

Preliminary Ecological Appraisal

Land at Aranjays, New Barn Lane

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Charlotte Harris
Greenacres
New Barn Lane
Henfield
BN5 9SJ

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V1	Amber Howie	Richard Schofield	Richard Schofield	06 October 2025

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Phlorum Limited

Southern Office: Unit 12, Hunns Mere Way, Brighton, BN2 6AH

T: 01273 307 167 E: info@phlorum.com W: www.phlorum.com

Contents

1. Introduction 1
2. Methodology 2
3. Baseline Conditions 7
4. Evaluation 18
5. Recommendations 21
6. Conclusions 27
7. References 28
8. Glossary of Terms 30

Appendices

Appendix A – Habitat map and target notes

Appendix B – Photographs

Appendix C – Legislation

Appendix D – Plant species list

Appendix E – Suggested compensatory planting

Appendix F – Bird and bat box designs

Appendix G – Priority habitat map(s)

Non-technical Summary

Phlorum Ltd was commissioned by Charlotte Harris to undertake a Preliminary Ecological Appraisal (PEA), and Daytime Bat Walkover (DBW)/ Preliminary Roost Assessment (PRA) / Tree Preliminary Roost Assessment (PRA), which was carried out at The Land at Aranjays, New Barn Lane, on the 27th January 2025, in order to determine whether any ecological constraints could affect the proposed works for the site.

Current proposals are for involve the construction of storage units at the site. The survey area extended over approximately 7.4 hectares (ha).

The main findings of the surveys are as follows:

- The site is not subject to any statutory or non-statutory designations. The closest statutory designated site is the South Downs National Park (SDNP) which is located 0.7km to the south at its closest point.
- The site comprised buildings (u1b5), hardstanding (u1b6 developed land/sealed surface), and modified grassland (g4).
- No further targeted surveys have been recommended for the site.
- In addition, a precautionary approach to site clearance in respect to breeding birds, badgers, hedgehogs, herpetofauna, water voles and otters is recommended to minimise any adverse impacts on these species group(s).
- It is recommended that a sensitive lighting strategy is implemented during the works and post construction in order to maintain the sites value for foraging and commuting bats.

Further information on precautionary working practices and additional surveys together with recommended mitigation and enhancement measures are discussed in Section 5.

1. Introduction

Background

1.1 Phlorum Ltd has been commissioned by Charlotte Harris to undertake a Preliminary Ecological Appraisal (PEA), with a Daytime Bat Walkover (DBW) / Tree Preliminary Roost Assessment (PRA) to inform the potential ecological constraints of proposed future development of the Land at Aranjays, New Barn Lane, Henfield BN5 9SJ (hereafter referred to as "the site").

1.2 The purpose of the Preliminary Ecological Appraisal was:

- to identify the major habitats present;
- to identify the potential for any legally protected species to be present; and
- to recommend any additional ecological surveys, if required.

1.3 As part of the assessment, a desktop review and a site visit were carried out. The results of which were used to assess the nature conservation importance of the site and the potential of the site to support protected species.

1.4 This report has been compiled in accordance with current guidelines (British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013 and CIEEM, 2017 and 2018).

1.5 It is understood that the proposed development is the construction of storage units at the site.

Site Location

1.6 The site is predominantly rural. The immediate surrounds are fields and rural residential buildings, with woodland, fields and a minor road present. Within the immediate surroundings the landscape is dominated by fields and scattered pockets of woodland and waterways. To the north is the town of Henfield and Nep, to the east is Woodmancote and to the south is Small Dole, these are small towns with minor and major connecting roads.

1.7 The National Grid Reference for the centre of the site is TQ21631452. The survey area extended over approximately 7.4 hectares (ha).

2. Methodology

Desk Study & Consultations

Database and Map Search

2.1 The desktop study involved conducting database searches for statutory and non-statutory designated sites, legally protected species and features of interest within a 2km radius of the site. The database and map search was based on available information provided by the following sources:

- Sussex Biodiversity Records Centre (SxBRC, 2025);
- Multi-Agency Geographical Information for the Countryside (MAGIC, 2025);
- Ordnance Survey mapping;
- Aerial photography; and
- The Woodland Trust online Ancient Tree Inventory.

2.2 The desktop study also involved a search of all international designated sites within 12km of the site.

Habitat Survey and Assessment

2.3 Phlorum Limited carried out an ecological survey of the site on the 27th January 2025. The survey was carried out by a suitably qualified ecologist, Amber Howie (BSc (Hons), qualifying member CIEEM) who holds a Bat Level 1 Survey Class Licence CL17 (Ref:2025-12638-CL17-BAT) and a Great Crested Newt Level 1 Survey Class License (Ref:2025-80368-SCI-CL08) with over 2 years experience in undertaking a range of ecological surveys.

2.4 The survey results and assessment was reviewed by Paul Carter (BSc (Hons), MBA, MCIEEM), an ecologist with over twenty years of experience of managing ecological and landscaping projects, and by the project director Richard Schofield (BSc (Hons), MSc, CSJK, MCIEEM, MIEMA, CEnv), with over twenty years of experience in managing projects. The weather conditions during the survey were dry and mild.

2.5 The field survey comprised a walkover inspection of the land and habitats present. The survey followed standard Phase 1 survey methodology (JNCC, 2010) and covered all accessible parts of the site, including boundary features. The description of the site habitats has used the code/referencing from The UK Habitat Classification User Manual Version 2.0 (UKHab 2023). UKHab uses primary habitat codes, either on their own or followed by one or more secondary codes. Each individual code is separated by a space. Habitats were described and mapped (Figure 1: Appendix A). A list of plant species was compiled, together with an estimate of abundance made according to the DAFOR scale. The DAFOR scale provides an estimate of the relatively abundance of plant species within the Survey Area (Appendix D).

2.6 This assessment provides information on the habitats in the survey area and identifies actual or potential presence of legally protected or otherwise notable species/habitats in or immediately adjacent to the site.

2.7 Target notes highlighting a particular feature of ecological interest are provided in Appendix B, with associated photographs.

2.8 Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (2019) for vascular plant species.

