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Preliminary Ecological Appraisal & Biodiversity Net Gain Report

Land West of Brook Lane

Prepared for: Mark Durrant

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Summary

Item	Description
Site Address:	Land West of Brook Lane, Botley, Hampshire, SO30 2ER
Survey effort:	- Preliminary Ecological Appraisal (PEA) Survey - Biodiversity Net Gain (BNG) Assessment
Survey date:	- PEA & BNG Survey – 19/02/2025
Surveyors:	Daniel Howgego – GCN licence (2022-10345-CL08-GCN), Bat licence (2024-11950-CL17-BAT), accredited under Hazel Robson (Bat licence ref 2015-10504-CLS-CLS)
Evidence of protected species/habitats found?	- No evidence of protected species or habitats within the site. - Suitable habitat for nesting birds, reptiles, GCN, and badgers adjacent to the site. - Outlier badger sett within the scrub adjacent to the site (>30m from the proposed house location)
Further survey required?	- No further surveys required. - The Avoidance Measures (Section 4.4) must be adhered to during the development to mitigate any impacts.
National Planning Policy Framework (NPPF) 2024, Paragraph 186	- No significant harm to biodiversity will occur because of the development. - No impacts to an SSSI will occur because of the development. - No irreplaceable habitats will be lost or damaged because of the development. - Biodiversity will be enhanced on the site (see below).
Date of Metric Calculation	- 12/03/2025
Date the Metric was Published (Statutory Metric)	- 12/02/2024
Baseline Value On-Site	- 0.03 Habitat Units & 0.00 Hedgerow Units
Has there been any Habitat Degradation On-Site?	- No
Are there Irreplaceable Habitats On-Site?	- No
Biodiversity Net Gain, Schedule 14 of the Environment Act 2021	- Project is exempt under the self-build application defined in section 1(A1) of the Self-build and Custom Housebuilding Act 2015
Opportunities for ecological enhancement: (See section 4.5)	- 1x Bat box - 1x Bird box & 1x Swift brick - Insect bricks - Native species planting

Document Control

Status	Version	Name of Author/Reviewer	Date
Draft	V1	Daniel Howgego BSc (Hons), MSc, ACIEEM	08/03/2025
Technical Review	V1	Daniel Howgego BSc (Hons), MSc, ACIEEM	12/03/2025
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The recommendations in this report represent Aware Ecology Ltd's professional opinions regarding the duty of care required of an experienced Ecological Consultant. The information has been prepared using industry-accepted ecological resources, academic background, and professional attention; no specific warranty is provided as to the precision of the background data.

Aware Ecology Ltd does not guarantee that the site is free of protected species or that the proposed client works will not negatively impact protected species or designated sites within or outside the site boundary. This report's recommendations aim to minimise any impact on protected species or designated sites and provide advice on the steps required to complete the work legally.

This report's findings are based on conditions observed during the survey, and updated advice should be sought if more than two years have elapsed.

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1 Introduction

1.1 Background

Aware Ecology Ltd was commissioned by Mark Durrant to undertake a Preliminary Ecological Appraisal (PEA) & Biodiversity Net Gain (BNG) assessment at 'Land West of Brook Lane, Botley, Hampshire, S030 2ER' (hereafter referred to as 'the site' or 'site'). This aims to assess the likelihood of any Protected Species or habitats being affected by the proposed works and calculate the site's potential to achieve a 10% net gain in biodiversity. So that the Local Planning Authority can consider any potential impacts as part of their decision-making process.

It is understood that planning approval is sought to construct a single dwelling within the site.

1.2 Site Description

The plot is at the national grid reference SU 50563 12797 in Botley, Hampshire. It is within a semi-rural landscape on the outskirts of Botley. Other dwellings, barns and extensive gardens surround it. The broader landscape comprises farm buildings, residential areas, arable and pastoral fields, treelines, mature hedgerows and woodland. A small unnamed watercourse (i.e. rivers) flows 250m northeast of the site, whilst there are no waterbodies (i.e. ponds) within 500m of the site. The priority habitats of deciduous woodland, floodplain grazing marsh, good quality semi-improved grassland, lowland calcareous grassland, lowland meadows and purple moor grass pastures are within 1km of the site. Some of the woodland is classed as ancient woodland, including Gould Copse to the south.

Figure 1. Location of the proposed development

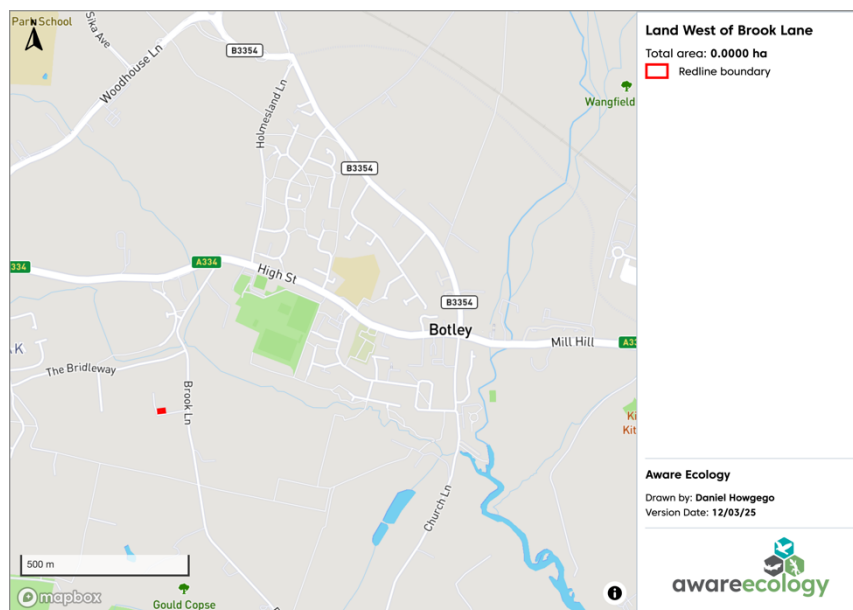


Figure 2. Redline boundary of the proposed development

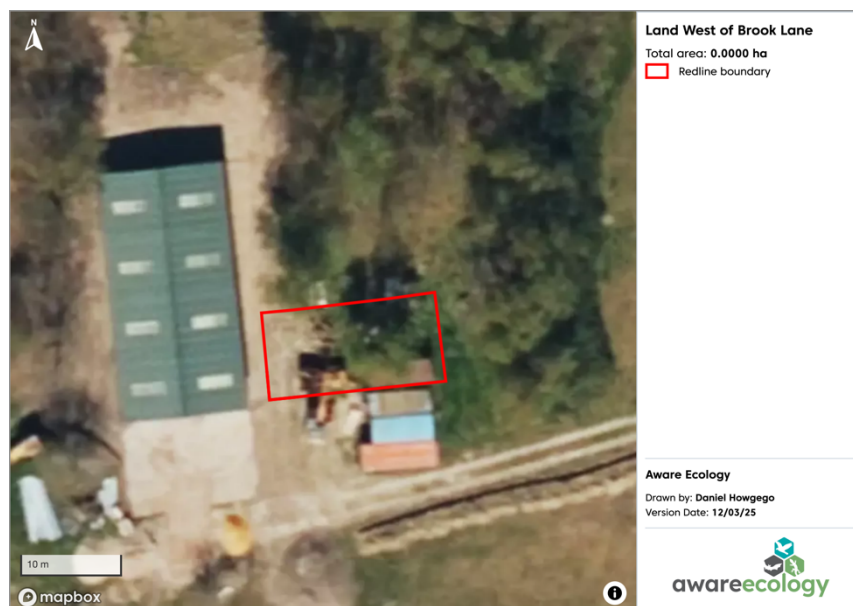


Figure 3. Overview of the site



1.3 Legislative / Planning Context

The legislation (outlined in Section 5), combined with the *National Planning Policy Framework (NPPF) 2024* and local councils' planning policies (including their BAP), places a further obligation on Local Planning Authorities (LPA) to consider impacts on biodiversity when assessing any development proposals. Specifically, they need to ensure that impacts on any protected species are adequately evaluated and, where necessary, addressed with suitable avoidance, mitigation, or compensatory measures to maintain the favourable conservation status of the species. So, to avoid an offence under the *Conservation of Habitats and Species Regulations 2010*. This means sufficient data is required to categorise the type and size of any roost, sett, breeding, or resting area (etc.) affected by the development proposal before seeking planning consent so that the LPA can consider this part of their decision-making process.

The ODPM circular 06/2005 provides guidance on applying the law relating to planning and nature conservation as it applies in England, complementing the NPPF.

Biodiversity Net Gain (BNG) is a strategy which requires developers to deliver a 'net gain' of 10%; this is principally set out under Section 90A and Schedule 7A (Biodiversity Gain in England) of the *Town and Country Planning Act 1990*. It was inserted into the act by Schedule 14 of the *Environment Act 2021* and became mandatory on the 12th of February 2024.

Policy DM11 of the Eastleigh Borough Local Plan 2016 – 2036 also outlines that development proposals should conserve, restore, and enhance the county's biodiversity and geodiversity assets.

