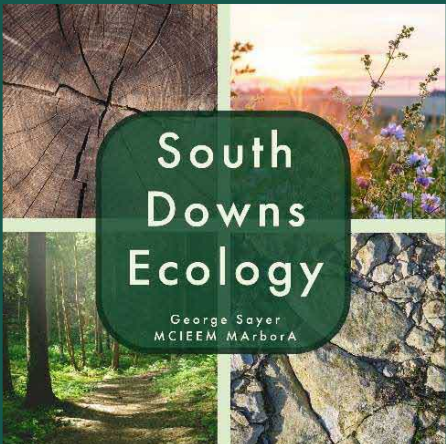




Ecological Impact Assessment

Oklahoma,
Westbourne



**South
Downs
Ecology**

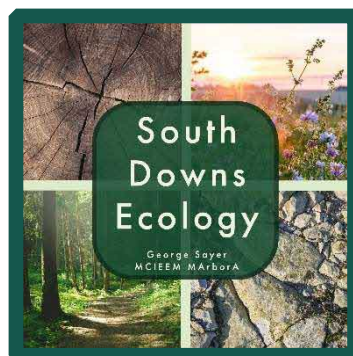
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Client	Phillips Build Ltd
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Summary

Phillips Build Ltd has commissioned a Preliminary Ecological Appraisal, Bat Emergence Survey, and Ecological Impact Assessment of proposals for demolition of a dwelling and replacement with 5no. new dwellings at the property known as Oklahoma, Long Copse Lane, Westbourne (SU 74678 07839, hereafter referred to as 'the site').

A Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment was carried out on the 6th December 2023 by George Sayer (*BSc (Hons) Environmental Sciences, PgDip Endangered Species Recovery, MA ArborA, MCIEEM, NE Licence Holder – Bats Level 2 and GCN - Ecologist*). Bat Emergence Surveys were conducted in June-July 2024.

The proposal area consists of an existing dwelling surrounded by gardens and driveway.

The dwelling contained droppings indicative of long-eared bats and also displayed some suitability for crevice-dwelling bats; further surveys and DNA analysis determined the building to be a day roost for brown long-eared bats and soprano pipistrelle.

The site offers some potential for reptiles. Very minor potential for disturbance of amphibians, small mammals, and birds also exists; with basic avoidance and mitigation measures, the proposals stand a 'negligible' chance of disturbing reptiles or other species.

The proposals are not considered to have significant negative impacts upon habitats or protected species in accordance with planning policy and once enhancements are considered (including proposals to ensure the mandatory Biodiversity Net Gain), could result in a minor net gain. The proposals would therefore accord with the Havant Local Plan Policies, the NPPF (2023) and relevant legislation.

1.0 Introduction

- 1.1 Phillips Build Ltd has commissioned a Preliminary Ecological Appraisal of proposals for demolition of a dwelling and replacement with 5no. new dwellings at the property known as Oklahoma, Long Copse Lane, Westbourne (*SU 74678 07839, hereafter referred to as 'the site'*).
- 1.2 A Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment was carried out on the 6th December 2023 by George Sayer (BSc (Hons) Environmental Sciences, PgDip Endangered Species Recovery, MA ArborA, MCIEEM, NE Licence Holder –Bats Level 2 and GCN - Ecologist).
- 1.3 The following ecological impact assessment report has been completed by George Sayer. The purpose of the assessment has been to identify whether any potential impacts upon protected species, habitats or designated sites might occur, and to propose mitigation or avoidance measures where necessary.
- 1.4 Based on the results of the appraisal, recommendations for potential ecological enhancements have been provided.

Site Description and Surrounding Area

- 1.5 The site consists of an area of an existing detached dwelling, surrounded by gardens. The site covers c.0.22 hectares and is rectangular in shape. To the south, east and west are further dwellings, whilst to the north is the verge and road of Long Copse Lane, and a grassland field to the north. This land is understood to be subject to an outline application for development (APP/21/00893) for c.210 dwellings.
- 1.6 The site is located within the residential area of New Brighton, to the west of Westbourne. To the south lies residential land for a significant distance. To the north-west the residential land gives way to Hollybank Woods. Treelined paddocks lie to the north-east. To the east lies new development with large greenspace. The wider surroundings to south and west consist of the urban coastal areas of Havant and Emsworth, whilst to north and east the land is a mixture of woodland and farmland, with large areas of woodland and parkland at Stansted Park.

Proposals

- 1.7 The proposals are for demolition of the existing dwelling and construction of 5no. dwellings on the site. It is understood the existing access would be re-used. The houses would be accompanied by parking and gardens.

2.0 Scope of Assessment

1. *Categorise habitats present on the site;*
2. *Identify habitat which may have potential for protected species;*
3. *Identify whether any signs of protected species are present on-site;*
4. *Recommend whether further surveys are required, or whether there are any relevant constraints with regards to protected species;*
5. *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
6. *Provide recommendations as to how the site and proposals could be enhanced with regards to protected species and habitats.*

- 2.1 This appraisal and assessment is deemed to be relevant for a maximum of 18 months due to the possibility of changes in the habitats on-site. Bat data within the report is valid for one season. Should the site or proposals alter, the ecologist should be consulted to confirm that the appraisal is still valid.

3.0 Planning Policy and Legislation

National Planning Policy

- 3.1 The National Planning Policy Framework (NPPF) 2023 sets out the government planning policies for England and how they should be applied. 'Chapter 15: Conserving and Enhancing the Natural Environment' states that development should be 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.'
- 3.2 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

- 3.3 The site sits within Havant Borough. The Havant Borough Local Plan was withdrawn from examination on 16 March 2022 and work started on a new Local Plan for Havant Borough. The Building a Better Future Plan –the new Local Plan for Havant Borough has been approved by the Planning Policy Committee in 2023 and includes an overall strategy but no detailed policies. As such the withdrawn local plan policies will be relied upon for the time.
- 3.4 The Local Plan (2019) includes a large number of policies related to the environment. The most relevant policies with regards ecology at this site are:

- ***E14 The Local Ecology Network:*** *All development in Havant Borough is expected to protect, conserve and enhance the Borough's Local Ecological Network. Planning permission will only be granted where:*
 - a. The development results in biodiversity net gain;*
 - b. The development avoids the fragmentation of the Local Ecological Network including across administrative boundaries;*
 - c. The applicant has identified and assessed the level of ecological value of the site through adequate and proportionate information and any matters arising have been addressed through an avoidance or mitigation plan; and*
 - d. Any necessary mitigation plan includes provision for ongoing management and maintenance.*

In addition to the above, priority habitats in the Borough are afforded protection by specific nature conservation designations. Development proposals which could affect a designated site will need to consider the impact and respond appropriately.

International Nature Conservation Designations

Development which has the potential to have an impact on an international nature conservation designation will be subject to a Habitats Regulations Assessment and, if necessary, an Appropriate Assessment, to determine the potential for likely significant effects. Development that is likely to have an adverse effect, either alone or in combination with another project/plan, on the integrity of an international site will not be permitted unless it can be demonstrated that:

e. Necessary avoidance or mitigation is secured such that in combination with other development there will be no adverse effects on the integrity of the designated sites; or

f. There are no alternative sites for the proposal, there are reasons of overriding public benefit/interest and compensatory provision is secured.

National Nature Conservation Designations

In addition to criteria a) to d), planning permission will only be granted on or adjacent to a national nature conservation designation where:

g. Development is unlikely to have an adverse effect either individually or in combination with other developments. An exception to j) will only be made where:

h. The benefit of development clearly outweighs the likely impact on the feature(s) of the designation; and

i. Mitigation and/or compensation measures are secured to offset any likely impacts.

- ***E15 Protected Species:*** *Development proposals which are likely to affect protected species, and/or their supporting habitats, must undertake appropriate surveys to establish their presence/likely absence. In using the findings of such surveys, proposals should, in the first instance, avoid an impact on a protected species. If this is not possible proposals should mitigate and compensate. Planning permission will only be granted where:*

a. A Mitigation Plan, or if this is not possible a Compensation Plan, is provided to the satisfaction of the Council; and

b. A Monitoring and Review Plan is put in place.