Protected Species Assessment

2.9 The potential for the site to provide habitat for protected species was assessed from field observations in conjunction with results of the desk study. The site was inspected for indications of the presence of protected species including:

- Habitat considered suitable to support widespread reptile species including areas with a scrub/grassland mosaic and potential hibernation sites;
- On-site ponds offering potential breeding opportunities for great crested newts (*Triturus cristatus*) and the presence of suitable terrestrial habitat including hedgerows and rough grassland;
- The presence of features in and on trees indicating potential for roosting bats (*Chiroptera*), including knot and rot holes and loose bark. Secondary evidence of bats including staining, droppings, and feeding remains were also looked for;
- The presence of nesting habitat for breeding birds, including mature trees, dense scrub, and hedgerows, and direct evidence of bird nesting including bird song, old nests etc.;
- Habitats considered suitable to support badger (*Meles meles*) setts, and evidence in the form of hair, pathways, and latrines;
- Presence of woodland and/or hedgerows providing suitable habitat to support hazel dormice (*Muscardinus avellanarius*);

- Riparian habitat supporting suitable features for water voles (*Arvicola amphibius*) and otters (*Lutra lutra)*; and the
- Presence of nationally protected and/or invasive plants.

2.10 The potential presence for protected species is categorised as **Negligible**, **Low**, **Moderate**, **High,** or **Present**, based on the findings of the field survey and on the evaluation of existing data. However, the potential presence for bats in a structure is categorised as **None, Negligible**, **Low**, **Moderate**, or **High** (Collins, 2023). The potential suitability of trees for bat roosts is as assessed as **None, FAR** (further assessment required), or **PRF** (at least one potential roost feature present) (Collins, 2023).

2.11 The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species or mitigation should be recommended.

Daytime Bat Walkover (DBW)/ Preliminary Roost Assessment (PRA)

2.12 The Daytime Bat Walkover (DBW)/ Preliminary Roost Assessment (PRA), was carried out on 27TH January 2025. The survey was undertaken in accordance with good practice guidelines (Mitchell-Jones and McLeish, 2004; Collins, 2023, and Reason, 2023). The survey was carried out by Amber Howie who holds Bat Level 1 Survey Class Licence CL17 (Ref:2025-12638-CL17-BAT). The survey results and assessment was reviewed by Paul Carter who holds a Bat Class Licence Level 1 CL17 (Ref: 2020-44978-CLS-CLS), and by the project director Richard Schofield who holds a Bat Class Licence Level 2 CL18 (2025-13010-CL18-BAT).

2.13 The interior and exterior of the buildings were inspected closely with the aim of identifying the presence of bats and any secondary evidence together with any potential roost sites. Secondary evidence includes droppings, feeding remains, scratch marks and oil and urine staining.

2.14 The external inspection was carried out first and comprised a detailed search of all accessible architectural features for bat droppings, urine staining, scratch marks, staining around suitable crevices and feeding remains.

2.15 The internal inspection was then carried out, where it was safe to do so. A high-powered torch was used to illuminate internal features at height, for instance the apex of the roof and associated supporting beams, and these were inspected using close focusing binoculars when required.

2.16 Where access permitted, roof voids were also inspected. This comprised a search of the floor area and other flat surfaces, including stored materials, in order to find evidence of discarded feeding remains and bat droppings. Internal features such as the roof lining were examined to assess actual or potential roost opportunities.

2.17 In accordance with current standing advice issued by Natural England (2015), the following types of bat roosts were considered during the assessment:

- Day Roost - where individual bats, or small groups of males, rest or shelter in the day
- Night Roost - where bats rest or shelter at night between foraging in the active period, but rarely during the day
- Feeding 'Perch' Roost - where bats hang to eat or catch their prey or rest at night between feeding sessions.
- Hibernation Roost - where bats are found during winter. These roosts typically comprise a stable environment where bats can enter torpor; these areas are normally of a constant temperature.
- Transitional or Occasional Roost - where individual or small numbers of bats gather at a temporary site before and after hibernation.
- Maternity Roost – where female bats give birth and rise their young.
- Satellite Roost – an alternative roost found in close proximity to the main nursery roost colony and sued by a few individual breeding females to small group of breeding females through the breeding season.

Caveat

Data Search Constraints

2.18 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

Survey Constraints

2.19 Ecological surveys are limited by factors that affect presence of plants and animals such as seasonality. Whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the environment.

2.20 The survey was carried out outside of the growing season and therefore many species may not have been visible above ground or readily identifiable.

2.21 The appraisal does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species. This survey provides a preliminary view of the likelihood of protected species occurring on the site based on the suitability of the habitat, known distribution of the species in the local area, and any direct evidence on the site. It is therefore used as a tool to recommend further protected species surveys (or other species of significant nature conservation interest) if on the basis of the preliminary assessment or during subsequent surveys, it is considered reasonably likely that protected species may be present.

2.22 It is however considered that the survey was sufficiently rigorous to assess the ecological value of the site.

Bat Survey Constraints

2.23 Bats are mobile animals which can move roost sites throughout the year. It is possible that surveys carried out in January may miss roosts not occupied until later in the year. However, where undisturbed, it is generally possible to find secondary evidence of bats throughout the year.

2.24 It is considered that the survey was sufficiently rigorous to assess the ecological value of the site for the purposes of this assessment.

Limitations

2.25 This appraisal also does not constitute as a full invasive species survey. All surveys are subject to the conditions on site at the time of the survey. Site surveys are non-intrusive and rely on the visual identification of aboveground growth. If parts of a site are inaccessible, then these areas can often not be surveyed unless they can be viewed from other areas. If any aboveground growth is being managed or has been disturbed or covered, or the below ground growth is dormant, then it may be impossible for us to identify invasive plants in these areas during our non-intrusive survey.

3. Baseline Conditions

Desk Study

Aerial Photography and OS Maps

3.1 Aerial photographs and OS maps show the site to be predominantly rural, with fields, farms and minor roads and residential areas. There appear to be several waterbodies within 500m of the site boundary, however the majority are over 250m from the site boundary.

