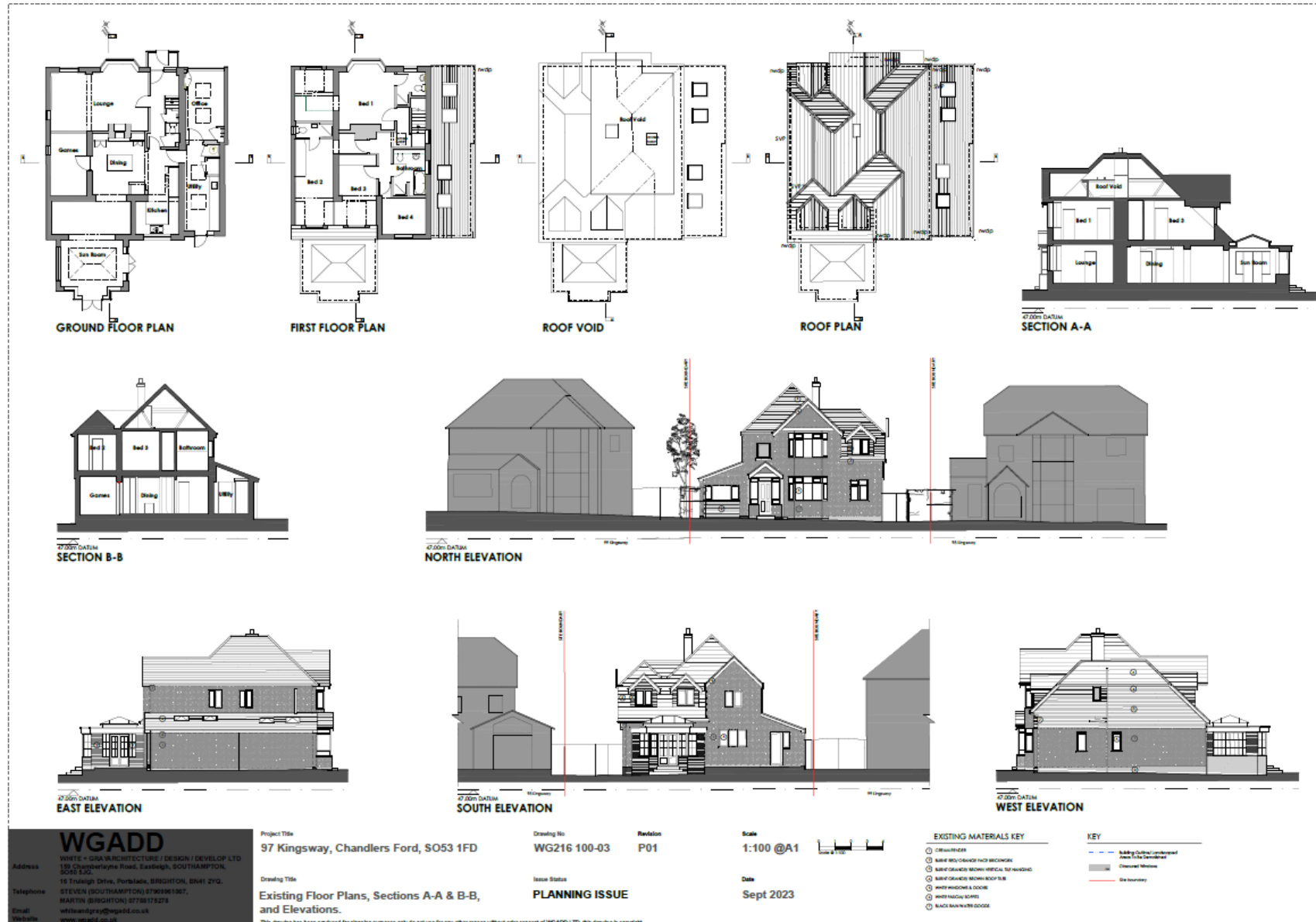
Hampshire Biological Information Centre (HBIC) (2023). 97 Kingsway, Chandlers Ford - bats only data search 1km radius.

JNCC (The Joint Nature Conservation Committee) (2016). UK BAP priority terrestrial mammal species.