Bechstein's Bat

In instances where Bechstein's bat is likely to be found on site and/or nearby, survey methods appropriate to Bechstein's bat must be used and undertaken by a suitably qualified ecologist. If the presence of Bechstein's bat is established on site and/or nearby, planning permission will only be granted where:

- c. Impacts on Bechstein's bat breeding habitat (i.e. net loss of/significant disturbance to woodland or trees containing roosts) are avoided;*
- d. Proposals include appropriate buffers to woodlands, trees, hedgerows and other flight corridors, considering the location of roosts and foraging/commuting habitats; and*
- e. Review and monitoring plans are put in place. Where the above measures cannot be met planning permission will be refused, unless the applicant can show, subject to meeting the tests of the Habitats Regulations, that there would not be an adverse effect on the population of the relevant protected species.*
- ***E16 Recreation impact on the Solent European Sites:*** *Planning permission will be granted for new dwellings and/or overnight accommodation that mitigates the likely significant effect on the Solent European Sites. This mitigation can be provided through either:*
 - a. A financial contribution consistent with the Solent Recreation Mitigation Strategy (SRMS); or*
 - b. A developer provided package of measures associated with the proposed development supported by evidence that it will avoid or mitigate any likely significant effect; or*
 - c. A combination of measures in (a) and (b) above.*

Where these measures cannot be provided development proposals will be refused, unless the applicant can show, subject to meeting the tests of the Habitats Regulations, that there would not be a likely significant effect on the Solent European Sites either alone or in combination with other plans or projects.

- ***EX1 Water Quality impact on Solent European Sites:*** New dwellings and/or development resulting in a net gain in overnight accommodation which would cause a likely significant effect on the designated sites will need to provide a nutrient budget. Planning permission will only then be granted if a mitigation package is provided which will remove the likely significant effect. This mitigation can be provided through either:

a. A financial contribution towards the Council's strategic mitigation package; or

b. A developer provided package of measures associated with the proposed development supported by evidence that it will avoid or mitigate any likely significant effect on the Solent European Sites; or

c. A combination of measures in (a) and (b) above.

Where these measures cannot be provided development proposals will be refused, unless the applicant can show, subject to meeting the tests of the Habitats Regulations, that there would not be a likely significant effect on the Solent European Sites either alone or in combination with other plans or projects.

- ***E17 Solent Wader and Brent Goose feeding and roosting sites:*** Development proposals on, or adjacent to, sites which are used by Solent waders and/or Brent Geese will be assessed in line with the appropriate regulations. These proposals will, therefore, require a project level Habitats Regulations Assessment and, if necessary, an Appropriate Assessment. The Council will consider the Solent Waders and Brent Goose (SWBG) Strategy and the latest survey data when making such an assessment.

- ***E18 Trees, hedgerows and woodland:*** Development affecting trees, hedgerows and woodlands will only be permitted where it:
 - a. Reflects, conserves or enhances the existing landscape and integrates the development into its surroundings, adding visual interest and amenity;
 - b. Adequately protects existing trees and hedgerows including their root systems prior to, during and after the construction process; and
 - c. Will not result in the loss or deterioration of ancient woodland and ancient or veteran trees.

The Council will refuse planning permission for proposals that threaten the retention of important trees, hedgerows, and woodland, unless the need for, and benefits of development in that location clearly outweigh the impact of the proposal.

Provision of new trees are expected as part of development proposals for new homes and commercial floorspace. Planning permission will be granted where it:

- d. Facilitates adaptation to climate change by providing shade, shelter and cooling through new tree planting; and
 - e. Includes proposals for the successful implementation, maintenance and management of landscape and tree planting schemes.
- ***E22 Amenity and pollution:*** Development proposals will be permitted where:
 - a. Projected levels of noise, odour, vibration, light, water or air pollution do not have a likely significant negative effect on the amenity of existing and future users of the site, nearby occupiers or the wider environment; or
 - b. Measures are provided which are suitable for the purposes intended and will ensure that any likely significant negative effect on receptor(s) are mitigated to an acceptable level.

Legislation

3.5 Legislation relating to wildlife and biodiversity of particular relevance to this EclA includes:

- The Conservation of Habitats and Species Regulations 2017;
- The Wildlife and Countryside Act 1981 (as amended);
- The Natural Environment and Rural Communities (NERC) Act 2006;
- The Hedgerow Regulations 1997;
- The Protection of Badgers Act 1992;
- The Wild Mammals (Protection) Act 1996;
- The Environment Act 2021.

3.6 All species of bat and their roosts are protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981. It is an offence to intentionally kill, injure or handle a bat, to possess a bat (live or dead), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

3.7 All UK bird species are protected against disturbance whilst occupying a nest under the Wildlife and Countryside Act 1981. Developments that could predictably disturb, kill or injure nesting birds could result in an offence. Furthermore, a number of bird species are targets of UK and Local Biodiversity Action Plans and listed as Species of Principle Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. This obligates local authorities to have regard to the purpose of conserving biodiversity with particular emphasis on targeted species.

3.8 All widespread reptiles are protected against killing and injury under the Wildlife and Countryside Act 1981, with rarer reptiles receiving further protection under EU regulation. Reptiles must also be given consideration under the NERC Act 2006 as part of the planning process.

3.9 Great crested newts (GCN) are protected under The Conservation of Habitats and Species Regulations 2017. It is an offence for anyone to intentionally kill, injure or disturb a GCN or to damage, destroy or block access to areas of suitable habitat.

3.10 Badgers are protected under the Protection of Badgers Act 1992. It is an offence to harm badgers or disturb badgers and their setts.

3.11 Water voles are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and are a priority conservation species. It is an offence to intentionally capture, kill or injure water voles, damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care), disturb them in a place of shelter or protection (on purpose or by not taking enough care), possess, sell, control or transport live or dead water voles or parts of them (not water voles bred in captivity).

- 3.12 In the UK, dormice are legally protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and have significant further protection as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Dormice are also a 'Species of Principal Importance for the conservation of biodiversity' listed under section 41 of the Natural Environment and Rural Communities Act 2006 (NERC). It is an offence for anyone to intentionally kill, injure or disturb a dormouse or to damage, destroy or block access to areas of suitable habitat.
- 3.13 All other mammals receive general protection against cruelty, inhumane killing or injuring under the Wild Mammals (Protection) Act 1996. This protection includes 'intentional' crushing and asphyxiation, for example that might occur when excavating mammal burrows.
- 3.14 In England, Biodiversity Net Gain (BNG) is mandatory from 12 February 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). Developers must deliver a BNG of 10%. There are a number of exemptions such as for custom and self-build applications. This development is subject to Mandatory BNG.

4.0 Methodology

Desktop Study

- 4.1 A desktop study was conducted using the government 'MAGIC' Map GIS tool; a search was carried out for all international statutory designated sites (Ramsar, SAC, SPA) within 12.0 km of the site; national statutory designated sites (SSSI, NNR, LNR) within 2.0 km of the site; and non-statutory designated sites (SNCI) and priority habitats within 1.0 km of the site. Any sites of relevance to the proposals are summarised below and their significance considered in the context of the development proposals. Given the nature of the proposals only sites which might be impacted are considered below and this is not an exhaustive list of all sites.
- 4.2 A search was carried out to identify features of ecological interest in the area, such as water bodies and ancient woodland.
- 4.3 Adjacent applications, particularly the 2021 application to the immediate north-east (*APP/21/00893 - Outline planning application for demolition of the existing buildings and the erection of a new residential scheme (C3 use of approximately 210 dwellings to include affordable housing) and associated landscaping, access and supporting infrastructure, all other matters reserved*) were utilised to provide thorough background information. Given the overall scale and nature of the site and the proposals and the presence of this alternative source of recent data, a full data search from HBIC was not considered appropriate as it would be highly unlikely to result in any additional pertinent information being provided. This is in accordance with CIEEM current guidance for such projects.