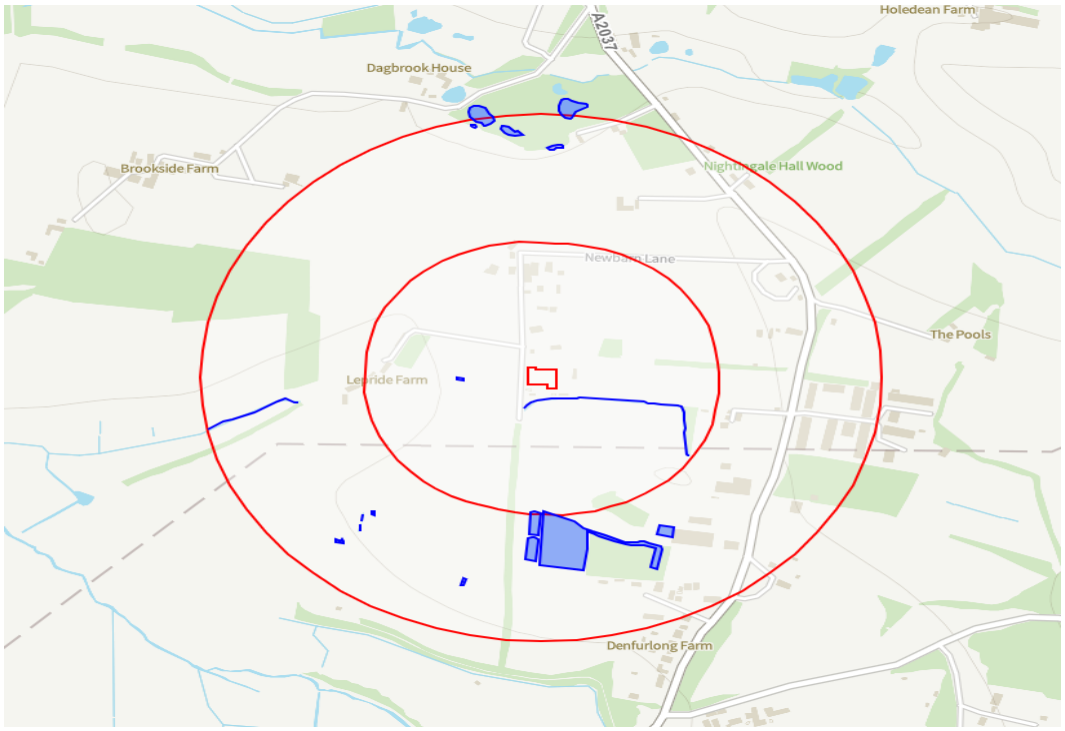


Image 1 (Above); Waterbodies present within a 250-meter and a 500-meter search radius. Waterbodies are shown in blue. The map shows the site boundary marked as the innermost red boundary, (Magic, 2025).

3.2 There are three granted European Protected Species Licences (EPSLs) within 2km of the site boundary and several within the wider surroundings. The closest EPSL is for bats located approximately 1.3km to the northeast and 1.6km to the east for soprano and common pipistrelle and brown long eared bat species. The closest EPSL for great crested newts is approximately 0.2km to the south, the next closest is over 2km from the site boundary. The closest for hazel dormice the closest is over 2km from the site boundary.

3.3 The SxBRC data search returned records of bat roosts including maternity and unknown roost types for pipistrelle, noctule, natterers myotis, whiskered myotis, serotine and brown long eared bats within 2km of the site- the closest are within 500m of the site. The locations of these are not provided due to their sensitive nature.

3.4 Unknown bat roosts or species-specific locations and habitats, such as ponds, hedges and other priority habitats may still be present within the 2km search radius.

3.5 The site and immediate surroundings are also areas monitored by the Countryside Stewardship Scheme (CS) as part of the Butterfly Trust (BT) and Natural England (NE). These areas are monitored for UK priority species, within the search area species present are the brown hairstreak butterfly.

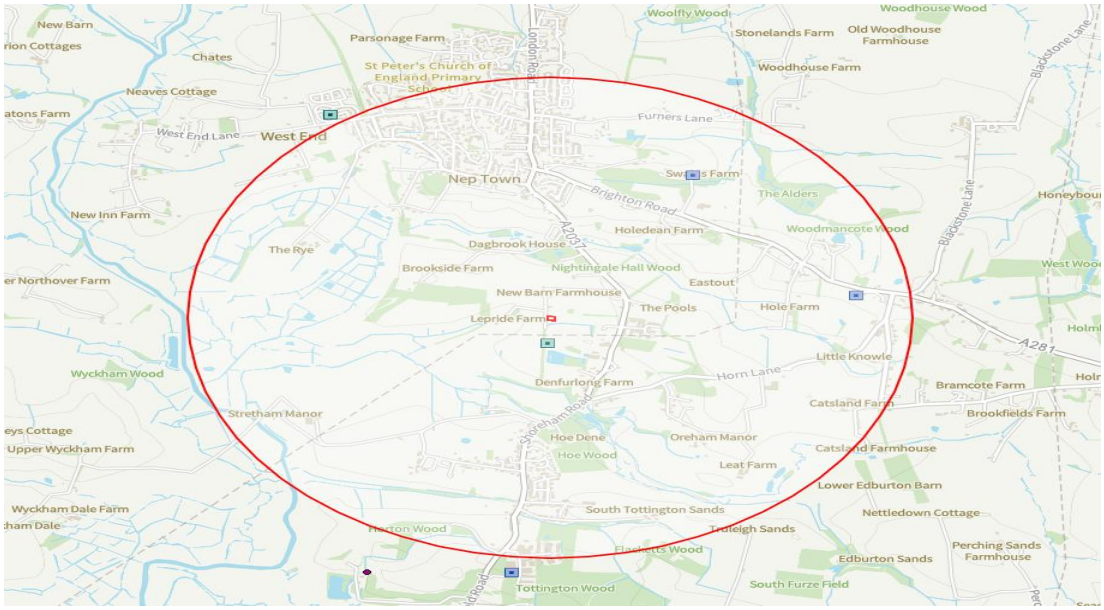


Image 2; Granted European Protected Species Licences (EPSLs) within a 2km search radius. The site is shown as the central red line boundary. There are several granted EPSLs within the wider surroundings. The granted EPSLs are shown as for bats by the blue pins and great crested newt by the green pins (Magic, 2025).