1.4 Biodiversity Net Gain (BNG)

The proposed project will **NOT** be subject to BNG under *Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021)*. The development is exempt under the self-build and custom application defined in section 1(A1) of the Self-build and Custom Housebuilding Act 2015. Therefore, the development has no legal requirement to deliver a BNG of 10%.

The biodiversity net gain is measured using the Statutory Metric published by DEFRA (2024), which measures the net gains in 'biodiversity units'. The aim is for development to achieve a measurable net gain in biodiversity. It follows the 'mitigation hierarchy' process of first avoiding and minimising biodiversity loss and providing positive habitat intervention, resulting in a net improvement to biodiversity.

The good practice principles for biodiversity net gain are set out in Table 1.1 of Biodiversity Net Gain: Good Practice Principles for Development (Baker et al. 2019). The fundamental principles include:

- Apply the 'Mitigation Hierarchy' (in line with CIEEM Guidelines for Ecological Impact Assessment (EcIA)) (CIEEM, 2018) and be 'additional' by achieving outcomes that exceed existing obligations.
- Avoid losing biodiversity which cannot be off-set elsewhere (e.g. irreplaceable habitats)
- Address risk (e.g. difficulty of achieving habitat creation/enhancement for net gain)
- Make a 'measurable' net gain contribution (e.g. calculated using an appropriate metric) and ensure that calculations are consistent and transparent (i.e. limitations and assumptions are identified)
- Ensure that net gain design achieves the best outcome for biodiversity (this may require quantitative and qualitative assessment) and create a net gain legacy for long-term benefits.

1.5 Scope of Use

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The findings in this report are based on conditions observed during the survey. If more than two years have passed, updated advice should be sought. The survey and report follow the CIEEM Guidelines for Preliminary Ecological Appraisal, Second Edition, December 2017, and BS42020.

1.6 Legislation

1.6.1 Designated Sites

Under the Wildlife and Countryside Act 1981 (as amended), it is an offence to carry out or permit to be carried out any operations likely to damage the SSSI. These operations are listed in the SSSI notification. Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 of the Wildlife and Countryside Act 1981 (as amended) before undertaking operations likely to damage a SSSI.

1.6.2 Protected and Notable Species

European Protected Species (i.e. Bats, Great Crested Newts, Hazel Dormouse, Otter), are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill an animal; deliberately disturb an animal; or damage or destroy a breeding site or resting place used by an animal.

Deliberate capture or killing includes “accepting the possibility” of such capture or killing. Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.

Where development works risk causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal. These species are also protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb an animal in such a place.

Lower levels of disturbance not covered by the Conservation of Habitats and Species Regulations 2017 remain offences under the Wildlife and Countryside Act 1981, although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

Under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), common reptile species are protected against intentional killing and injury. However, a licence is not required when development works affect these species. Instead, reptiles should be protected from any harm that might arise during the development works through appropriate mitigation.

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), with some species afforded greater protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). It is illegal to kill, injure or ‘take’ any wild bird, take or damage the nest of any wild bird whilst in use or being built. In addition to these protections, Schedule 1 birds and their young must not be disturbed at the nest. There are no licensing purposes that explicitly cover activities affecting wild birds.

Badgers and their setts are protected under the Protection of Badgers Act 1992. This makes it an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.

It is not illegal to carry out disturbance activities near unoccupied setts, i.e., those that do not show signs of current use. When assessing the requirement for a licence in respect of development, badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.

Under the Wildlife and Countryside Act 1981, it is an offence to plant, or otherwise cause to grow, a plant in the wild at a location outside its native range.

2 Methods

2.1 Desk Study

The MAGIC website was reviewed to obtain records of any statutory and non-statutory designated sites for bats within 5km of the development and any other statutory and non-statutory designated sites within 2km.

The NBN Atlas was searched for records of protected and notable species within 1km of the site. Bat records were provided within 5km of the site. This buffer zone was deemed sufficient based on CIEEM guidelines, The BCT Guidelines (Collins (ed), 2023), The Dormouse Conservation Handbook (Bright, P. *et al*, 2006) and The Great Crested Newt Conservation Handbook (Langton T. *et al*, 2001). MAGIC Maps was also reviewed for any records of granted protected species licences within 1km of the site.

A local planning portal search was undertaken, which involved looking for other sites within the same postcode area with bat surveys submitted as a part of their planning applications.

In addition, the following sources were consulted to gather ecological information on habitats such as waterbodies and woodlands:

- Ordnance Survey 1:25,000 mapping

- Aerial Imagery (Google Maps)
- MAGIC Map

2.1.1 Zone of Influence (ZOI)

The zone of influence of a project refers to the area beyond the site boundary that may be affected by the work being carried out. The impacts of the works for this project are unlikely to extend beyond the site boundary.

Survey work concentrated on the habitats within the red line boundary and protected species signs within 30m of the boundary. Desktop data checks were assessed up to 5km from the red line boundary.

2.2 Site Inspection

A field survey was conducted on 19/02/2025. This visit included a thorough site assessment of the survey area within the red line boundary to identify the habitats present and a 30m buffer for signs of protected species.

The survey area was evaluated for the potential presence of any protected or notable species that might be encountered on the site, given the geographical region and habitats within or adjacent to it. Features of protected or notable species (e.g., potential badger setts) have been identified as Target Notes (TN) where appropriate.

2.2.1 Habitat

A field survey of habitats within the survey area was conducted. Any habitats present were further defined using the latest UKHab Classification System (UKHab) (UKHab 2023) to define primary habitats and their secondary codes using the UKHab Habitat Key. It must be noted that introduced species and garden varieties are not always identified.

2.2.2 Bats

2.2.2.1 Daytime Survey

Any suitable trees or buildings were visually inspected using binoculars and a high-powered torch where necessary to facilitate a more detailed inspection of individual features.

Details of any potential roost features (PRFs), such as holes, crevices or internal voids that roosting bats could use, were recorded and photographed. A search was also made for any evidence of bat presence, such as droppings or feeding remains, and any such field signs were noted.

The assessment of suitability for bats was based on the professional judgement and experience of the ecologist in recognising evidence of bats and features that provide suitable roosting conditions but followed the framework set out in current good practice guidelines published by the Bat Conservation Trust (Collins (ed), 2023). This framework is based on the number, location and type of any potential roost features found and the surrounding habitat. The categories for structures include **none**, **negligible**, **low**, **moderate** or **high potential**, whilst for trees, the categories are **none**, **PRF-I**, **PRF-M** or **confirmed roost** where direct evidence of bats is found (Table 1).

Table 1. Bat Roost Suitability Assessment Criteria (Collins (ed), 2023)

Suitability for Bats	Description	Habitat Description
None	No features on-site likely to be used by a roosting bat at any time of the year.	No habitat features on-site likely to be used by foraging/commuting bats at any time of the year.
Negligible	A structure/tree with no obvious features suitable for use by roosting bats. However, a small uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on-site are likely to be used as flight paths by foraging bats. However, some uncertainty remains to account for the non-standard behaviour of bats.
Low (PRF-I)	A structure/tree with one or more potential roost features that could be used by individual bats opportunistically, but without sufficient shelter or connectivity to foraging habitats to be used regularly by large numbers of bats. <i>(Not suitable for maternity or hibernation use.)</i>	Isolated habitat that could be used by a small number of bats as flight paths (gappy hedgerows/unvegetated stream). Suitable but isolated habitat that could be used by foraging bats (lone tree/scrub patch).
Moderate	A structure/tree with one or more potential roost features that could be used by bats but is unlikely to support a roost of high conservation status. <i>(Unlikely to support maternity or hibernation use.)</i>	Continuous habitat connected to the wider landscape providing suitable flight paths or foraging (lines of trees/scrub, back gardens, water course, grassland)
High (PRF-M)	A structure/tree with one or more potential roost features that provide conditions that are obviously suitable for use by larger numbers of bats and potentially for long periods. <i>(i.e. suitable for maternity or hibernation)</i>	Continuous high-quality habitat that is well connected to the wider landscape, which is used regularly by foraging/commuting bats (river valleys, streams, hedgerows, lines of trees, woodland edges, grazed parkland).

		The site is close to/connected to known roosts.
Confirmed Roost	A structure/tree with direct evidence of bat presence, or an existing record of a roost	

2.2.3 Birds

The site was assessed for any habitat that nesting birds might use, and any signs of nesting activity were recorded.

Bird species use buildings, trees and shrubs, undergrowth, or open fields for nesting. Therefore, all these features were considered. Along with these nesting features, any features that may provide shelter for overwintering birds and/or foraging for Schedule 1 birds were also considered.

2.2.4 Great Crested Newts

The suitability of any aquatic and terrestrial habitat on or near the site was assessed for use by Great crested Newts (GCN) (*Triturus cristatus*). GCNs travel up to 500m between breeding ponds using suitable terrestrial habitats. Therefore, ponds up to 500m away from the site were identified using OS maps and aerial imagery, and connectivity to the site was also considered.

A suitable terrestrial habitat offers cover and foraging opportunities and includes meadows, rough grassland with tall sward height, scrub, woodland, or mature gardens. Hedges, ditches, stone walls, old farm buildings, piles of loose stone or rock, rabbit burrows, and small mammal holes also contribute to a 'good' terrestrial habitat.