Site Visit

- 4.4 A site visit was conducted on 6th December 2023 during suitable conditions (8 degrees, WF1, 4/8 cloud). Habitats were recorded broadly according to the UKHab Classification System as described within the UK Habitats Manual v2.01 (UKHab Ltd 2023). All habitats present on-site were recorded on a UKHab map (Figure No. 01 –Site Habitat Plan).
- 4.5 During the survey any constraints with regard to protected species were considered; potential for impacts upon protected species even when evidence of such was not noted at the time of survey.
- 4.6 Points of interest for protected species have been plotted into the Site Habitat Plan and within target notes. Protected and Notable Species considered as part of this assessment include but are not limited to:
 - Bats –foraging, commuting, roosting, swarming and hibernating;
 - Badgers *Meles meles* –setts, latrines, push-unders and trapped hairs to fences, snuffle holes, and tracks;
 - Dormice *Muscardinus avellanarius* –nesting and commuting;
 - Great Crested Newts *Triturus cristatus* and other Amphibians such as Common Toads *Bufo bufo* –terrestrial active and hibernation habitat and aquatic habitat, including commuting;

- Birds –nesting, foraging and wintering;
 - Reptiles –terrestrial active and hibernation habitat;
 - Rare or Notable Invertebrates;
 - Rare or Notable Plants;
 - Water Voles *Arvicola amphibius*–foraging and shelter habitats;
 - Otters *Lutra lutra*–foraging and shelter habitats;
 - White-clawed Crayfish *Austropotamobius pallipes*;
- 4.7 The building and trees were inspected for features conducive to bat and bird roosting. The bat roost assessment was conducted following the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines (2023). The dwelling lofts were inspected in detail for evidence of bats or suitable access points into the loft. The building roofs were inspected for features such as gappy or hanging tiles, loose flashings, raised roof tiles and gaps in soffits and fascias. Features in trees including knot holes, limb failures, cavities and heavy ivy cover were inspected using high power torch; endoscope and binoculars as appropriate. Any evidence of bats such as grease marks, bat droppings, feeding remains and suitable cavities were noted. Bat droppings where found were submitted to Ecotype Genetics for DNA analysis to confirm the species of bat.
- 4.8 Buildings were assigned levels of bat roost suitability, ranging between negligible and high for buildings. Trees are assessed either as having no suitability, PRF-I (only able to support individual bats) and PRF-M (being able to support larger numbers of bats and therefore maternity colonies).
- 4.9 Due to the site visit being carried out over one day, it is possible that some signs of protected species may not be apparent within this short timeframe. This is a constraint recognised within the Survey Guidelines and all reasonable effort has been made to identify evidence of protected species.

Bat Emergence Surveys

- 4.10 Three bat emergence surveys were undertaken in June-July 2024 in accordance with the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines (2023) and the Interim Guidance on the Use of Night Vision Aids (2022). The dusk emergence surveys began c.15 minutes before sunset and continued until c.1.5 hours after.

Table 1 –Summary of Bat Surveys

Date	Sunset	Start	End	Weather Conditions - Start	Weather Conditions - End	Emergences?
21st June 2024	21:09	20:49	22:39	15.3°C, BF.4, Okt.7	15.2°C, BF.3, Okt.8, light rain	No
10th July 2024	21:15	20:58	22:55	16°C, BF.0, Okt.8	15°C, BF.0, Okt.7	Yes
31st July 2024	20:50	20:33	22:24	23°C, BF.0, Okt.7	21°C, BF.0, Okt.2	No

- 4.11 Three experienced surveyors were present on the first survey (Aidan Bird, Lauren Bird, Kacper Kobusinski). Two experienced surveyors (George Sayer, David Search) were present on the second and three (George Sayer, David Search, Joshua Blackman) on the third surveys which covered the dwelling and garage, with all three surveys utilising four to six night-vision aids (a combination of Canon XA10-XA60, Sony Ax100, Sony Ax53 and Nightfox Whisker NVAs all with multiple Illuminators, and a Pixfra Arc A613 thermal imager on the first survey) on each survey to improve coverage, better vision later into the survey and the ability to review potential emergences.
- 4.12 Surveyors and cameras thoroughly covered the building; the likelihood of bats being missed is very low. All surveys were designed, and surveys two and three led, by a licensed bat ecologist with multiple years' survey experience (George Sayer BSc (Hons) MCIEEM, 2018-34434) with survey one led by Aidan Bird, accredited agent under George's licence with 8 years of ecological survey experience. All other surveyors were suitably experienced and trained in use of equipment.
- 4.13 Bat detection was carried out using Echo Meter Touch 2 Pro and Peersonic RPA3 Full Spectrum Recording Bat Detectors, with analysis of recordings carried out where necessary on Kaleidoscope software. Infrared and Thermal camera footage was reviewed at between 0.5-1.5x speed on Microsoft Media Player where necessary. Early pipistrelle species calls, all Myotis calls and all long-eared bat calls were reviewed on cameras to ensure no potentially emerging bats were missed.
- 4.14 Whilst visits 1 and 2 were only 19 days apart, whilst the current guidelines recommend 21, this would have no material impact upon the results, which are considered robust. Surveys were conducted at the peak of the survey season when bat activity is most likely to be recorded.

5.0 Baseline Ecological Conditions

Desktop Study

Designated Sites and Habitats within 12.0km

- 5.1 The following information is included so that the site can be considered within the ecological context of the surrounding area, guiding decisions related to habitat change and protected species; these sites are not necessarily representative of the habitat on or surrounding the site and may not be influenced by the proposals.

Table No. 01 –Statutory Sites within the Zone of Influence

Site	Description	Location
<i>South Down National Park</i>	<i>1,600km² of high-value lowland landscape, including farmland, river valleys, ancient woodland and lowland heaths containing a number of small villages and market towns.</i>	<i>0.9 km N</i>
<i>Brook Meadow Emsworth LNR</i>	<i>Grassland, woodland and streams that support water voles.</i>	<i>1.6 km S</i>
<i>Solent Maritime SAC</i>	<i>Supports priority Annex 1 habitats including tidal mudflats and estuaries. The only site for smooth cordgrass (<i>Spartina alterniflora</i>) in the UK</i>	<i>2.3 km S</i>
<i>Chichester and Langstone Harbours Ramsar, SPA (also Chichester Harbour SSSI)</i>	<i>A large, sheltered estuarine habitat comprising extensive mudflats, saltmarsh, and support a number of priority and migratory breeding birds, invertebrates and flora.</i>	<i>2.3 km S</i>
<i>Solent and Isle of Wight Lagoons SAC</i>	<i>The site includes a number of lagoons in the marshes in the Keyhaven–Pennington area, at Farlington Marshes in Langstone Harbour, behind the sea-wall at Bembridge Harbour and at Gilkicker, near Gosport. The lagoons show a range of salinities and substrates, ranging from soft mud to muddy sand with a high proportion of shingle, which support a diverse fauna including large populations of three notable species: the nationally rare foxtail stonewort <i>Lamprothamnium papulosum</i>, the nationally scarce lagoon sand shrimp <i>Gammarus insensibilis</i>, and the nationally scarce starlet sea anemone <i>Nematostella vectensis</i></i>	<i>6.0 km SW</i>
<i>Kingley Vale SAC</i>	<i>A 200 ha area of calcareous dry grassland and scrubland noted for the presence of rare orchid species.</i>	<i>6.2 km NE</i>
<i>Portsmouth Harbour Ramsar, SPA</i>	<i>Large industrialised estuary with large expanses of mudflats and tidal creeks. Designated for its wintering populations of brent geese, red breasted merganser, black tailed godwit and dunlin.</i>	<i>10.0 km SW</i>
<i>Butser Hill SAC</i>	<i>Situated on the east Hampshire chalk which forms part of the South Downs. Much of the site consists of sheep's-</i>	<i>10.8 km N</i>