Statutory and Non-Statutory Designated Sites

Statutory International Sites

3.6 The closest international statutory designated site is the Brighton and Lewes Downs UNESCO Biosphere Reserve. Table 3.1 provides a list of statutory international sites within 12km of the site.

Table 3.1: Statutory international sites within 12km of the site

Site Name	Reason for Designation	Area (ha)	Distance from the Site
Brighton and Lewes Downs UNESCO Biosphere Reserve	Three interrelated environments rural, coastal & marine and urban make up the biosphere reserve area. The habitats include coastal chalk cliffs, sub-tidal chalk reef, freshwater wetland, shingle beaches, river	29,514	0.7km to the southwest

	estuaries, deciduous woodland and chalk grassland. The area is home to many rare and species of international conservation interest.		

Statutory National and Local Sites

3.7 The closest statutory national and/or local designated site is the South Downs National Park (SDNP). Table 3.2 provides a list of statutory national and local sites within 2km of the site.

Table 3.2: Statutory national and local sites within 2km of the site

Site Name	Reason for Designation	Area (ha)	Distance from the Site
South Downs National Park (SDNP)	Chalk down land makes up the principal terrestrial landscape of the area. The coastline is dominated by impressive chalk cliffs in the east and urbanized plains in the west. A mosaic of habitats including chalk grassland, heathland habitat, woodland, home to many rare and internationally important species, such as adonis blue butterfly (*Polyommatus bellargus*), barbastelle bats (*Barbastella barbastellus*) and rare wildflowers.	162,700	1.7km to the southeast
Tottington Wood Local Nature Reserve (LNR)	Oak and ash standards dominate the canopy, with hazel coppice frequent in the shrub layer, field maple. And ash coppice. The shrub layer is particularly rich along the ride sides with hawthorn, Midland hawthorn, spindle, dogwood, sallow and guelder rose. The ground flora is also very rich. In spring, the ground is carpeted by an intimate mixture of bluebell (*Hyacinthoides non-scripta)*, wood anemone (*Anemone nemorosa)* and lesser celandine (*Ranunculus ficaria)* with frequent primrose (*Primula vulgaris)*, common dog-violet (*Viola riviniana)*, bugle (*Ajuga reptans)* and common twayblade (*Listera ovata)*.	34.8	1.7km to the south

	There are small streams present, over-shaded by crack and goat willow. Particularly notable species recorded on this site include early-purple orchid (*Orchis mascula),* common spotted orchid (*Dactylorhiza fuchsii)*, greater butterfly-orchid (*Platanthera chlorantha)* and goldilocks buttercup (*Ranunculus Auricomus).* The site also supports a rich bryophyte community.		

Non-Statutory Sites

3.8 The closest non-statutory designated site is Broadmare Common Local Wildlife Site (LWS). Table 3.3 provides a list of non-statutory sites within 2km of the site, there are several others within 2km of the site boundary.

Table 3.3: Non-statutory sites within 2km of the site

Site Name	Reason for Designation	Area (ha)	Distance from the Site
Broadmare Common LWS	Habitats include a mosaic of poor fen, willow and deciduous woodland punctuated by ephemeral and permanent ponds. It supports a number of Birds of Conservation Concern such as the Red-listed nightingale (*Luscinia megarhynchos),* cuckoo (*Cuculus canorus)* and starling (*Sturnus vulgariis).* It also supports the Sussex rare lesser marshwort (*Apium inundatum).*	4.4	0.5km to the north
Oreham Common LWS	Habitats consist of herb-rich damp grassland with areas of tall-herb wetland vegetation and two ponds. There are areas of dense scrub and some deciduous woodland. The habitat supports a number of less common birds such as nightingales and turtle doves.	4.9	0.8km to the southeast
Hoe Wood LWS	Ancient woodland dominated by oak, with frequent ash and birch over hazel coppice. It has a good assemblage of woodland plants and supports a diverse community of	15.8	0.8km to the south

	birds. The site includes a lake which has significant numbers of dragonfly and damselfly species as well as providing for good populations of amphibians. Other habitats include an unimproved meadow.		
River Adur Water Meadows & Wyckham Wood LWS	Coastal and floodplain grazing marsh and lowland mixed deciduous woodland are both NERC S41 habitats. A considerable number of notable species have been recorded from the site including birds, plants and insects, particularly Coleoptera and Odonata. Over 100 bird species have been recorded, including 24 NERC S41 species and it is particularly notable for wintering waterfowl and waders.	397.5	1.8km to the southwest

Ancient Woodland

3.9 There is no ancient woodland covering any part of the site or immediately adjacent to the site. No trees on or adjacent to the site are listed on the Woodland Trusts' Ancient Tree Inventory.

3.10 The closest area of ancient woodland is situated 0.6km to the southeast.

UK BAP Priority Habitat

3.11 UK BAP Priority habitats are habitat types or elements with unique or significant value to a diverse assemblage of species. UK BAP priority habitats are identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP).

3.12 The SxBRC data search returned records for the priority habitats lowland fen, Reedbed, coastal saltmarsh, traditional orchard, lowland meadow, coastal & floodplain grazing marsh, deciduous woodland and ancient woodland within the 2km search radius.

3.13 At the time of the survey, there were no habitats that could be classed as priority habitat (Bickmore, 2002). The next closest priority habitats are 0.1km to the south which is deciduous woodland, 0.2km to the west for traditional orchards, 0.6km to the southeast which is ancient woodland and 0.6km to the southwest for coastal and floodplain grazing marsh. The UK BAP Priority Habitats are shown in Appendix G.

Habitats

Site Summary

3.14 The site comprised buildings (u1b5), Developed Land/Sealed Surface (u1b6), and modified grassland (g4).

3.15 The main habitats recorded within the site are described below. The UKHab code is shown in the bracket after the habitat type (UKHab 2023). Additional details are shown on the habitat survey plan in Appendix A.

Buildings (u1b5)

3.16 There were two disused polytunnel buildings which where the dominant feature on the site.

3.17 The internal areas of the polytunnels had ruderal plants beginning to grow from the flooring and a large area of bramble *(Rubus fruiticosus)* scrub was present in one which was encroaching from the adjacent offsite habitats.