2.2.5 Reptiles

During the site visit, any features that reptiles may use for basking (e.g., south-facing slopes), hibernation (e.g., walls, piles of hardcore/wood), and foraging (e.g., rough grassland/scrub) were assessed. Many common reptiles have similar requirements for all the above features; however, certain reptiles also have some more specific requirements (Table 2).

Table 2. List of reptiles with specific habitat requirements (*Beebee and Griffiths, 2000*)

Species	Habitat Requirement
Common Lizard (<i>Zootoca vivipara</i>)	Can be found from woodland opening to pastures and walls to brownfield sites
Slow Worm (<i>Anguis fragilis</i>)	Like common lizards, as well as rank grassland, gardens, and derelict land
Grass Snake (<i>Natrix helvetica</i>)	Like common lizards, but also require wetland habitats for foraging
Adder (<i>Vipera berus</i>)	Require open habitats with some cover, usually associated with dry heathland

2.2.6 Badgers

Checks were undertaken to identify any areas within the surrounding land that may be used by Badgers (*Meles meles*) for foraging and sett digging. These signs may include setts, foraging pits, pathways, and latrines.

Badger setts can be classified as Main Sett, Annex Sett, Subsidiary Sett and Outlier Sett. The classification of a sett may change over time. Some setts may become abandoned by badgers and fall out of use. Or badger territories may change, and a non-main sett (e.g. annex, subsidiary or outlier) may be upgraded by being converted into a main sett.

2.2.7 Dormouse

Surrounding habitats were assessed for their general suitability by Dormouse (*Muscardinus avellanarius*). Dormice generally use areas of dense woody vegetation. They are most likely to be found where there is a wide diversity of woody species contributing to three-dimensional habitat complexity, several food sources, plants suitable for nest-building material and that have good connectivity to other areas of suitable habitat. Records for dormice within 2km of the site were also checked on the NBN atlas.

Records for Harvest Mice (*Micromys minutus*) have also been checked due to the population decline. They are now a Biodiversity Action Plan (BAP) listed species. Harvest Mice are active climbers and feed in the stalk zone of long grasses and reeds, where they weave nests 30cm above the ground in dense vegetation (such as grasses, rushes, grassy hedgerows and brambles).

2.2.8 Barn Owl

The site was surveyed to assess the foraging potential for Barn Owls (*Tyto alba*) and any potential roosting and/or breeding sites they may use. Barn Owls need a mixed habitat with a large amount of rough grassland/field margins with a thick enough thatch layer to provide suitable shelter for their main prey (field voles) and suitable roosting/nesting locations within 3-6km.

2.2.9 Other Protected Species

Any other protected species (e.g., otter, water vole) were not surveyed because the nature of the works will not impact suitable habitats for them, as there are no suitable ponds/waterbodies on the site or within 250m of the red line boundary.

2.2.10 Invasive Non-Native Species (INNS)

The site was checked for signs of INNS, including flora and fauna.

2.3 Biodiversity Net Gain

2.3.1 Baseline Data

The site is divided into habitat parcels based on the UK Habitat survey map. The respective areas (in hectares) of each habitat parcel and the respective lengths (in kilometres) of linear features are calculated in Geographical Information System (GIS) mapping software and entered into the calculator tool. The Statutory Biodiversity Metric calculator tool utilises the UK Habitat Classification System (UKHab) as the standard data input for habitats.

Each habitat or linear feature recorded is assigned a score for 'Distinctiveness', 'Condition', and 'Strategic Significance':

- Distinctiveness—An automated score based on the type of habitat present and its wildlife value. Highly diverse habitats, such as those listed as Habitats of Principal Importance under the NERC Act (2006) or Annex 1 habitats in the Habitats Directive (1992), score highly in this category, while highly modified and low-diversity habitats, such as arable crops, will have low distinctiveness scores.
- Condition – A score based on the quality of the habitat parcel. Habitat condition values used in this report refer to the habitat condition tables included in this report.
- Strategic significance – A score based on information set out in local plans or policies. The value of each habitat parcel (or linear feature) is presented in terms of habitat (or hedgerow) units.

2.3.2 Proposed Habitat Data

The future baseline conditions within the site are based on the proposed site plan drawing, with the client confirming certain aspects of the design drawing habitats that were not obvious. The future baseline is initially overlaid on the existing baseline to calculate the area of habitats to be lost, retained and enhanced. This is used to calculate the gross biodiversity change within the site. New target habitat types, 'distinctiveness' and 'condition' values are subsequently assigned for all proposed habitats on site, taking account of any habitat creation and outline proposals detailed in the most up-to-date documents provided by the client. As the calculation of target habitats requires some degree of prediction based on professional judgment, additional risk factors are included to account for the difficulty in restoring or creating habitats.

The metric includes a 'Street tree helper', which allows individual trees which fall outside of areas of scrub woodland and hedgerows to be converted to an area (in hectares) for inputting into the metric. Trees are categorised as 'small', 'medium' or 'large' and are automatically assigned an area using the Street Tree Helper based on their size class. For this assessment, the size classes assigned are as follows:

- Small Trees (Trees identified as 'young' or 'semi-mature' and which are less than one-third of their life expectancy)
- Medium trees (Trees identified as 'early-mature' and which are one to two-thirds of their life expectancy)
- Large Trees (Trees identified as 'mature', 'over-mature' or 'veteran' and which are greater than two-thirds of their life expectancy or exhibit attributes of veteran trees)

2.4 Limitations to this Evaluation

The surveys were undertaken by an experienced ecologist following industry-standard good practice methodology.

The survey area was fully accessible, so a thorough site inspection could be completed to determine the habitat present within the site and the potential for protected/notable species to be present.

The survey was not carried out during the optimal period for habitat surveys (April to September). Therefore, some plant species (including INNS) may have been missed because they were not in evidence (present as seeds or underground parts), inconspicuous, or impossible to identify. However, sufficient plant species were visible to confidently assess the ecological value of the present habitats.

The preliminary view of whether protected species might occur on the site is based on the suitability of the habitat, the known distribution of relevant species in the local area (from online sources and desk study), and any signs of the relevant species noted. It does not constitute a full and definitive survey of any protected species group.

Field signs for protected and valuable species are often difficult to find or absent from a site. The survey was not intended to be a comprehensive presence/absence survey for all species but rather to indicate the likely presence of such species based on the field signs found and the nature of the habitats present.

Based on the conditions encountered during the fieldwork and the results achieved, the survey presents a robust assessment of the likelihood of use by protected species. It is sufficient to inform mitigation requirements for the current proposals. The overall impact on biodiversity will likely be localised and of low significance.

However, it should be noted that while every effort has been made to provide a comprehensive description and survey of the site, no investigation could ensure the complete characterisation and prediction of the natural environment during a 'snapshot' study. The assessment may also not have identified species that use the site seasonally.

2.5 Survey Team

Daniel Howgego, ACIEEM, led the assessment. He is an experienced ecologist with six years of experience in ecological consultancy. He holds a Natural England (NE) Class 1 GCN and Bat licence and is accredited under the NE & NRW Class 2 survey licence for bats.

As a member of the Chartered Institute of Ecology and Environmental Management (CIEEM), he is bound by its professional standards and code of conduct. He is also appropriately experienced for the assigned tasks based on the CIEEM competency framework (CIEEM, 2013).

3 Results

3.1 Desk Study

3.1.1 Designated Sites

There are five statutory designated sites within 2km of the proposed development site, and no statutory designated site for bats within 5km.

Table 3. Summary of statutory and non-statutory designated sites up to 5km from the site

Designated Site	Distance from Site (km)	Reason(s) for Designation
Statutory Designated Site		
Manor Farm LNR	0.6km S	The site contains abundant wildlife from roe deer in the woods to curlews along the river and skylarks in the fields, plus an amazing array of wildflowers, insects and reptiles.
Upper Hamble Estuary and Woods SSSI	1km SE	Upper Hamble Estuary and Woods Site of Special Scientific Interest comprises the uppermost section of the estuary of the River Hamble and its flanking zones of saltmarsh, reedswamp and ancient semi-natural woodland.
Solent & Southampton Water SAC, SPA and Ramsar	1km SE	Solent and Southampton Water is located on the south English coast. The 54 km ² area extends from Hurst Spit to Hill Head along the south coast of Hampshire, and from Yarmouth to Whitecliff Bay along the north coast of the Isle of Wight. The site comprises a series of estuaries and harbours with extensive mudflats and saltmarshes together with adjacent coastal habitats. The area also regularly supports at least 20,000 waterfowl.

The site falls within the SSSI Impact Risk Zone (SSSI IRZ) for Upper Hamble Estuary and Woods SSSI.

However, the SSSI IRZs indicate that at the location selected, the proposed development is unlikely to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin. Therefore, you do not need to consult Natural England on the likely impacts of development on terrestrial SSSIs and the SACs, SPAs or Ramsar sites they underpin.

3.1.2 Protected/Notable Species

The protected/notable species recorded within 1km of the site include Common Pipistrelle, Brown Long-eared Bat, Badger, Hedgehog, Slow Worm, Common Lizard, Grass Snake, Starling, Skylark and Swallow. It must be noted that the absence of records often results from under-recording within the given search area rather than the species itself being absent.