	<i>fescue – meadow oat-grass (Festuca ovina – Helictotrichon pratense) grassland. The site has a varied range of slope gradients and aspects which has a strong influence on the vegetation composition. A particular feature of the site is its lower plant assemblage. It has a rich chalk grassland lichen flora and also supports the distinctive Scapanietum asperae or southern hepatic mat association of leafy liverworts and mosses on north-facing chalk slopes. This association is very rare in the UK and Butser Hill supports the largest known example. The site exhibits various transitions between seminatural dry grassland, chalk heath, mixed scrub and yew Taxus baccata woods.</i>	
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- 5.2 The site is within the Recreational and Nutrient impact areas. Residential developments increasing overnight accommodation must contribute to the Strategic Solutions to mitigate recreational impacts. In addition proposals must achieve nitrate neutrality or (in Hampshire) purchase a credit from a locally-based mitigation scheme.
- 5.3 The site is within the Local Plan Bechstein's *Myotis bechsteinii* survey area, whereby it must be assumed that such bats are present locally and survey and mitigation must account for this.

Table No. 02 –Non-statutory Protected Sites

Site	Location
<i>Southleigh Forest (South)</i>	<i>150.0 m NW</i>
<i>Southleigh Forest (North)</i>	<i>750.0 m N</i>

Habitats

Desk Study

- 5.4 Within 1.0km of the site there are Priority Habitats of Woodpasture and Parkland, Deciduous Woodland, Ancient Woodland and Lowland Dry Acid Grassland. The Southleigh Forest/Hollybank Woods are classified as Deciduous Woodland. The closest area mapped as this habitat lies 60.0 m north-west.

Site Assessment

- 5.5 The site is given over to the following habitats.

U1b–Developed Land; Sealed Surface

- 5.6 The site is accessed along a resin-bound gravel drive and parking area. A concrete carport is present to the east which leads along a narrow concrete path to the south of the site. The habitat offers **negligible ecological value**.

U1b5–Building

- 5.7 There is a single detached dwelling on-site. The building is in good condition and offers **negligible ecological value** in a broader sense. The potential for the building to support protected species is discussed further in Section 6.0 below.

U1d 10 32 524 827 846–Suburban Mosaic of Developed and Natural Surface–Garden Flowerbeds with Scattered Scrub, Invasive Non-native Species and Trees

- 5.8 The eastern boundary of the site consists of a relatively continuous, wide flowerbed. This contains interspersed beech *Fagus sylvatica* and yew *Taxus baccata* shrubs, best described as scattered scrub, ornamental planting of species such as periwinkle *Vinca minor*, spiraea *Spiraea japonica* and St. John's-wort *Hypericum sp.* The area contains small interspersed patches of unvegetated ground and patches of grasses. Several small patches of variegated yellow archangel *Lamium galeobdolon subsp. Argentatum* (*invasive non-native species listed under Schedule 9 of the Wildlife and Countryside Act as amended 1981*). The habitat offers **negligible ecological value**.

- 5.9 Several small-medium trees including silver birch *Betula pendula* and hawthorn *Crataegus monogyna* are present. The trees are of fair form and of **site ecological value**.

U1d 524 827 847–Suburban Mosaic of Developed and Natural Surface–Garden with Introduced Shrubs and Invasive Species

- 5.10 There are several large shrubs within the garden. Mature bay laurel *Laurus nobilis* are noted as are two stands of *Rhododendron ponticum* (*invasive non-native species listed under Schedule 9 of the Wildlife and Countryside Act as amended 1981*). The habitat offers **negligible ecological value**.

G4 32 108 828–Modified Grassland (Frequently Mown Vegetated Garden with Scattered Trees)

- 5.11 The gardens are mostly laid to lawn. The sward is mown short and dominated by perennial ryegrass *Lolium perenne*. Common forbs such as yarrow *Achillea millefolium* are present. The habitat offers **negligible ecological value**.
- 5.12 Several small scattered trees including magnolia *Magnolia stellata* and camellia *Camellia japonica*. The trees are immature and offer **negligible ecological value**.

G4 14 16 32 128 504 827–Modified Grassland (Garden, Waterlogged Tall sward with Tall Forbs, Scattered Rushes, and Scattered Trees)

- 5.13 To the south-west is a square of grassland lawn, which has been left longer. The grass lies in a slight indentation, which was waterlogged during the survey. The vegetation displays coarse grasses and tall forbs such as square-stalked St. John's-wort *Hypericum tatrapterum*, wood avens *Geum urbanum*, and ground ivy *Glechoma hederacea*. A single apple *Malus domestica* is present. The habitat offers **site ecological value**.

H2a6 33 - Other Native Hedgerow (Priority Habitat) with Lines of Trees

- 5.14 The northern boundary is lined with a low but dense hedge, formed of beech and holly *Ilex aquifolium*. Several mature oaks *Quercus robur* and beech emerge from this and the adjacent verge. The vegetation offers very limited connectivity but is a distinctive feature of **site-local value**. The hedge is a priority habitat with some connectivity and offers **local ecological value**.

H2b - Non-native, Ornamental Hedgerow

- 5.15 A dense hedge of cherry laurel *Prunus laurocerasus* separates two parts of the garden. The western boundary is lined with a sparse row of what appears to be Himalayan cotoneaster *Cotoneaster simonsii* (*invasive non-native species listed under Schedule 9 of the Wildlife and Countryside Act as amended 1981*). The north-west hedge contains small sections of cherry laurel and Himalayan cotoneaster.
- 5.16 The southern boundary is lined with an unkempt line of small trees. The small size and interconnectivity of the canopies qualify this as a hedge. The hedge is very gappy, consisting of several small beech, a field maple, several bay laurels and a cherry plum that has collapsed. Being less than 80% native this is not considered a native hedgerow (as per UKHab definitions). The hedges offer **negligible ecological value**.

6.0 Protected Species Assessment

Bats

Desk Study

- 6.1 The site is on the edge of the Bechstein's bat *Myotis bechsteinii* area designated in the Local Plan, with land to the north in the area and the residential land forming the site and surroundings to east, west and south being outside. Static detector and trapping survey work undertaken for the development to the north-east in 2021 recorded Bechstein's, Barbastelle *Barbastella barbastellus*, and Alcathe bats *Myotis alcathoe*, Common, Soprano and Nathusius' Pipistrelle *Pipistrellus pipistrellus*, *P. pygmaeus*, *P. nathusii*, Serotine *Eptesicus serotinus*, *Nyctalus species*, *Myotis sp.* (confirmed by trapping studies as including whiskered *Myotis mystacinus*, Brandt's *M. brandtii*, Alcathe, Daubenton's *M. daubentonii*, Bechstein's and Brown Long-eared *Plecotus auritus* bats. Radio-tracking did not identify any Bechstein's bat roosts in close proximity to that site nor this.

Site Assessment

- 6.2 There is a single, detached dwelling on the site, of a complex shape formed of brick and rendered block. The building is relatively modern and in good condition. The roof is formed of concrete Roman tiles. Most of these appeared well-sealed, with some gaps at valleys but ridges being well-mortared. A single small dormer displays modern hanging tiles, with several gaps present at the base of the tiles. Soffits and fascias are well-sealed and of uPVC.
- 6.3 Internally there are 3 no. roof voids. The main roof void displays a timber roof with modern non-bitumen felt. This is mostly well-sealed, however in at least two places, felt has been incorrectly installed or has slipped, leaving gaps of at least 1.0 m width and 10.0 cm high where bats could access the roof void from the tiles above. Daylight could be seen at points suggesting suitable access for bats. The loft displayed several other small rips in felt, and three distinct areas where small accumulations of droppings, suggestive of long-eared bats were found. Some of these appeared fresh, and the quantity (fewer than 100) was suggestive of a day roost only. Bat dropping DNA analysis revealed these to be conclusively from brown long-eared bats.
- 6.4 The garage displayed a small void with a large water tank taking up most of the floorspace. The loft appears connected to the main loft. The felt appeared well-sealed, and a small accumulation of 30-40 bat droppings were found in the northern end of the void.
- 6.5 The third void is a large boat-garage to the west. This is open full height other than a small floor installed c.1.0 m down from the apex, which was not accessible. The felt appeared well-sealed and no evidence of bats was found within this void.
- 6.6 The building is a confirmed bat roost of a loft-dwelling species, and generally offers **moderate bat roost suitability** for other bats such as pipistrelles under tile gaps.