Developed Land/Sealed Surface (u1b6)

3.18 There was an access track at the south of the site that connected the adjacent Newbarn Lane to the site.

Modified Grassland (g4)

3.19 The main habitat on site was grassland. The grassland was relatively species poor and waterlogged. The sward was varied with some tufts/clumps of longer grass present and a small area at the southeast corner that had some other species present, however these were mainly restricted to the boundaries of the grassland. At the southeast corner, a small patch of ruderal vegetation was present, but this was sparse and consisted mainly of old plants and was below 25m^2.

3.20 It is noted that the lack of species diversity is likely due to the time of year the survey was conducted at.

3.21 Species noted included; perrenial ryegrass *(Lolium perenne)*, nettle *(Urtica dioica)*, daisy *(Bellis perennis)*, common fleababe *(Pulicaria dysenterica)*, oxeye daisy *(Lecanthium vulgare)*, buttercup *(Rannunculus spp.)*, garlic mustard *(Alliaria petiolata)*, bristly oxtongue *(Helminthotheca echioides)*, common columbine *(Aquilegia vulgaris)*, forget me not *(Myosotis sylvatica)* and dock *(Rumex spp.)*.

Target Note (TN)

3.22 The following features of interest were noted during the survey and have been marked on Figure 1:

- **TN1 – Scrap Metal Pile.**

Daytime Bat Walkover (DBW)/Preliminary Roost Assessment (PRA)

Building 1 (B1)

3.23 Building 1 (B1) was a long, plastic covered polytunnel. The polytunnel was approximately single storey height and had large metal support beams across the length. The polytunnel was in poor condition and the inside was overgrown with bramble, and stored furniture and plant pots.

3.24 No bats or secondary evidence of bats were found during the initial inspection. The building materials were not considered to be suitable for potential roosting features for bats.

3.25 Overall, building 1 was assessed as having **negligible** potential to support roosting bats.

Building 2 (B2)

3.26 Building 2 (B2) was a long, plastic covered polytunnel. The polytunnel was approximately single storey height and had large metal support beams across the length. The polytunnel was in fair condition and had a wooden floor and appeared to have been used for recreational purposes. This polytunnel also contained furnishing and had some ruderal plants overgrowing sections.

3.27 No bats or secondary evidence of bats were found during the initial inspection. The building materials were not considered to be suitable for potential roosting features for bats.

3.28 Overall, building 2 was assessed as having **negligible** potential to support roosting bats.

Other

3.29 There were shipping containers and a small dilapidated open wooden storage unit present at the southwest corner of the site. These were assessed as having **negligible** potential to support roosting bats due to the type of buildings.

Summary

Negligible Potential Buildings

3.30 Due to the type of buildings and materials present on site, the two polytunnel buildings (B1 & B2) were considered to offer **negligible** potential roosting opportunity for bats; The bat survey guidelines (4th edition, BCT, 2023) describes a negligible potential roost as*; "No obvious habitat features onsite likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion".*

3.31 No further survey works are recommended at this stage.

3.32 It should be noted that bats are mobile animals which can move roost sites throughout the year. Unused buildings such as above may deteriorate, increasing their suitability for roosting bats.

Daytime Bat Walkover

3.33 A daytime bat walkover (DBW) was carried out of the site to assess the sites suitability for foraging and commuting bats.

3.34 The site was considered to offer opportunity for foraging and commuting bats and the surrounding habitat offers good connectivity to the wider landscape and foraging opportunities. The bat survey guidelines (4th edition, BCT, 2023) describes moderate potential flight paths and foraging habitats as; *Continuous habitat connected to the wider landscape that could be used by bats for flight paths such as lies of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water".*

3.35 The site is considered as having moderate potential for foraging and commuting bats; however, this is largely due to the offsite adjacent and bordering treelines and woodland habitats.

3.36 It is therefore recommended that the adjacent offsite habitats are not impacted by the proposed development, predominantly light spill.

Protected Species

3.37 Legislation relating to the protected species referred to in this section is included in Appendix C.

3.38 The following paragraphs detail the suitability of the on-site habitats to support protected species and include information from the data search for protected, rare and otherwise notable species returned within a 2km radius.

Bats

3.39 The data search showed records of bats from the genera pipistrelle (*Pipistrellus*), long eared (*Plecotus*), myotis (*Myotis*), serotine (*Eptesicus*) and Noctule/Leisler's (*Nyctalus*) occurring within the 2km search area in the past 15 years.

3.40 During the survey no potential bat roosting features were seen in the onsite buildings. The site was considered to offer potential for foraging and commuting bats due to the adjacent offsite habitats.

3.41 Overall, it was considered that the habitats on site offered **negligible** potential for roosting bats.

Amphibians

3.42 Aerial photographs and maps show one pond and one stream within 250m of the site. There are several waterbodies within 500m of the site.

3.43 The data search showed records of great crested newt *(Triturus cristatus)* within 2km of the site within the past 15 years.

3.44 The data search showed records of common toad *(Bufo bufo),* common frog (*Rana temporia),* palmate newt *(Lissotriton helveticus)* and smooth newt (*Lissotriton vulgaris)* within 2km of the site within the past 15 years.

3.45 The closest toad crossing is approximately 3km to the southeast at badgerwood ponds.

3.46 During the survey it was noted that there was no water within the development boundary, however there was a stream present offsite along the southern boundary which could provide suitable for breeding great crested newts. Additionally, there was terrestrial habitat that could support foraging and commuting great crested newt. This included offsite grassland and woodland in the immediate and surrounding areas.

3.47 It was considered that the site offered **negligible** potential for breeding newts and **low** potential for foraging and commuting newts.

3.48 Due to the availability of good quality habitat in the immediate surroundings, it is considered unlikely that the proposed works will cause a significant increase in disturbance to any newts or amphibians in the area, and that precautionary measures will be sufficient to safeguard this species group.

Reptiles

3.49 The data search showed records of adder *(Vipera berus)*, grass snake *(Natrix helvetica),* slow worm *(Anguis fragilis)* and common lizard *(Zootoca vivpara)* within 2km of the site within the past 15 years.

3.50 During the survey no reptiles or signs of reptiles were seen, however the habitat contained features that could support widespread reptile species. This included grassland and offsite adjacent habitats including grassland, a stream and woodland.