Within 1km of the site, the MAGIC website had one record of EPS-licensed projects (1 for bats), although it is unclear how up-to-date this database is. The EPS licences are shown in Table 4 below.

Table 4. Granted EPS licences within 1km of the site

Distance from Site	Orientation from Site	Date	Species Impacted	Roost Types Impacted
0.5km	East	2012	C-PIP	Resting Place (Destruction)

The planning portal search of sites in the proposed development's postcode area, shown in Table 4 below, returned no bat roost records.

3.2 Daytime Site Inspection

3.2.1 Habitat

The survey area was found to contain predominantly two habitat types as classified according to UKHab; these include:

- Modified Grassland (g4)
- Individual Trees (g4 - 200)

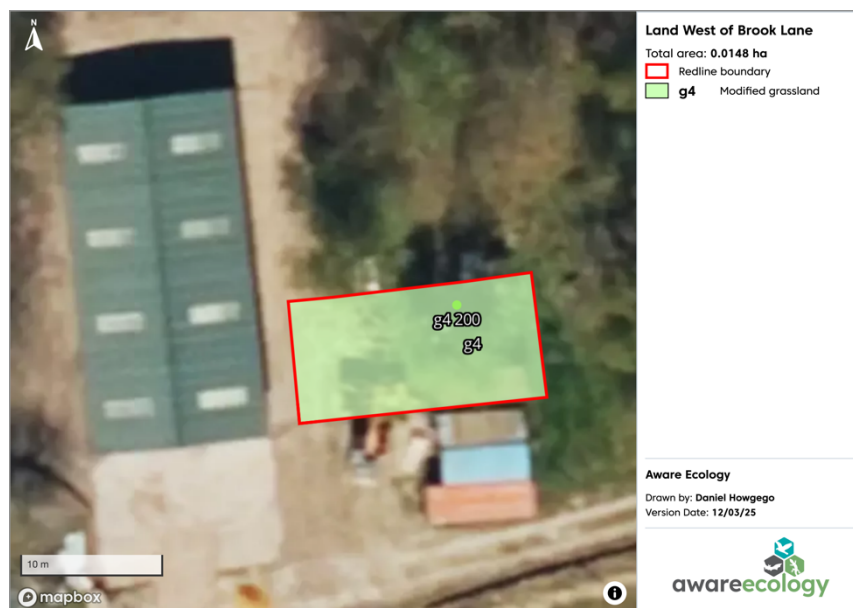
3.2.1.1 Modified Grassland (g4)

The site comprises a managed modified grassland growing on previously disturbed land. Therefore, it has a low sward height with areas of bare ground. There are <6 species per m²; these include Annual Meadow Grass (*Poa annua*), Cocksfoot (*Dactylis glomerata*), Ribwort Plantain (*Plantago lanceolata*), Bristly Oxtongue (*Helminthotheca echinoides*), Lesser Swine-cress (*Coronopus didymus*), Common Mouse-ear (*Cerastium fontanum*), Groundsel (*Senecio vulgaris*), Bramble (*Rubus fruticosus*) and Soft Rush (*Juncus effusus*).

3.2.1.2 Individual Trees (g4 - 200)

A single semi-mature Silver Birch (*Betula pendula*) tree is within the site boundary.

Figure 4. Baseline habitat map of the site



3.2.1.3 Habitat Degradation

No action was undertaken before the survey that would create any degradation of the habitats on-site.

3.2.2 Protected/Notable Species

3.2.2.1 Bats

The site does not contain buildings, and the single tree present does not provide a suitable roosting habitat. The tree is a semi-mature Silver Birch with no PRFs present. Therefore, it can be classified as having 'negligible' roosting potential.

The surrounding landscape offers moderate-quality foraging and commuting habitats. The site is connected to the wider landscape, which provides suitable flight paths or foraging areas (lines of trees/scrub, back gardens, watercourse, grassland).

Bat species recorded within 5km of the site include Brown Long-eared, Common Pipistrelle, Soprano Pipistrelle, Noctule, Natterer's, Whiskered, Serotine, and Daubenton's.

3.2.3 Birds

Due to the lack of vegetation cover within the site, there is limited nesting potential; however, there are suitable nesting opportunities within the surrounding area. During the survey, no nests were located.

3.2.4 Great Crested Newts

There are no ponds within 500m of the site, and the habitat within the site provides limited opportunities for foraging or transitional individuals. However, a suitable terrestrial habitat adjacent to the site has rough grassland and scrub.

Therefore, transitional individuals could use the surrounding land. However, there are no GCN records within 1km of the site.

3.2.5 Reptiles

The site provides sub-optimal habitats for dispersion, basking, and foraging, whilst the surrounding land would provide more suitable areas for reptiles within the scrub, rough grassland and woodland. Although there are limited

records of reptiles (15 records of Slow Worm, 1 record of Grass Snake and 4 records of Common Lizard) within 1km of the site, their presence cannot be discounted due to the suitability of the surrounding habitat.

3.2.6 Badgers

There was no evidence of badgers (e.g., setts, latrines, hair, and footprints) on the site; however, a potential 'Outlier Sett'¹ was recorded within the scrub approximately 20m to the east of the site (approx. 50.912432, -1.2821630). This showed no signs of recent activity during the survey visit. The tunnel leads away from the site into the earth bank and scrub.

There is one badger record within 1km of the site.

3.2.7 Dormouse

There are no dormouse records and no harvest mouse (BAP species) records within 1km of the site and the site doesn't contain any suitable habitats for these species.

3.2.8 Barn Owl

There was no suitable potential for breeding barn owls on-site, and the site doesn't contain any suitable habitat for foraging. There is a suitable foraging and breeding habitat for barn owls within the adjacent land.

3.2.9 Other Species

No other notable species were recorded on-site during the survey visit. The development would also not damage or disturb any areas used by otters or water voles.

3.2.10 INNS

There was no evidence of invasive non-native flora or fauna on the site.

4 Evaluation and Recommendations

4.1 Likelihood of Use by Protected Species

4.1.1 Birds

No active nests were found at the site during the survey. However, the habitat on-site and adjacent to the site boundary would provide suitable nesting opportunities, so nesting birds may be present during the next nesting season.

4.1.2 GCN & Reptiles

The site has a low-quality terrestrial habitat for dispersal, basking and foraging, which reptiles and GCN may use.

4.1.3 Badgers

There is a potential outlier sett approximately 20m from the proposed house location; whilst it showed no signs of recent badger use, it may be used during the summer months when badgers are more active.

4.1.4 Other Species

During the daytime survey, no other field signs were identified to indicate the presence of any other protected species within the vicinity of the site. However, there is a chance that transitional animals may pass through the site, and bats could use the crevices within the adjacent stone wall opportunistically.

4.2 Predicted Impacts of the Proposed Development

The current proposals will not impact any habitats of local importance, and the loss of the poor-quality modified grassland will not negatively impact any protected or notable species.

Due to the scale of the proposed work and the current use of the adjacent land, it is thought unlikely that there would be any impacts (disturbance or destruction) on the potential outlier badger sett. The scrub and earth bank are retained and can be buffered from the work area, enabling badger activity to continue.

Additional habitat planting and the creation of wildlife features (e.g., bat boxes, bird boxes, and insect towers) within the site will benefit biodiversity.

The work could disturb protected species, including Nesting Birds, Reptiles and GCN that may pass through the site or be more susceptible to noise disturbance. Therefore, the appropriate Avoidance Measures should be implemented to mitigate any adverse impacts on biodiversity at a local scale.

4.3 Further Surveys and EPS Licensing

Due to the survey findings, no further surveys for protected species are required before work commences; however, it is recommended that the **Avoidance Measures** (Section 4.4) be followed during the work (*if any protected species is found at unsupervised times, work will stop immediately, and the ecologist will be called for advice – Aware Ecology 07470433712*).

All contractors working on the proposed development must read this report to ensure they know about the legal protection afforded to protected species and their places of shelter and how to proceed if anything is discovered during the work (*if any protected species is found at unsupervised times, work will stop immediately, and the licensed ecologist will be called for advice*).

¹ These usually only have one or two holes, often have little spoil outside the hole, have no obvious path connecting them with another sett, and are only used sporadically. When badgers are not using them, foxes or rabbits often take over.

4.4 Mitigation / Avoidance Measures

4.4.1 Protected Species

4.4.1.1 Bats

There is a likelihood that bats roosting in the surrounding landscape will forage and/or commute over and around the site. The surrounding trees should be maintained/enhanced to ensure flyways are available for the bats, and a lighting plan should be implemented that reflects the guidance of the Bat Conservation Trust Bats and Lighting in the UK (2018). If new lighting is required, it would be good practice to use low-level lamps, hooded/cowled, to avoid unnecessary light spillage and with motion sensors or timers to limit illumination to essential periods only, especially as Brown long-eared bats are susceptible to impacts from artificial lighting. As long as artificial lighting is not inappropriately used during or after development, the proposals are considered small-scale and will not impact habitats (or the dark sky sites) beyond the site boundaries.

Bats will likely be flying around the buildings at night during the late spring, summer, and early autumn months, and they could investigate any new crevices or cavities that are exposed on the walls/roof during the building works. Any such holes or gaps must be securely covered/blocked at the end of each day's work to prevent bats from having the opportunity to use them for shelter.