Bat Emergence Surveys

- 6.7 Survey 1 was undertaken during suitable conditions with some light rain beginning c.25 minutes before the end, which was considered unlikely to impact emergence activity. No bats were recorded emerging from the building. Activity was low and consisted of soprano pipistrelle, noctule, and individual serotine, long-eared and *Myotis sp.* bat passes.
- 6.8 Survey 2 was undertaken during suitable conditions. **A single soprano pipistrelle was recorded emerging** from the eaves to the south-east corner at 21:30, 15 minutes after sunset. No long-eared bats were conclusively recorded emerging; several passes were recorded at 56 and 60 minutes after sunset which is within the emergence window for the species, but review of NVAs did not reveal any emergences. Activity overall was moderate and consisted of common and soprano pipistrelle passes, including a soprano pipistrelle foraging continuously in the rear garden, with several long-eared bat passes.
- 6.9 Survey 3 was undertaken during suitable conditions. A soprano pipistrelle was recorded on-site from 13 minutes after sunset, suggesting this had emerged relatively locally. At 21:52, 62 minutes after sunset, long-eared bat passes were recorded and the NVA appears to show **an emergence from the ridge above the boat-garage**. Another bat was calling and circled in the seconds prior to the emergence and as such, it is likely that **two brown long-eared bats emerged**. Activity overall was moderate and consisted of common and soprano pipistrelle passes, individual noctule and *Myotis sp.* passes and several long-eared bat passes.
- 6.10 Overall the building contains a **day roost of a single soprano pipistrelle**, and a **day roost of two brown long-eared bats**.
- 6.11 There are two relatively mature oak trees to the frontage; these display no significant features suitable for bats, small cavities are noted to one but are insufficiently deep and too wet to shelter a bat. The trees are conferred offer some limited suitability for bats due to their size and maturity, and presence of typical deadwood in the crowns. A pair of silver birch trees in the gardens have been subject to heavy formative pruning, resulting in numerous small cavities at the ends of limbs; the cavities are shallow and exposed; the trees offer some limited suitability for bats. A beech tree displays a cavity to the south of site, but this was found to be full of water with no suitable shelter for bats. Following the latest bat survey guidance, all such trees would be classified as **PRF-I** as there are no features suited to larger numbers of bats.
- 6.12 The immediate surroundings to the north are rural and highly suitable for bats, as discovered by Davidson-Watts Ecology when undertaking work for the application site to the north-east (2021). The site itself is within the residential envelope of the surrounding area and considered of **site value only** for foraging and commuting bats. The northern treeline is of **local value**. No Bechstein's bats were recorded moving over or in proximity to the site in the 2021 radio-tracking previously mentioned and only two individual *Myotis sp.* bat passes were recorded during Bat Emergence Surveys.

Birds

Desk Study

- 6.13 Numerous bird species are present in the local area, including a number of farmland species and woodland specialists. Relevant species include house-sparrow *Passer domesticus* and starling *Sturnus vulgaris*.

Site Assessment

- 6.14 The grassland is too enclosed, and the sward generally too small to support ground nesters such as skylark, or wintering birds. The site is not on nor adjacent any site listed on the Solent Waders and Brent Geese Strategy Maps (2020).
- 6.15 The shrubs, trees and hedges are suitable for birds such as house sparrow, wren *Troglodytes troglodytes* and blackbird *Turdus merula*, and oak trees are suitable for birds such as treecreeper *Certhia familiaris*, although there are limited deadwood features which they might inhabit. The habitats are of **site value**.

Reptiles

Desk Study

- 6.16 There are records of widespread reptiles within 2.0km of the site. The proposed development to the north-east recorded slow worms *Anguis fragilis* and grass snakes *Natrix Helvetica* at that site.

Site Assessment

- 6.17 The grassland and shrub borders are generally well-maintained and offer no significant forage or shelter for reptiles. The small square of grass to south-west is rank and suitable for widespread reptiles. The area of suitable habitat would equal approximately 0.01 hectare, an insufficient space for anything other than vagrant individuals to occupy. Surrounding gardens are generally small and from aerial imagery appear well-managed with closeboard fences to the south and west, limiting dispersal to and from site. The grassland was waterlogged during the preliminary survey, and unlikely to support hibernation, but the surrounding hedges and shrubs may support hibernation. The habitats are of **site value** and offer **low potential**.

Amphibians

Desk Study

- 6.18 There are no records of Great Crested Newts (GCN) within the immediate surroundings recorded as part of nearby developments, nor are there any GCN survey or licence returns (positive or negative). The development to north-east undertook eDNA of a number of ponds in the vicinity and all returned negative results. A cluster of positive licence returns and an EPSM licence from 2018 are present 2.8 km north-west. Given the quantum of recent local development, the lack of local records might suggest local absence.
- 6.19 No ponds are noted from aerial or OS imagery within 500.0 m of the site. This would partly explain the lack of records.

Site Assessment

- 6.20 The site offers suitable but very limited foraging and shelter in the longer grass, shrubs and hedges. The grassland is currently waterlogged and unlikely to support hibernation, but the surrounding hedges and shrubs may do. The habitats are of **site value** to widespread amphibians such as toads. Given the lack of local records and ponds, the site offers **negligible potential** for GCN.

Dormice*Desk Study*

- 6.21 There are limited records of dormice in the immediate vicinity, with numerous records from EPSM licences west of Havant. They are also recorded within Southleigh Forest. The development to north-east identified 2no. dormice nests on their northern boundary in 2020. As such they should be assumed to be present in suitable and connected habitat.

Site Assessment

- 6.22 The boundary vegetation is sparse and poorly connected. The northern hedge consists of beech and holly, with several hazel stools on the north-west and north; however these hedges are isolated by driveways and being only c.30.0 m long, do not offer sufficient forage resource nor any commuting potential. There is some canopy connectivity over Long Copse Lane but given the short length of hedge on the site and likely levels of disturbance, it is highly unlikely that dormice would cross over with any regularity. The site offers **low potential**.

Badger*Desk Study*

- 6.23 Badger records are confidential, but they are likely present nearby.

Site Assessment

- 6.24 No evidence of badger such as setts, snuffle holes or latrines were noted. The site offers **negligible value** for foraging, being well-fenced. There is **negligible potential** for setts to be present and unseen in the shrubs and hedges.

Other

- 6.25 No potential for or evidence of any other protected species such as rare plants was recorded. There are several large stumps in the garden which might harbour stag beetles *Lucanus cervus*. Water vole are present in Westbourne but are not recorded in the immediate vicinity, and no suitable habitat exists with the ditches being shaded and devoid of suitable vegetation. There is good potential for hedgehogs *Erinaceus europaeus* to forage in the grass garden given its size and the surroundings. No impacts upon other protected species are considered likely and these have not been assessed further.

7.0 Evaluation of Impacts and Mitigation

Designated Sites

Potential Impacts

- 7.1 The proposals would not have any direct impact upon statutory sites given its small scale and nature. The site is within the Solent Recreational Disturbance and Nutrient Impact Areas, whereby increases in overnight accommodation are considered to result in such impacts on local designated sites.

Avoidance, Mitigation and Compensation

- 7.2 Nitrate mitigation credits shall need to be purchased from a Hampshire-based mitigation solution, and the appropriate level of contribution to the Solent Bird Aware scheme must be paid. Such mitigation shall be secured through the Section 106 legal agreement for the site.