3.51 Overall, the site was assessed as having **moderate** potential to support reptiles.

3.52 Due to the availability of good quality habitat in the immediate surroundings, it is considered unlikely that the proposed works will cause a significant increase in disturbance to any reptiles in the area, and that precautionary measures will be sufficient to safeguard this species group.

Birds

3.53 Several Red or Amber listed Birds of Conservation Concern[1] (BoCC), and notable[2] bird species were returned by the data search that may utilise habitats within the site. Species include swift *(Apus apus),* swallow *(Hirundo rustica)* and house martin *(Delichon urbicum).*

[1] Birds of Conservation Concern status is prioritised into high concern (Red), medium concern (Amber) and low concern (Green) (Eaton et al, 2009). Red-list species are those that are globally threatened according to the IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and have not shown a substantial recent recovery. Amber-list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations. Green-list species are those that fulfil none of the criteria.

[2] Notable Birds are based on a list of birds that are particularly scarce or vulnerable either at national or a regional level. The majority of these bird species are designated as Schedule 1 species, under the Wildlife and Countryside Act 1981 (as amended), or listed as red or amber-listed BoCC.

3.54 During the survey it was noted that the onsite habitats provided suitable habitat for nesting birds.

3.55 Overall, it was considered that the site offered **low** potential for breeding birds.

Badgers

3.56 Records for this species are kept confidentially and were not returned by the data search.

3.57 The habitat on site was not suitable for breeding badgers. However, it was suitable for commuting and feeding badgers.

3.58 Overall, the site offered **negligible** potential for breeding badgers and **high** potential for foraging and commuting badgers.

Hazel Dormice

3.59 The data search showed no records of dormice within 2km of the site within the past 15 years.

3.60 The site did not contain the type or density of vegetation that would be suitable for supporting either breeding or commuting dormice.

3.61 Overall, it was considered that the site offered **negligible** potential to support breeding dormice and **negligible** potential to support commuting dormice.

Water Voles

3.62 The data search showed no records of water voles within the 2km search area in the past 15 years.

3.63 The site did not contain the aquatic habitat and vegetation of a type that would support breeding water voles. However, the presence of an offsite stream meant it could be suitable for commuting and foraging water voles.

3.64 Overall, it was considered that the site offered **negligible** potential to support breeding water voles and **low** potential to support commuting and foraging water voles.

Otters

3.65 Reports of otters are not returned by the record centre in this area

3.66 The site did not contain the aquatic habitat and vegetation of a type that would support breeding otters. However, the presence of an offsite stream meant it could be suitable for commuting otters.

3.67 Overall, it was considered that the site offered **negligible** potential to support breeding otters and **low** potential to support foraging and commuting otters.

Hedgehogs

3.68 The data search showed records of hedgehogs (*Erinaceus europaeus*) within 2km of the site within the past 15 years.

3.69 Although no direct evidence of hedgehogs was seen during the survey, the habitats on site, such as the short grassland, log piles, leaf litter and offsite adjacent woodland seen on site would provide suitable habitat for them to forage and/or hibernate.

3.70 Overall, the site offered **high** potential for hedgehogs.

Stag Beetles

3.71 The data search showed multiple records of stag beetles (*Lucanus cervus*) within 2km of the site within the past 15 years.

3.72 No direct evidence of stag beetles was seen on the site. However, the presence of adjacent offsite woodland and trees could have provided the dead wood required for this species.

3.73 Overall, the site offered **negligible** potential for stag beetles.

Invertebrates

3.74 The data search showed multiple records of invertebrates within the 2km search area in the past 15 years.

3.75 Notable species included purple emperor *(Apatura iris),* swallowtail *(Papilio machaon),* brown hairstreak *(Thecla betulae),* and Sussex notable rare species such as sharp-collared furrow bee *(Lasioglossum malachurum)*, painted nomad bee *(Nomada fucata)* and trimmers mining bee *(Andrena trimmerana).*

3.76 Nationally scare species including Rolphs door snail *(Macrogastra (Pseudovestia) rolphii)* have been recorded within the search radius.

3.77 Other invertebrates were within the data search which included but not limited to species from the families; dragonflies and damselflies, ants, sawflies and bees, molluscs, grasshoppers and crickets, butterflies and moths and beetles were present within the 2km search radius, many of which include nationally scarce, Sussex rare, redlist VU EN NT DD R, NERC S41, UK BAP priority and notable A & B species.

3.78 The site contained a large area of grassland which would support a range of invertebrate species.

3.79 Overall, it was considered that the site offered potential to support invertebrates.

Invasive Plants

3.80 The data search showed records of plant species including Japanese knotweed *(Reynoutria japonica),* three cornered leek *(Allium triquetrum)* and Spanish bluebell *(Hyacinthoides hispanica)* occurring within the 2km search area in the past 15 years. These plants are listed as invasive in Schedule 9 Part II of the Wildlife and Countryside Act (1981 amended).

3.81 During the survey no specimens were seen of plant species that are listed in Schedule 9 Part II of the Wildlife and Countryside Act (1981 amended).

4. Evaluation

4.1 On the basis of the information available from the habitat survey and desk study, the site has been evaluated in terms of its potential for biodiversity, support of protected species and habitats, and the contribution the area makes as part of the wider landscape. The nature conservation value of the site has been assessed following standard criteria developed by CIEEM (2017 and 2018) and in accordance with BS 24040:2013 Biodiversity – code of practice for planning and development. This is provided below.

4.2 The biodiversity value of protected species within the site is a preliminary evaluation based upon the desk study records, habitat suitability, and the conservation status of the species in question. It should be noted that where European Protected Species (EPS) or species of Principle Importance for the Conservation of Biodiversity are present on-site they may be valued at a lower level/scale where it is considered likely that populations would not be of sufficient importance to justify designation at a higher level. However, regardless of their biodiversity value, such species are still subject to national and/or European legislation.

4.3 Key aspects of relevant planning policy regarding conservation, including an explanation of species referred to as being of 'Principal Importance for Conservation of Biodiversity' and European Protected Species and habitats, are provided in the Legislation section in Appendix C.