In the unlikely event that a bat is encountered, work in that area must **STOP** immediately, and advice must be sought from a licenced bat ecologist before resuming (**contact Aware Ecology on 07470433712**).

4.4.1.2 Birds

Any on-site work to suitable habitat should be completed outside the breeding bird season (March to August inclusive) or after a pre-works survey/search by a suitably experienced ecologist. However, as the broader landscape contains other suitable nesting habitats, any negative impacts on nesting birds are unlikely to extend beyond the site. The presence of nesting birds surrounding the site is considered likely.

Checks should be completed for any nesting birds within 10m of the work area to ensure the increased noise levels will not disturb them.

If any active nests are found, work in that area must **STOP** immediately, and advice must be sought from an ecologist before resuming (**contact Aware Ecology on 07470433712**). The nests and an appropriate buffer zone of 10m will be protected until the nesting is complete and the young have fledged.

4.4.1.3 Great Crested Newts

Due to the site's location and adjacent suitable terrestrial habitats, GCN could be discovered during the construction phase. Therefore, building materials will be stored off the ground (on pallets or similar) to avoid crushing any animals that might seek refuge under them when lifted.

Any excavations should be done between mid-November and February and filled before the end of February. If this isn't possible and trenches are created after February, earth ramps will be made in each trench, in consultation with the consultant, so that newts can escape. The trenches will then be inspected each morning before being filled.

If a Great Crested Newt is discovered around the work site, work will **STOP** in that area, and a licensed Great Crested Newt worker (**Aware Ecology 07470433712**) will be contacted immediately for advice.

4.4.1.4 Badgers

No direct impact on badgers is predicted during the works. However, due to the proximity of the outlier sett, a buffer zone should be established to prevent heavy machinery from going within 30m of the opening and light machinery from going within 20m of the opening. It is advisable to fence the protection zone off, leaving a gap of 25 cm at the base of the fence.

To prevent foraging Badgers from becoming trapped in excavation works, the excavations should either not be left uncovered overnight or ways of escape for Badgers should be provided (wooden planks over 60cm wide at no greater angle than 30° or graded earth banks). This methodology is also beneficial to hedgehogs. Before construction, any exposed pipes and trenches must be checked for trapped wildlife each morning.

4.4.1.5 Reptiles

There is a chance that reptiles could be present throughout the site. Therefore, safe working methods should be implemented to discourage reptiles from occurring on-site. These methods should include maintaining the habitat at a low level (approximately 300mm during the winter) to decrease the suitability of reptile habitats on site.

During construction, piles of materials and excavated earth should be stored away from the boundaries at a minimum to deter reptiles from using them for temporary cover.

If a reptile is discovered around the work site, work will **STOP** in that area, and an experienced ecologist (**Aware Ecology 07470433712**) will be contacted immediately for advice.

4.4.1.6 Other Species

Under the *Wild Mammals (Protection) Act 1996*, it is an offence to intentionally inflict unnecessary suffering on any wild mammal, as specified by the Act. This legislation may need to be considered where the destruction of occupied rabbit warrens and burrow systems is contemplated. If the warrens are occupied, then it is recommended to hand dig them until you get to a level where the whole burrow system can be inspected and confirmed empty.

4.4.2 Precautionary Measures

All materials and tools should be removed from the site overnight, and any holes or ditches dug should be fully covered or have an escape point, such as a plank of wood, to ensure any animals falling into the holes aren't trapped. These should be checked as a priority at the beginning of each day.

If any materials must be left on site overnight, they should be thoroughly checked before being moved, and any tubing materials should be covered at both ends to prevent animals from accessing them.

Construction work should be limited to daylight hours. Prohibiting night-time work will protect the site from the potential adverse effects of noise, activity, and lighting.

In addition to the species-specific recommendations, general environmental protection measures must be implemented during the proposed works. The following minimum standards must be adhered to, so to prevent ecological impacts beyond the site boundary:

- Chemicals and fuels must be stored in secure containers away from watercourses or bodies of water, and spill kits must be available.
- Protection of retained habitats, such as the employment of strict working areas (i.e., the use of existing areas of hardstanding for site compounds and material/plant storage areas).
- Excavations must be covered or securely fenced (with no potential access points beneath fencing) when the site is closed (e.g., overnight) to prevent the entrapment of animals.
- To protect the root systems of retained trees, an appropriate buffer must be implemented per BS5837:2012 (Trees in Relation to Design, Demolition and Construction to Construction—Recommendations).
- Noise and vibration must be controlled and kept to the minimum necessary.

If any protected species (such as Nesting Birds, GCN, Reptiles, Bats or Badgers) are discovered during the construction phase, work must cease immediately, and an Ecologist must be contacted to discuss the issue and determine the best course of action.

4.5 Ecological Enhancement

The enhancements in this report aim to meet the requirements set out in *Policy DM11 of the Eastleigh Borough Local Plan 2016 – 2036*, which requires enhancing existing biodiversity and creating new biodiversity features on site.

4.5.1 Species Enhancement

The site will be enhanced for nesting birds and roosting bats by erecting one artificial bird box, one swift brick, and one bat box on suitable features at the site's perimeter or the buildings themselves. Various durable, woodcrete bat and bird boxes will be installed, including maintenance-free boxes suitable for trees (see Appendices 6.3 and 6.4).

The bat boxes will be placed on the south-east to south-west aspects ideally, with linear features nearby, to allow bats undisrupted dispersal to local foraging habitat and in positions where the entrance is not artificially illuminated at night (enabled by the provision of the 'dark corridor'). Boxes will be positioned a minimum of 3m from the ground.

Depending on the final building design, other bat compensations could include ridge tiles, integrated/external bat boxes, and bat bricks suitable for crevice-dwelling species. If bats can access the internal elements of the roof, only traditional Type 1F felt must be used to line it.

The bird boxes will also be in secluded positions, ideally within dense cover and at a minimum height of 3 metres from ground level. Other boxes, such as house sparrow and house martin-specific boxes, should be placed following their guidelines, ideally around the eaves of the new dwelling. An artificial swallow cup could also be erected high up and inside a building, such as a garage or outbuilding, which allows constant easy access.

It is also recommended that insect bricks (or similar) be incorporated into the design or placed within the site, along with hedgehog boxes in secluded areas.

Table 5. Compensation enhancement measures

Species	Enhancement Type
Bats	- 1x Integrated/external bat boxes¹ - Integrated crevice features (bat access tiles etc)
Birds	- 1x Open fronted & enclosed boxes - 1x Swift brick²
Other Species	- Invertebrate habitat features (e.g. bug hotel, solitary bee boxes) - Wildlife friendly planting (i.e. wildflowers good for nighttime flying insects)
Lighting	- Keep it to essential lighting only that is directional rather than floodlights - Use motion sensors/timers and hoods to limit unnecessary illumination

¹ To be placed following guidance from Bat Conservation Trust Bat Box Information Pack (2018) e.g. at least 4m high facing south, southeast or southwest. Summer maternity roosts in the northern hemisphere often have a southerly or westerly aspect for maximum solar heating. Male roosts and hibernation sites typically have a northerly aspect (BCT 2020)

² House Martin cups should be placed at the gable apex or under the eaves/soffit where there is a deep overhang, this should be facing north, east or west at a minimum height of 2m. Integral swift nest boxes to follow BS 42021:2022. Swallow nest cups should be sited high up and inside a building such as a garage or outbuilding which allows constant easy access.

4.5.2 Habitat Enhancement

The plot consists of modified grassland and a single individual tree, which will be developed.

Post-intervention habitat creation and enhancement, which will be delivered alongside development (includes the following):