Habitats

Potential Impacts

- 7.3 The proposals remove only garden habitats. It is determined that a small number of trees would require removal; this might reduce the habitat value of the site.
- 7.4 There are at least 3no. different invasive non-native plant species present –rhododendron, variegated yellow archangel and Himalayan cotoneaster. These are likely to be heavily disturbed or removed by proposals, presenting a risk of their spread into the wild.

Avoidance, Mitigation and Compensation

- 7.5 In order to ensure there is not a loss of habitat value, medium sized trees have been retained where possible, and where not possible, new hedge and tree planting has been proposed to compensate. A Biodiversity Net Gain Assessment details how proposals will achieve the mandatory gains to comply with The Environment Act (2021).
- 7.6 All construction must be undertaken in accordance with best practice advice with regards to control of dust, noise and emissions. No chemicals or fuels shall be stored on open ground. Trees and hedges must be protected in accordance with BS5837:2012.
- 7.7 In order to avoid the spread of invasive species, a full invasive species removal strategy will be devised and implemented by a specialist contractor to ensure the full and thorough removal of all vegetative and reproductive parts of these plants. Such works might begin prior to planning to minimise the risk of delays and to allow monitoring for e.g. sprouting seeds. This is likely to involve supervised digging and disposal of said plants, as well as fingertip searches for any seeds of the cotoneaster which might have fallen.

Bats

Potential Impacts

- 7.8 The building displayed evidence of bats in the form of droppings; Bat Emergence Surveys determined that day roosts of soprano pipistrelle and brown long-eared bats are both present. **An appropriate mitigation licence would be required prior to works commencing**, which might be an EPSML, BMCL or ER licence. Mitigation for such species would involve replacement bat features in at least one dwelling. For up to 3no. long-eared bats, a bat box is considered sufficient if not equivalent compensation. A bespoke bat loft with minimum dimensions of c.5x5x2.8m height might also be provided to compensate for the loss of loft space; **bitumen felt only is permitted within bat lofts with breathable membranes not permitted where bats can access**. In some cases a smaller loft may also be permissible.
- 7.9 In the absence of mitigation, proposals might damage, illuminate or otherwise disturb both several trees offering bat roost suitability, and commuting/foraging habitat in the form of hedges and scrub. Whilst Bat Emergence Surveys recorded low use by light-shy species such as *Myotis sp.* bats, to the north the vegetation might be used by such species which might not have been recorded during the survey. The grassland itself might be used by low numbers of bats, but this loss would not be significant beyond the site itself.
- 7.10 A single oak considered to be a PRF-I would require removal. The particular tree contains only minor deadwood and no notable cavities and as such a bat roost is highly unlikely, but occasional use of deadwood by individual bats cannot be ruled out.

Avoidance, Mitigation and Compensation

- 7.11 Trees and hedges will be protected in accordance with BS5837:2012 as described above. Following the latest guidance, a roost-resource approach will be followed and a bat box installed on a retained tree to compensate for any minor loss of roost suitability arising from loss of small trees. The single oak considered a PRF-I will be subject to a climbed inspection to look for any suitable features for bats, immediately prior to removal. Should a bat or evidence thereof be found within any tree, works will cease until a licence to disturb can be obtained.
- 7.12 Works shall be designed to minimise disturbance of any bats which might use the surroundings. No external lighting shall be installed other than minimal downlighting of entrances and the access drive. Such lighting must strictly accord with the BCT/ILP Guidance Note 08/23, with minimal illumination of the northern boundary in particular (taken to be no more than 0.2 lux other than for emergency lighting). Construction phase lighting shall not be used.
- 7.13 The boundaries will be planted with hedges and trees to improve connectivity and foraging. This is detailed within the Biodiversity Net Gain Assessment.

Nesting Birds

Potential Impacts

- 7.14 Where shrubs and trees are to be removed, there is a chance of nesting birds being disturbed. It is highly unlikely that ground nesting birds would be disturbed.

Avoidance, Mitigation and Compensation

- 7.15 Any tree, hedge or scrub removal shall be carried out outside of nesting season (March-August inclusive) and in any case shall be preceded by a check to ensure no nests are present. If this is not possible, a more detailed inspection and dependent on the results of this, monitoring would be necessary by an ecologist to confirm no nests are present or likely to be concealed.
- 7.16 Any active nests must be afforded a 5.0 m buffer from any works or other disturbance, until such time that the chicks within have fledged and the nest is no longer in active use.

Reptiles and Amphibians

Potential Impacts

- 7.17 The cutting of the grass to enable construction may harm individual reptiles or amphibians, and result in a loss of reptile and amphibian potential at the site. The risk is moderate at the site level; however the overall impact would not extend beyond the individual animals themselves. The risk of disturbing or harming GCN is considered to be negligible.

Avoidance, Mitigation and Compensation

- 7.18 Given the small area of the site, the fact that the surroundings are not highly suitable and offer limited dispersal opportunities, and the small nature of proposals, a full survey and translocation exercise is not considered proportionate. Mitigation can be undertaken using management techniques with minimal risk of harm.
- 7.19 The long grassland shall be subject to a two-phase cut; an initial cut shall take the grassland down to c.100mm and remove the thatch present; this shall be undertaken very slowly with arisings removed from the habitat. Following this, after a 24 hour pause to allow any wildlife to vacate, the grass shall again be cut slowly down to c.50mm, and then subject to clearance with an excavator. Any reptiles found shall be relocated to the margins. No vehicles shall traffic over uncut areas. The initial vegetation cut can be undertaken without supervision, but the second cut and clearance shall be under ecological supervision such that the method can be varied dependent upon findings, and reptiles can be safeguarded. Clearance shall utilise a toothed bucket, operated in a slow methodical manner. All cutting and clearance shall operate from the north and out towards the south and east, encouraging reptiles into the margins and adjacent land.
- 7.20 Following works, the margins shall be planted as boundary hedges, with log piles, compost piles and a hibernaculum added to compensate for the very minor loss of reptile habitat. Where possible, boundaries shall be 'soft' i.e. hedges and shrubs, or post and rail/wire fences rather than walls or closeboard fences, as these restrict access to the garden margins.

Dormice

Potential Impacts

- 7.21 It is highly unlikely that dormice would be present or disturbed, although given some limited canopy connectivity over Long Copse Lane to the north, where dormice are recorded, precaution is advised.
- 7.22 Given the extremely small areas of habitat being removed and very low risk, in accordance with the Dormouse Conservation Handbook, further survey is not considered appropriate. A method of clearance of shrubs, hedges and small trees follows that would minimise the already very low risk of harm to dormice:
- The vegetation must first be subject to a detailed 'nest and nut' check by an ecologist, searching for any evidence of dormice. Should any evidence be found or suspected, a licence may be necessary and works will not proceed until the ecologist has advised further.
 - Any pruning back or removal of scrub, shrubs and hedges must be undertaken manually using hand tools. Such vegetation should be cut down to c.150mm height initially. This can be undertaken at any time of year but must be supervised by an ecologist searching for dormouse nests and chewed nuts.
 - Stumps and scrubby margins can be used for hibernation and shall be left undisturbed between November-March inclusive.

Other

- 7.23 There is a low possibility of hedgehogs being disturbed in long grassland. The cutting regime proposed for reptiles would protect these as would good site maintenance. The grass must be kept maintained prior to development to prevent shelter or hibernation habitats from forming. Materials shall not be stored on the grassland and any shrub borders etc. must be properly removed before use of such areas for construction or storage.