Geographic Evaluation

Features of International Importance

4.4 Features of International Importance are principally sites covered by international legislation or conventions. The Conservation of Habitats and Species Regulations 2017 (as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 implements the Natural Habitats and Wild Fauna and Flora (92/43/EC) (Habitats Directive) in England and Wales. The Regulations mainly deal with the protection of sites with certain habitats and populations of species that are important for nature conservation in a European context, i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

4.5 The site is not subject to any international statutory nature conservation designations. The closest internationally important site within 12km of the site is the Brighton and Lewes Downs UNESCO Biosphere Reserve. The site provides limited supporting habitat for this designated site.

Features of National Importance

4.6 Features of national importance include Sites of Special Scientific Interest (SSSIs) which are designated under the Wildlife and Countryside Act 1981 (as amended). The site is not subject to any national statutory nature conservation designations and it is not considered that any habitats or populations or assemblages of species within the site would meet the criteria for the designation of SSSIs at an appropriate geographic level[3].

4.7 The closest designated site of national importance for nature conservation is the South Downs National Park (SDNP) located 1.7km to the southeast. The site provides limited supporting habitat for this designated site.

4.8 The site is also located within the 5/10/12km Impact Risk Zone of Chanctonbury Ring SSSI and Cissbury ring SSSI which are designated for chalk grassland, woodland and breeding bird community's, Beeding Hill to New timber Hill SSSI and Wolstunbury Hill SSSI which are designated for grassland scrub and invertebrate communities, Adur estuary SSSI designated for coastal and wetland habitats and breeding bird assemblages. The site does not have supporting habitat for these designated sites.

Features of County (i.e. West Sussex) Importance

4.9 The site does not include any features of value at this level neither is it likely to be selected as a SINC based on the results of the current survey.

Features of Local and/or Value in the Immediate Vicinity (c. 250m) of the Project

4.10 The on-site vegetation is of value within the local and immediate vicinity and provides suitable habitat to support protected species including bats, breeding birds, badgers, hedgehogs, herpetofauna, water voles and otters It also forms part of the wider ecological network of habitats in the locality, providing wildlife corridors for mobile species to move through the landscape.

Summary

4.11 Overall, on the basis of the survey results and the above criteria, habitats within the site are considered largely to be of ecological value within the immediate vicinity only. The site provides suitable habitat to support several protected species and groups including bats, breeding birds, badgers, hedgehogs, herpetofauna, water voles and otters. However, populations of these are unlikely to be locally significant.

[3] JNCC Guidelines for selection of biological SSSIs (see http://jncc.defra.gov.uk/page-2303#download).

Local Plan Evaluation

4.12 It is considered that the statutory Horsham Local Plan (Adopted 2015) contains the following nature conservation policies relevant to the site. A list of the policies is provided below. The full text of the relevant policies is contained in the Legislation section in Appendix C and this should also be referred to.

Horsham Local Plan (2015)

- Policy 25 - District Character and the Natural Environment.
- Policy 26 – Countryside Protection.
- Policy 30 – Protected Landscapes.
- Policy 31 – Green Infrastructure and Biodiversity.

5. Discussion and Recommendations

Discussion

5.1 The survey site is located at Land at Aranjays, New Barn Lane, Henfield BN5 9SJ. The survey area extended over approximately 7.4 hectares (ha). Habitats to be impacted by the development proposals include buildings (u1b5), hardstanding (u1b6 developed land/sealed surface), and modified grassland (g4).

5.2 Design proposals involve the construction of storage units at the site

5.3 Habitats within the proposed development area were assessed as being of value to wildlife within the local vicinity with potential to support bats, breeding birds, badgers, hedgehogs, herpetofauna, water voles and otters and these species may pose a constraint to works.

5.4 No further targeted surveys are recommended for the site.

5.5 In addition, a precautionary approach to site clearance in respect to breeding birds, badgers, hedgehogs, herpetofauna, water voles and otters is recommended to minimise any adverse impacts on these species group(s).

5.6 It is recommended that a sensitive lighting strategy is implemented during the works and post construction in order to maintain the sites value for foraging and commuting bats.

5.7 Details regarding specific mitigation, including further surveys and precautionary working practices together with habitat enhancement measures are provided below.

Recommendations

Breeding Birds

5.8 The on-site buildings provide suitable nesting habitat for a range of bird species. All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).

5.9 In order to avoid any potential impact on breeding birds, the clearance of any vegetation / demolition of buildings should be undertaken outside the main bird nesting season which runs from March to August inclusive[4], with clearance works possible between September and February. Where this is not possible, an ecologist would need to check the vegetation for active nests and signs of bird breeding activity.

[4] It should be noted that this is the main breeding period. Breeding activity may occur outside this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

5.10 In the event that a nest is found, an exclusion zone around the nest would be established. Works would have to cease within this buffer area until the young birds have fledged.

Badgers

5.11 Badgers receive protection under The Protection of Badgers Act 1992.

5.12 Due to the potential presence of badgers in the area, a series of general precautions are recommended. This will include the following;

- Throughout construction, all on-site contractors must be made aware of the potential presence of badgers in the locality and a tool box talk should be given by a qualified ecologist immediately prior to the start of construction works to discuss the potential for badgers to pass through the site and to provide information on legislation and the ecology of this species.
- All trenches should be covered at night or if this is not possible, ramps must be installed into the trenches to enable badgers to escape should they enter the excavations. All materials must be stored safely and lids securely fitted, particular waste and other potential food sources.

Bats

5.13 Bats receive protection under The Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended).

5.14 Different species of bat have been found to react differently to night-time lighting however research has found that generally, all species of bats are sensitive to artificial lighting and that excessive lighting can delay bats from emerging, thus shortening the time available for foraging, as well as causing individuals to move away from suitable foraging grounds or roost sites, to alternative dark areas (Jones, 2000). Bats can also become isolated from their foraging grounds if the linear features they use for commuting are suddenly illuminated, creating a light barrier (Fure, 2006).