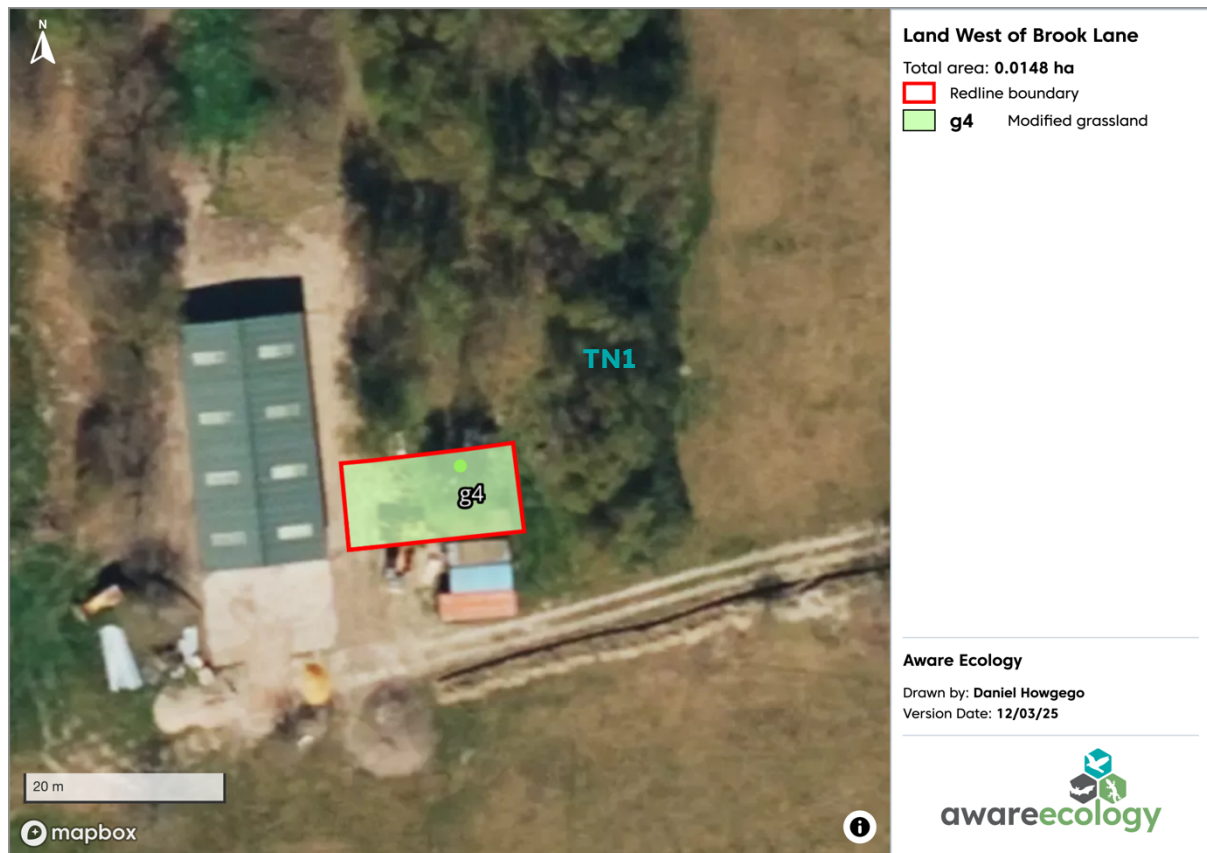
- Enhancement of surrounding grassland with a shade tolerant (Emorsgate EH1) seed mix.

5 References

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- Woodland Trust (2020) How and when to plant fruit trees. <https://www.woodlandtrust.org.uk/blog/2020/11/planting-fruit-trees/>

6 Appendix

6.1 Site Map



Target Note Number	Description
TN1	Possible outlier badger sett within the scrub

6.2 Site Photos



6.3 Recommended Bat Boxes

Bat boxes should be provided to enhance the site's biodiversity and replace any lost roosts during construction.

- **Ecostyrocrite Crevice and Hollow Bat Boxes.** These should be installed where they are sheltered from the wind but unshaded for most of the day at a mix of heights from 3m-5m. Summer maternity roosts should be on a south-easterly to south-westerly aspect. There should be a clear flight line into the box, so ensure nothing is impeding the entrance to the box. Different bat species prefer different boxes, so a mix would provide more chances for use. (<https://www.greenwoodsecohabitats.co.uk/shop>)
- **Schwegler or Vivara Pro Bat Boxes.** These should be installed as above. (<https://www.nhbs.com/en/4/bat-boxes>)
- **Bat Block.** These should be positioned within the wall during construction. Aim to position South or West facing for a summer maternity roost or north-facing for a winter hibernation roost.
- **Kent Bat Box.** Boxes are best fixed as high as possible in sheltered/shaded locations with a clear flight to the box entrance. Exposure to the sun for part of the day is acceptable. Several boxes may be placed together.
- **Soffit Bat Box.** Boxes are placed within the soffit, and access is created via a 20mm slot in the back of the soffit board against the external wall.
- **Pole Mounted Bat Box.** These are an ideal solution when no suitable building or tree is available to mount a bat box. It can come in one or two boxes and have a 4-, 5- or 6-metre metal pole. (<https://www.nestbox.co.uk/products/pole-mounted-bat-box>)

HALF AND HALF BAT BOX



£50

Individually Handmade - Specifications are in cm and approximate.

External: 44 high x 22 wide x 10 deep

Internal: Vertically, one half of the box is a

Two Crevice design, the other half of the box has the Small Hollow design.

Weight approx. 8kg

For where the bat species is unknown or to be suitable for a wider range of species.

MEDIUM HOLLOW BAT BOX



£66

Individually Handmade - Specifications are in cm and approximate.

External: 44 high x 22 wide x 13 deep

Internal: 41 x 17 x 7.5

Weight approx. 9kg

Designed for larger groups of bats who prefer a wider cavity -

described as **Hollow**, such as Brown Long Eared, Noctules, Myotis

Sp.

TWO CREVICE BAT BOX



£53

Individually Handmade - Specifications are in cm and approximate.

External: 44 high x 22 wide x 10 deep

Internal: 41 x 17 x 1.8 crevices @ 2

Weight approx. 8kg

Designed for small groups of crevice dwelling

bat species, such as Common and Soprano

Pipistrelles.

<https://www.greenwoodsecohabitats.co.uk/shop>

6.4 Recommended Bird Boxes

The provision of bird boxes is a recommendation as they enhance biodiversity on the site and replace any lost nests during the construction phase. Ideally, these should be either swift boxes, house martin nests or sparrow terrace nest boxes due to the declining populations of these species, but other nest boxes can be used, as discussed below.

- **Schwegler and Manthorpe Swift bricks** (this would be the preferred option). These should be installed in sheltered locations (such as under the eaves of a suitable building), installed at a minimum height of 2m and orientated in a southerly/ westerly direction.
- **WoodStone Swift Nest Boxes** should be installed in sheltered locations (such as under the eaves of a suitable building), at a minimum height of 2m, and orientated southerly/ westerly.
- **Schwegler Single & Double House Martin Nests**. These should be installed in sheltered locations (such as under the eaves of a suitable building), installed at a minimum height of 2m and orientated in a southerly/ westerly direction (ensuring they have enough shade).
- **Schwegler 1SP Sparrow Terrace nest boxes**. These should be installed in a sheltered location upon a suitable building, at a height no less than 2m and orientated in a southerly or westerly direction.
- **Schwegler Woodcrete 1B nest boxes (for trees) and/ or Schwegler Bird House nest boxes (for buildings)** should be installed upon a suitably mature tree and/ or upon a suitable building at a height of no less than 2m and orientated in a southerly or westerly direction.
- **Wooden Barn Owl box**. These can be installed on trees or buildings more than 1km from motorways. They should be 3m above ground level with minimal obstructions leading to the opening. Trees should be mature with thick trunks and located within a hedgerow or woodland edge.
- **Little Owl box**. The Little Owl nestbox should be erected horizontally at least 3 metres (10 feet) above the ground on a wall top, beam or tree branch so that Little Owl owlets can walk in and out before fledging. Little Owls prefer nest boxes in open-sided or open-fronted buildings rather than enclosed places. A thin layer of untreated wood shavings or bark can be provided as a floor covering.



<https://www.nestbox.co.uk/collections/bird-boxes>

6.5 Other Biodiversity Enhancements

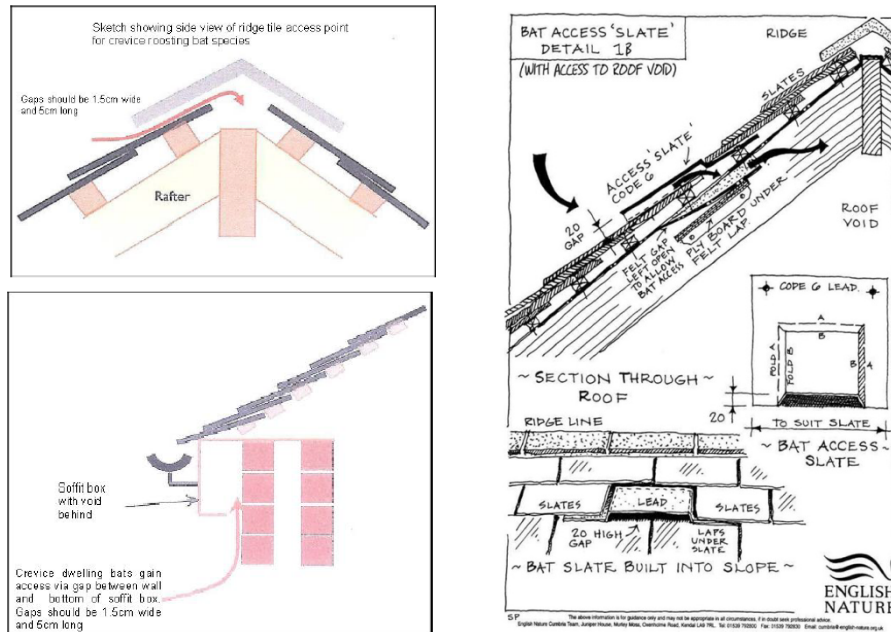
- **Hedgehog Highways.** Minimum 150mm x 150mm gaps to be left in fencing/ boundaries between adjoining plots where suitable habitat exists or is created. (<https://www.hedgehoghighway.co.uk/shop/>)
- **Insect boxes/Bee Banks/Bee Bricks.** Good for a wide range of invertebrates. Can be prefabricated/off-the-shelf units or constructed using available materials. Bee banks can be constructed from a layer of turf, soils and sands to create low mounds / vertical faces with a sunny aspect—ideally 1 per property. (<https://www.birdfood.co.uk/wildlife/bees-insects>)
- **Habitat Pile.** Create a log pile by loosely arranging together old branches or pieces of log, leaving the bark on and using a variety of species if possible. Place the pile in a shady place, such as under a tree, at the foot of a hedge, at the back of the border or behind the shed.