8.0 Ecological Enhancements

8.1 In accordance with current Local Plan Policy, the proposals must achieve mandatory BNG, and should aim to achieve other gains. The most beneficial enhancements would involve the following:

- Installation of new bat roost features to the trees, such as a bat box (over and above the box required for mitigation); integration of at least 1no. bat box into each dwelling;
- Installation of bird nesting features to the boundaries such as an open nest box; integration of at least 1no. bird box into each dwelling, preferably a mixture of features suited to swifts, house sparrows and other passerines;
- Enhancement of the boundaries with native hedge, shrub and tree planting to fill existing gaps; species such as guelder rose *Viburnum opulus*, crab apple *Malus sylvestris*, hawthorn *Crataegus monogyna*, rowan *Sorbus aucuparia*, silver birch *Betula pendula*, field maple *Acer campestre* and alder buckthorn *Frangula alnus* should be added to provide ecological value not currently present;
- Creation of flowering lawn areas with trees to the frontages, to provide insect resource and therefore a resource for birds, bats, mammals and reptiles;
- Addition of bee bricks to the dwellings, and log piles to the corners of site.

9.0 Conclusions

- 9.1 The proposal area consists of a dwelling and surrounding gardens and driveway. The dwelling contains day roosts of soprano pipistrelle and brown long-eared bats. Mitigation is proposed to ensure these are not harmed by proposals. **A mitigation licence must be obtained prior to any works commencing.**
- 9.2 The proposals could negatively impact upon protected species of reptiles, birds, small mammals and amphibians, but these impacts will be avoided with mitigation and avoidance measures.
- 9.3 No significant effects are anticipated upon designated sites, provided the standard mitigation for recreational and nutrient impacts are provided.
- 9.4 When mitigation has been taken into account, the proposals are not considered to have a negative impact upon designated sites, habitats or protected species. Enhancements and a Biodiversity Net Gain Assessment are included to confirm how ecological gains will be achieved.

10.0 References

- Bat Conservation Trust (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines. Third Edition. Available online: <http://www.bats.org.uk/pages/batsurveyguide.html>
- Bat Conservation Trust and Institution for Lighting Professionals (BCT/ILP, 2023). Bats and Artificial Lighting at Night. Available online: <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>
- British Standards Institution. (2013). BS 42020:2013 Biodiversity –Code of practice for planning and development. London: BSI Joint Nature Conservation Committee (JNCC 2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. Available online: <http://jncc.defra.gov.uk/page-2468>
- CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM (2020) Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management. Winchester, UK.
- CIEEM (2021) Bat Mitigation Guidelines, Beta Version 1.0. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM (2022) Guidelines for Ecological Impact Assessment, 1st edition, Revision 1.02. Chartered Institute of Ecology and Environmental Management, Winchester.
- East Hampshire District Council (2021). Biodiversity and Planning Guidance. Available online: <https://www.easthants.gov.uk/media/6296/download?inline>
- Joint Nature Conservation Committee (JNCC 2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. Available online: <http://jncc.defra.gov.uk/page-2468>
- MAGIC Interactive Map Tool (Accessed 7th November 2024): www.magic.gov.uk
- Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.
- Streeter, D. (2010). The Most Complete Guide to the Flowers of Britain and Ireland; Harper Collins, London.
- UK Hab Ltd. (2023). The Habitat Classification Version 2.0. Available online: <https://www.ukhab.org>

11.0 Species Lists

Modified Grassland

Common Name	Scientific Name	DAFOR
Bird's-foot Trefoil	<i>Lotus corniculatus</i>	R
Cocksfoot	<i>Dactylis glomerata</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	LF
Creeping Cinquefoil	<i>Potentilla reptans</i>	O
Daisy	<i>Bellis perennis</i>	LF
Field Forget-me-not	<i>Myosotis arvensis</i>	LF
Oxeye Daisy	<i>Leucanthemum vulgare</i>	R
Pendulous Sedge	<i>Carex pendula</i>	R
Perennial Rye-grass	<i>Lolium perenne</i>	D
Red Fescue	<i>Festuca rubra</i>	LF
Selfheal	<i>Prunella vulgaris</i>	O
Smooth Scab-thistle	<i>Sonchus oleraceus</i>	O
Sorrel	<i>Rumex acetosa</i>	O
White Dead-nettle	<i>Lamium album</i>	R
Yarrow	<i>Achillea millefolium</i>	F
Yorkshire Foxtail	<i>Holcus lanatus</i>	LF

Modified Grassland - Waterlogged Tall Sward with Tall Forbs

Common Name	Scientific Name	DAFOR
Cut-leaved Bramble	<i>Rubus laciniatus</i>	R
Ground Ivy	<i>Glechoma hederacea</i>	LA
Hard Rush	<i>Juncus inflexus</i>	LF
Hogweed	<i>Heracleum sphondylium</i>	R
Ivy	<i>Hedera helix</i>	LF
Ragwort	<i>Senecio jacobaea</i>	R
Square-stalked St. Johns-wort	<i>Hypericum tetrapterum</i>	R
Violet	<i>Viola sp.</i>	O
Wood Avens	<i>Geum urbanum</i>	LF
Wood Brome	<i>Brachypodium sylvaticum</i>	O

Introduced Shrubs and Herbaceous Plants

Common Name	Scientific Name	DAFOR
Bay Laurel	<i>Laurus nobilis</i>	LD
Buddleia	<i>Buddleia davidii</i>	R
Cherry Laurel	<i>Prunus laurocerasus</i>	LD
Cosmos	<i>Cosmos sp.</i>	R
Dogwood	<i>Cornus sp.</i>	LF
Forsythia	<i>Forsythia sp.</i>	R
Goldenrod	<i>Solidago sp.</i>	LF
Himalayan Cotoneaster	<i>Cotoneaster simonsii</i>	LD
Honeysuckle	<i>Lonicera sp.</i>	R
Japanese Laurel	<i>Aucuba japonica</i>	R
Lavender	<i>Lavandula angustifolia</i>	O
Periwinkle	<i>Vinca minor</i>	LA
Pieris	<i>Pieris japonica</i>	R
Rhododendron	<i>Rhododendron ponticum</i>	LD
Spiraea	<i>Spiraea sp.</i>	O
Spurge Laurel	<i>Daphne sp.</i>	O
St. John's Wort	<i>Hypericum sp.</i>	R
Variegated Holly	<i>Ilex sp.</i>	R
Wild Strawberry	<i>Fragaria vesca</i>	O

Trees, Scrub and Hedges

Common Name	Scientific Name	DAFOR
Ash	<i>Fraxinus excelsior</i>	R
Beech	<i>Fagus sylvatica</i>	F
Bramble	<i>Rubus fruticosus agg.</i>	LF
Camellia	<i>Camellia japonica</i>	O
Cherry Laurel	<i>Prunus laurocerasus</i>	LD
Cherry Plum	<i>Prunus cerasifera</i>	R
Crab Apple	<i>Malus domestica</i>	R
Field Maple	<i>Acer campestre</i>	R
Hawthorn	<i>Crataegus monogyna</i>	R
Hazel	<i>Corylus avellana</i>	R
Holly	<i>Ilex aquifolium</i>	R
Magnolia	<i>Magnolia stellata</i>	O
Pedunculate Oak	<i>Quercus robur</i>	LF
Silver Birch	<i>Betula pendula</i>	O
Weeping Willow	<i>Salix x sepulchralis</i>	R
Yew	<i>Taxus baccata</i>	R

12.0 Appendix A - Site Photos

Photo 1 –View of the dwelling from the north looking from to the access point.



Photo 2 –View of the dwelling from the south-east.



Photo 3 –View inside the main loft.



Photo 4 –Scattered bat droppings in the main loft.



Photo 5 –Scattered bat droppings in the garage loft.



Photo 6 –The roof void in the boat garage,



Photo 7 –Mature oaks, rhododendron, hedge and grassland to the northern boundary.



Photo 8 –Western boundary with cotoneaster hedge.



Photo 9 –Eastern boundary shrubs.