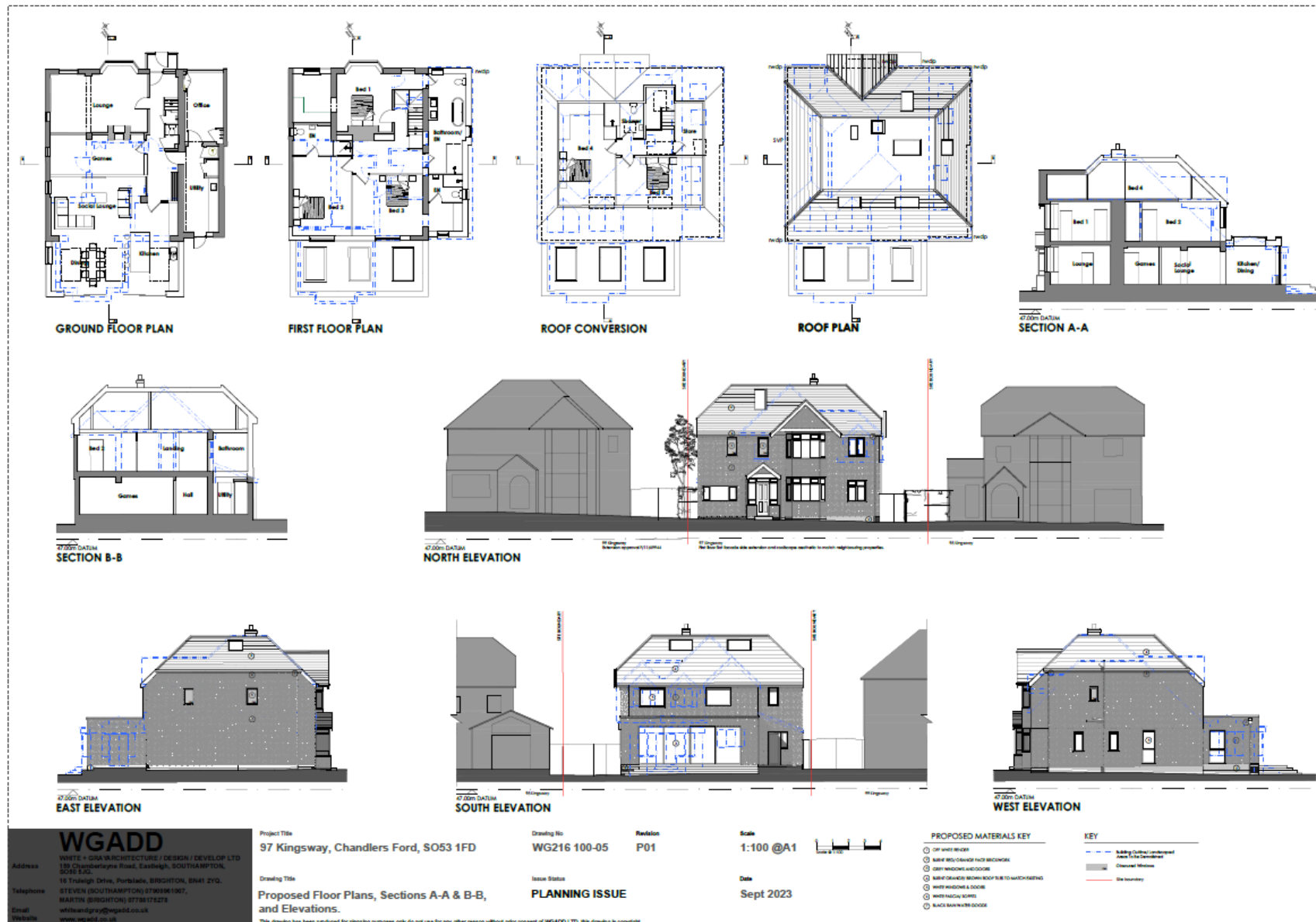
Ministry of Housing, Communities and Local Government (2021). National Planning Policy Framework.

Appendix 1: Site plan and existing plans





Appendix 2: Proposed plans



Appendix 3: Photographs



Photo 1: Front elevation of house.



Photo 2: Rear elevation of house.



Photo 3: Gaps at hanging tiles.



Photo 4: Gaps at hanging tiles.



Photo 5: Loft void 1.



Photo 6: Loft void 2.

Appendix 4: Stag beetle log pyramid

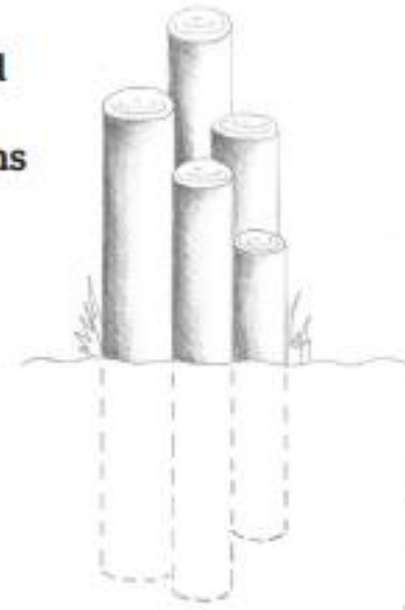
**Large log pyramid
suitable for parks
and large gardens**



Ground level

Approx. 50cm
deep

**Log pyramid
suitable for
small gardens**



Approx.
50cm deep