Hedgehog Highway – 2 Pack



6.6 Bat Access Point Designs

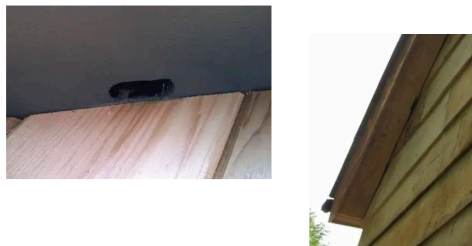


6.7 Bat Mitigation – Fascia, Soffit and Bargeboard Roosts

The below information is from Acer Ecology (2015) and is accessible at <https://www.acerecology.co.uk/mitigation-crevice-dwelling-bats/>

Fascia, Soffit and Bargeboard Roosts

Crevice dwelling bat species often exploit gaps in or under fascias, soffits and bargeboards, to gain entry into buildings. If these features are being removed, replaced or made inaccessible to bats during the development work and bats are known to be using these features, then compensation within the new fascia, soffit or bargeboard should be implemented. This can be as simple as cutting holes in the new soffit box or bargeboard. The holes must be located next to the wall of the building as bats often require a surface (often a wall) to land on before crawling through the access. Examples of this are shown below:



Alternatively, gaps can be left between the wall and the fascia, soffit or bargeboard, by raising parts of the feature off the wall by approximately 20mm.

6.8 Recommended Native Planting

6.8.1 Native Hedgerow/Shrub Composition

Hedgerow

Field maple *Acer campestre*
Hazel *Corylus avellana*
Hawthorn *Crataegus monogyna*
Elder *Sambucus nigra*
Holly *Ilex aquifolium*
Blackthorn *Prunus spinosa*
Dog rose *Rosa canina*
Spindle *Euonymus europaeus*
Dogwood *Cornus sanguinea*

Shrubs (<https://www.wildlifetrusts.org/actions/how-make-shrub-garden-wildlife>)

Barberry *Berberis* spp.
Bell Heather *Erica cinerea*
Box *Buxus sempervirens*
Cotoneaster spp.
Currant *Ribes* spp.
Elder *Sambucus nigra*
English Lavender *Lavandula angustifolia*
Firethorn *Pyracantha* spp.
Forsythia spp.
Guelder Rose *Viburnum opulus*
Hazel *Corylus avellana*
Heather (Ling) *Calluna vulgaris*
Hebe spp.
Holly *Ilex aquifolium*
Honeysuckle *Lonicera periclymenum*
Ivy *Hedera helix*
Privet *Ligustrum vulgare*
Skimmia *Skimmia japonica*
St John's Wort *Hypericum* spp.
Sweet box *Sarcococca confusa*
Witch hazel *Hamamelis* spp.

6.8.2 Native Tree Composition

Field Maple *Acer campestre*
Alder *Alnus glutinosa*
Silver Birch *Betula pendula*
Hazel *Corylus avellana*
Hawthorn *Crataegus monogyna*
Beech *Fagus sylvatica*
Holly *Illex aquifolium*
Crab Apple *Malus sylvestris*
Cherry *Prunus avium*
Bird Cherry *Prunus padus*
Oak *Quercus robur*
White Willow *Salix alba*
Whitebeam *Sorbus aria*
Rowan *Sorbus aucuparia*
Small-leaved Lime *Tilia cordata*
Goat Willow *Salix caprea*

6.8.3 Shade Tolerant Native Grassland & Wildflower Composition (EH1)

EH1 contains wildflowers and grasses tolerant of semi-shade and suitable for sowing beneath newly planted or established hedges, within orchards and on woodland edges, rides and glades. EH1 is a complete mix of 20% native wildflowers and 80% slow-growing grasses (by weight). The suggested sowing rates are 40kg/ha, 16kg/acre or 4g/m². The information below is from <https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/hedgerow-mixture/>.

Wildflowers 20%

0.50% *Agrimonia eupatoria* – **Agrimony**
1.00% *Alliaria petiolata* – **Garlic Mustard**
0.50% *Anthriscus sylvestris* – **Cow Parsley**
1.00% *Arctium minus* – **Lesser Burdock**
2.00% *Centaurea nigra* – **Common Knapweed**
0.40% *Chaerophyllum temulum* – **Rough Chervil**
0.80% *Cruciata laevipes* – **Crosswort**
0.80% *Daucus carota* – **Wild Carrot**
1.50% *Dipsacus fullonum* – **Wild Teasel**
0.40% *Filipendula ulmaria* – **Meadowsweet**
1.50% *Galium album* – **Hedge Bedstraw**
0.40% *Geum urbanum* – **Wood Avens**
0.30% *Geranium pratense* – **Meadow Crane's-bill**
1.00% *Lathyrus sylvestris* – **Narrow-leaved Everlasting-pea**
1.20% *Leucanthemum vulgare* – **Moon Daisy**
1.00% *Malva moschata* – **Musk Mallow**
0.30% *Origanum vulgare* – **Wild Marjoram**
0.80% *Plantago lanceolata* – **Ribwort Plantain**
0.60% *Primula veris* – **Cowslip**
0.40% *Rumex acetosa* – **Common Sorrel**
2.00% *Silene dioica* – **Red Campion**

0.80% *Silene vulgaris* – **Bladder Campion**

0.80% *Vicia cracca* – **Tufted Vetch**

Grasses 80%

2.40% *Agrostis capillaris* – **Common Bent (w)**

1.60% *Anthoxanthum odoratum* – **Sweet Vernal-grass (w)**

0.80% *Brachypodium sylvaticum* – **False Brome (w)**

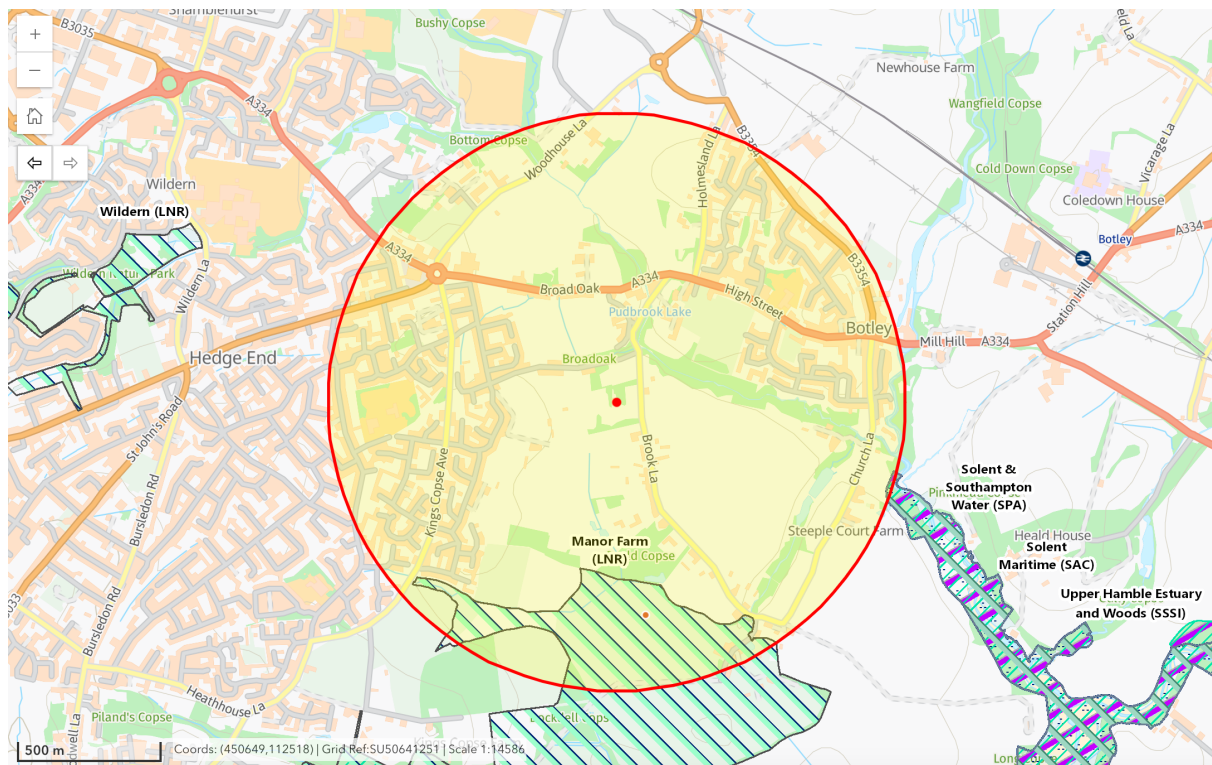
48.00% *Cynosurus cristatus* – **Crested Dogstail**