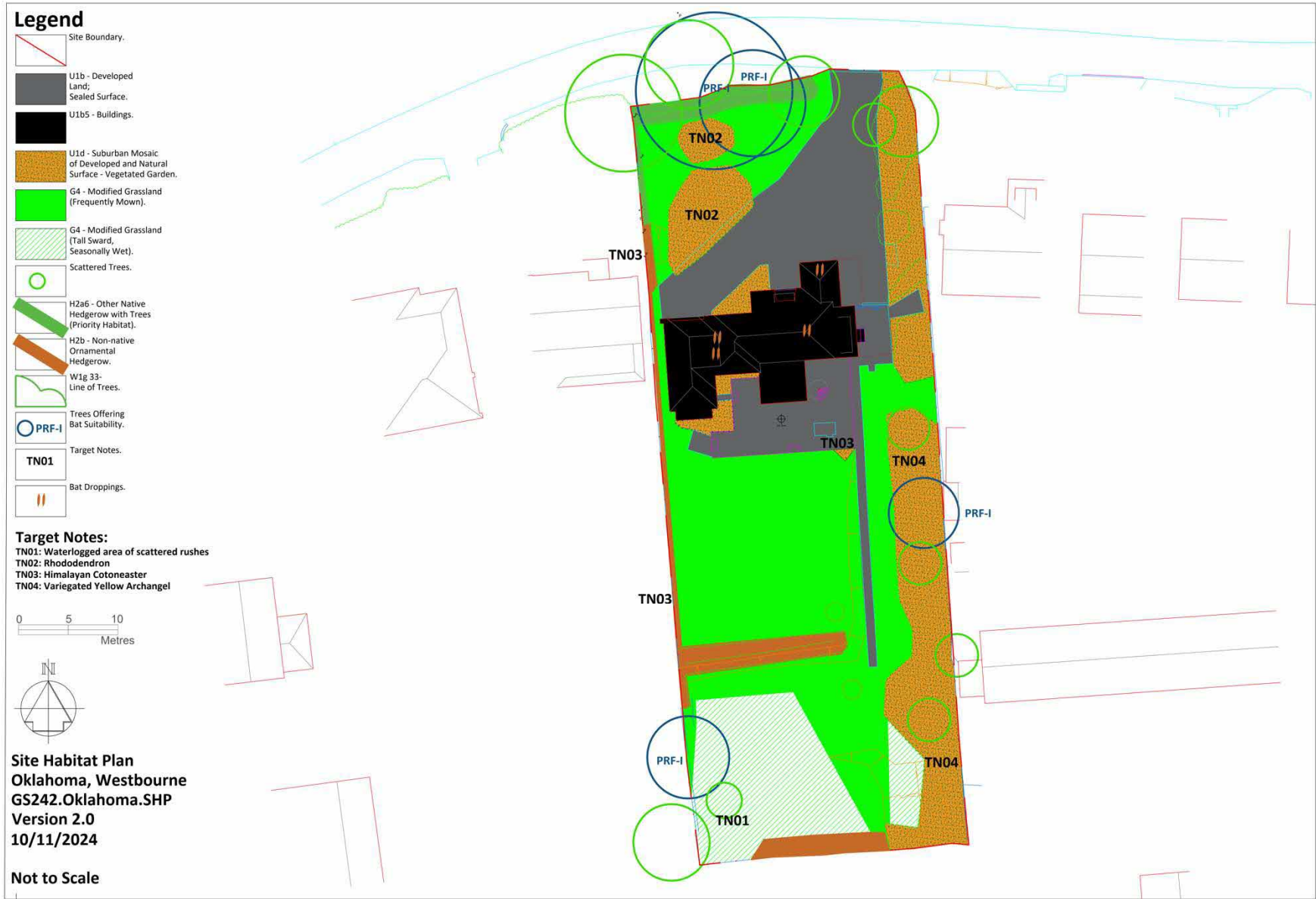
Photo 10 –Southern portion of site, with rank waterlogged grassland and treeline.



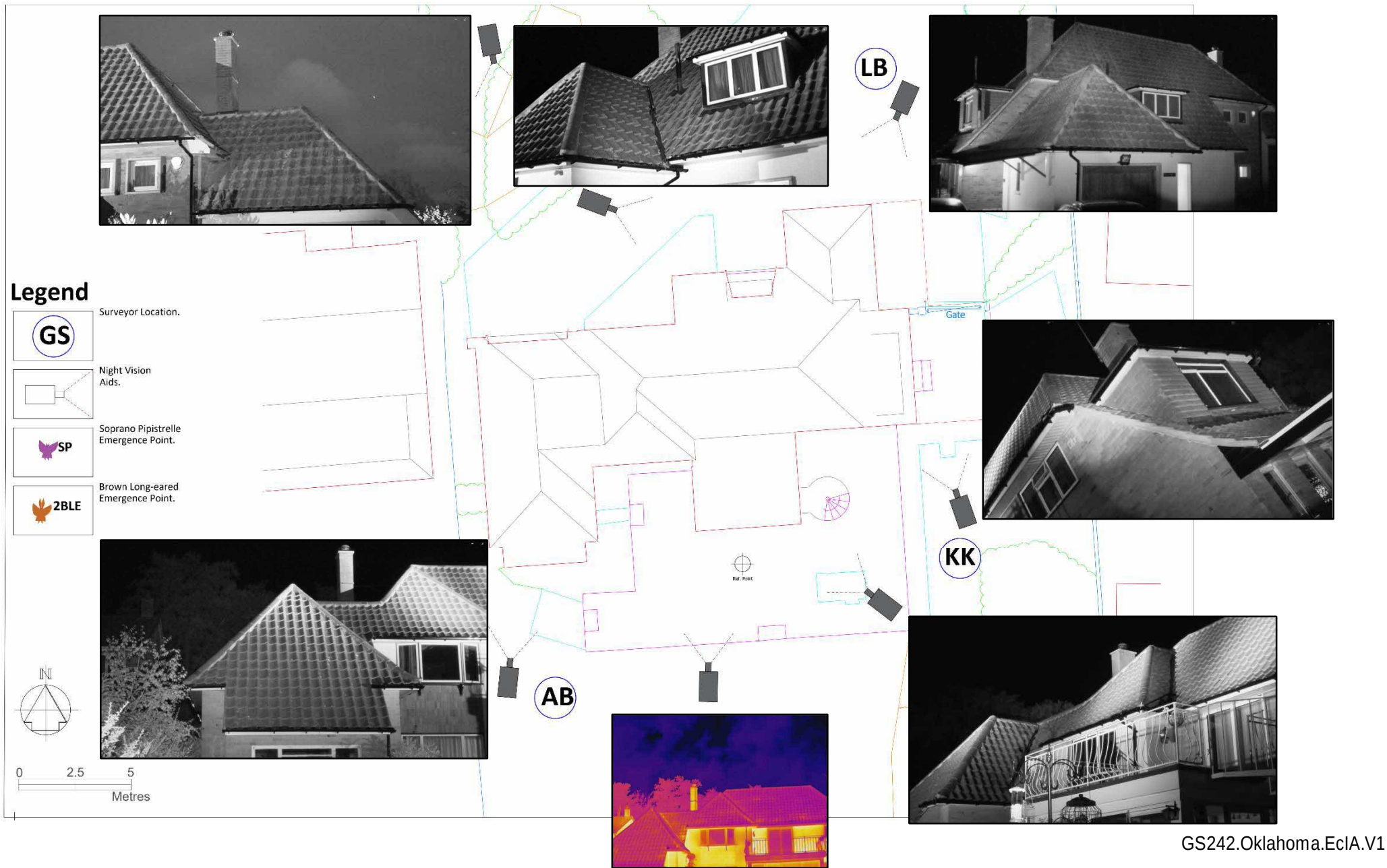
13.0 Figure No. 01 –Site Aerial



14.0 Figure No. 02 –Site Habitat Plan



15.0 Figure No. 03 –Bat Survey Plan, 21/06/2024



16.0 Figure No. 04 –Bat Survey Plan, 10/07/2024



17.0 Figure No. 05 –Bat Survey Plan, 31/07/2024