1.60% *Deschampsia cespitosa* – **Tufted Hair-grass (w)**

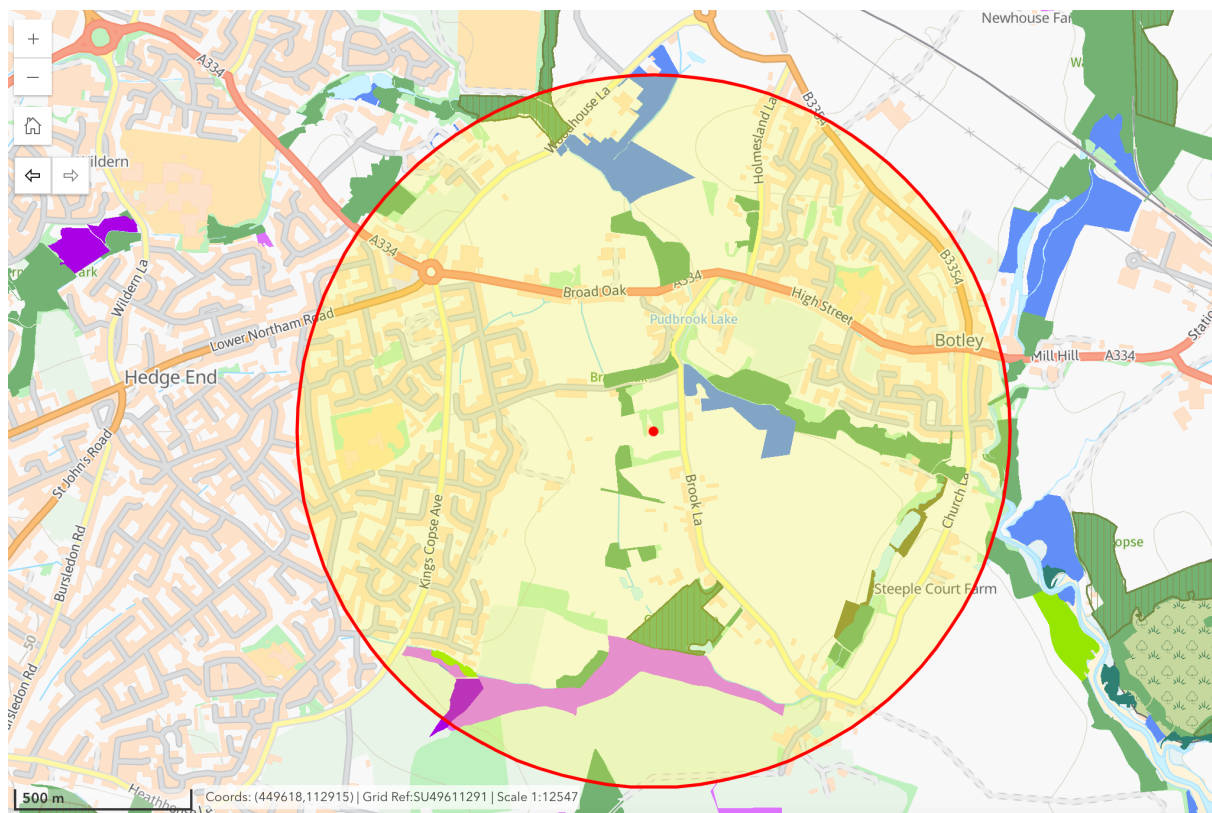
19.20% *Festuca rubra* – **Red Fescue**

6.40% *Poa nemoralis* – **Wood Meadow-grass**

6.9 Designated Sites



6.10 Priority Habitats



6.11 Legislation

6.11.1 Bats

All species of British bat are protected by The ‘*Wildlife and Countryside Act 1981*’ (as amended), extended by the ‘*Countryside and Rights of Way Act 2000*’ (*CRoW Act*). This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst it occupies a bat roost.

Bats are also European Protected Species listed on *Schedule 2* of the ‘*Conservation of Habitats and Species Regulations 2017*’ under *Regulation 41*. This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats in such a way as to be likely to (a) impair their ability to: (i) survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or b), to affect significantly the local distribution or abundance of the species to which they belong; and
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present.

Where it is necessary to carry out an action that could result in an offence under the ‘*Conservation of Habitats and Species Regulations 2017*’ it is possible to apply for a European Protected Species (EPS) licence from Natural England (NE). Three tests must be satisfied before this licence (to permit otherwise prohibited acts) can be issued:

- *Regulation 53(2)(e)* states that licences may be granted to “preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.”
- *Regulation 53(9)(a)* states that a licence may not be granted unless “there is no satisfactory alternative”.
- *Regulation 53(9)(b)* states that a licence cannot be issued unless the action proposed “will not be detrimental to the maintenance of the population of the species concerned at a favorable conservation status in their natural range”.

6.11.2 Birds

All species of bird are protected under *Section J* of the ‘*Wildlife and Countryside Act 1981*’ (as amended). The protection was extended by the ‘*CRoW Act*’.

The legislation makes it an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

Certain species of bird are listed on *Schedule 1* of the ‘*Wildlife and Countryside Act 1981*’ (as amended) and receive protection under *Sections 1(4)* and *1(5)* of the Act. The protection was extended by the ‘*CRoW Act*’. The legislation confers special penalties where the above-mentioned offences are committed for any such bird and makes it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependent young; or
- disturb the dependent young of such a bird.

6.11.3 Great Crested Newt

Great Crested Newt is listed on *Schedule 5* of the ‘*Wildlife and Countryside Act 1981*’ (as amended) and receives full protection under *Section 9*. These species are also listed as European Protected Species on *Schedule 2* of the ‘*Conservation of Habitats and Species Regulations 2017*’ which gives them full protection under *Regulation 41*. Protection was extended by the ‘*CRoW Act*’.

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

The Great Crested Newt is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and also as a species of principal importance for the conservation of biological diversity in England under *Section 74* of the 'CRoW Act'.

6.11.4 Reptiles

Common Lizards, Grass Snake, Slow-worm and Adders are listed under *Schedule 5* of the 'Wildlife and Countryside Act 1981' (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the 'CRoW Act'.

Under the above legislation it is an offence to:

- intentionally or deliberately kill or injure any individual of such a species; or
- sell or attempt to sell any part of the species alive or dead.

6.11.5 Badger

Badger is protected in Britain under the 'Protection of Badgers Act 1992' and *Schedule 6* of the 'Wildlife and Countryside Act 1981' (as amended).

The legislation affords protection to Badgers and Badger setts and makes it a criminal offence to:

- willfully kill, injure, take, possess or cruelly ill-treat a Badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

6.11.6 Dormouse

The dormouse is on *Schedule 5* of the 'Wildlife and Countryside Act 1981' (as amended) and receives full protection under *Section 9*. This species is also listed as European Protected Species on *Schedule 2* of the 'Conservation of Habitats and Species Regulations 2017'; which gives them full protection under *Regulation 41*. Protection was extended by the 'CRoW Act'.

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species,
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

Dormouse is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and as a species of principal importance for conserving biological diversity in England under *Section 74* of the 'CRoW Act'.

6.11.7 Barn Owl

Barn Owls are included in *Schedule 1* of the 'Wildlife & Countryside Act 1981' which affords them protection against disturbance whilst nesting in addition to the basic level of protection of Barn Owls afforded to most wild birds. Specifically, under Part 1, Section 1 (5), it is an offence punishable with imprisonment for a period of up to 6 months to intentionally or recklessly:

- Disturb a Barn Owl while it is building a nest or is in, on or near a nest containing eggs or young.
- Disturb a Barn Owl's dependent young.

6.11.8 Otter

The otter is listed as European Protected Species on *Schedule 2* of the 'Conservation of Habitats and Species Regulations 2017', and they are listed as rare and most threatened species under *Section 41* of the 'Natural Environment and Rural Communities Act (2006)'.

Under the above legislation it is an offence to:

- deliberately kill, injure, disturb or capture them
- damage or destroy their breeding sites and resting places - even if otters are not present
- possess, control or transport them (alive or dead)

It is also an offence under the 'Wildlife and Countryside Act 1981' to intentionally or recklessly:

- disturb otters while they occupy a structure or place used for shelter or protection
- obstruct access to a place of shelter or protection

6.11.9 Water Vole

Water voles are protected under *Schedules 5 & 9* of the *Wildlife and Countryside Act 1981*. It is an offence to intentionally:

- kill, injure or take them
- possess or control them (alive or dead)

It is also an offence to intentionally or recklessly:

- damage or destroy a structure or place used for shelter or protection
- disturb them in a place used for shelter or protection
- obstruct access to a place used for shelter or protection

Water voles are also listed as rare and most threatened species under *Section 41 of the Natural Environment and Rural Communities Act (2006)*. You must have regard for the conservation of Section 41 species as part of your planning decision.

6.11.10 INNS

INNS are on *Schedule 9* of the '*Wildlife and Countryside Act 1981*' (as amended)

Under this legislation, it is illegal:

- to plant, or otherwise cause to grow in the wild, any plant listed in Schedule 9 to the Act;
- to release, or allow to escape into the wild, any animal not ordinarily resident in Great Britain and not a regular visitor to Great Britain in a wild state or is listed in Schedule 9.

Plant INNS are also listed under the '*Environmental Protection Act 1990*' which requires soil or other waste containing Schedule 9 plant species material (live biomass, seeds, fruits, flowers) to be classified as Controlled Waste and must be disposed of at a landfill site that is authorised to accept it.

You must not trap or remove any non-native crayfish in England without written permission from the Environment Agency.