5.15 The current site is not well lit at night and therefore the development should serve to maintain the site's value for foraging bats and to minimise indirect impacts from lighting associated with the development. This can be achieved by following accepted best practice (Institute of Ecology and Environmental Management 2006, Institute of Lighting Professionals 2018, 2023, and Bat Conservation Trust, 2014):

- The level of any artificial lighting including flood lighting should be kept to a minimum, particularly around the site boundaries;
- LED lights are a preferred option to low pressure sodium lights or high pressure sodium or mercury lamps. LED lights do not emit UV radiation, towards which some insects are attracted, drawing them away from bat foraging areas in the surrounding landscape;
- all lights should be directed at a low angle with minimal light spillage wherever possible;

- ideally the site boundaries should be kept dark, preferably at bat emergence (0-1 hour after sunset) and during peak bat activity periods (e.g. 1.5 hours after sunset and 1.5 hours before sunrise);
- Artificial lighting should not directly illuminate any potential bat commuting areas such as boundary features. Similarly, any newly planted linear features or buffer areas around the site boundary should not be directly lit; and
- If security lights are required, then they will be set on a Passive Infrared (PIR) sensor and timer so that the light is only emitted for the short time period required.

Herpetofauna

5.16 All reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). Great crested newts, and natterjack toads are protected under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended).

5.17 The proposed development is considered to have a relatively low impact on any potential herpetofauna populations that may be present. It is therefore felt that a precautionary approach to vegetation clearance should be sufficient to safeguard these protected species group. This would involve vegetation clearance to be carried out in stages in order to avoid any potential impacts on reptiles. This work should be supervised by a suitably experienced ecologist.

Hedgehogs

5.18 Hedgehogs are listed on the Natural Environment and Rural Communities (NERC) Act 2006 Section 41 as a Species of Principal Importance. They are a rapidly declining species.

5.19 Hedgehogs need short grass areas to search for invertebrate prey. Log piles and decaying vegetation are used to forage and hibernate in. Areas of leaf litter can be collected and used in nests. Dense scrub areas are also useful to build hibernation nests during winter. Wildlife friendly corridors allow hedgehogs and other wildlife to migrate across a site. These are discussed in the Wildlife Friendly Pathways Section below.

Water Voles

5.20 Water voles are protected under the Wildlife and Countryside Act 1981 (as amended).

5.21 The onsite habitats were considered to provide limited potential for water vole and therefore, at this stage, no further survey is considered necessary. It is however considered necessary to adopt a precautionary approach to works to safeguard this protected species. This will require a suitably qualified ecologist carrying out an updated walkover survey of the site immediately prior to works starting on the site. The ecologist will then give a toolbox talk to the on-site contractors prior to the start of works to discuss a precautionary approach to works.

Otters

5.22 Otters and their places of refuge are protected at a European level under the EC Habitats Directive (as amended 2010) and have full protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

5.23 Although potential habitat for otters was identified near the site, no otters or secondary signs of otters were found on the site. It is therefore recommended that a precautionary approach will be sufficient to safeguard this protected species. This will require a suitably qualified ecologist carrying out an updated walkover survey of the site immediately prior to works starting on the site. The ecologist will then give a toolbox talk to the on-site contractors prior to the start of works to discuss a precautionary approach to works.

5.24 To help maintain the value of the watercourse, the area should be litter picked at the start and end of works, and all construction related materials removed periodically through the contract period and on completion of works.

5.25 The use of high intensity lighting which would illuminate the watercourse should be avoided both during the works period and following on from the completion of the project, to ensure that suitable habitat for otter is maintained.

5.26 It is recommended that no works within 30m of the watercourse should be undertaken after dusk.

5.27 Otters are naturally inquisitive. Any excavations that are left overnight should include a ramp of 45 degrees or less on one face to allow otter and other wildlife to climb out should they fall into the excavation. Excavations should be inspected daily before the start of works.

5.28 Construction staff should be aware that otter may lie-up in stacked pipes or beneath pallets. These features should be inspected daily before the start of works.

Stag Beetles

5.29 Stag beetles are a Species of Principle Importance for the UK and are also listed on the Sussex Rare Species inventory, therefore a precautionary approach to the clearance of all dead wood should be taken during works. Where possible the standing dead wood around the site boundaries should be retained as part of the works. Where the dead trees pose a health and safety risk, the above ground section should be felled and the arisings stacked on the ground. The tree base and root system of these trees should be retained where possible.

5.30 Where it is not possible to retain these areas, the root system of the dead trees should be removed under an ecological watching brief and any larvae encountered should be removed to suitable retained deadwood habitat elsewhere around the site boundaries.

Habitat Retention

5.31 All retained trees, including all adjacent off-site trees should be protected in accordance with British Standards (BS 2012) 5837:2012 Trees in Relation to Design, Demolition and Construction. The root protection areas of any retained trees must be left free from excavation and disturbance, and protected during any proposed works. Protection should be in the form of fencing and signs installed for the duration of the works.

Habitat Enhancement

5.32 New development offers the opportunity for habitat enhancement in accordance with national and local planning policy and some recommendations are included below.

Bird and Bat Boxes

5.33 Additional bird nesting and bat roosting provision could be incorporated into new design proposals. These could either be installed on trees or incorporated into the new building design. Some recommendations are made below as a guide.

5.34 Bat roosting opportunities could be provided through the installation of boxes on the outside of the walls or remaining trees, such as the Schwegler 2F, or other makes of a similar design, such as Chavenage Bat box. There are a range of bat boxes available and these can be selected to suit the development and bat species in the locality.

5.35 Bird boxes could be installed on the walls of the new building or in the remaining trees which could include the following Schwegler bird house or 1B makes, or similar designs from alternative suppliers. If the client is happy for bird boxes to be installed on the walls of the new building then a Schwegler sparrow terrace 1SP could also be used.

5.36 Further details of the bird and bat boxes are provided in Appendix F.

5.37 Bat boxes should be installed at appropriate locations ideally with south-east, south, or south-west facing aspects at least 3m from ground level. Ideally they need to be exposed to 6-8 hours of direct sunlight, but sheltered from strong winds. If installed on the building, these should ideally be positioned directly below the eaves.

5.38 Bird Boxes should be located out of prevailing wind, rain, and strong sunlight, ideally with a clear flight path to the entrance. Ideally they should be installed two to four metres from the ground facing north or north-east.

Wildlife Friendly Pathways

5.39 The increase in building can result in ecological areas which are unconnected. Effectively these are ecological islands, and often there is no way for wildlife to migrate to and from these areas. One way to reduce the impact and allow wildlife, including hedgehogs, to migrate across sites is to install wildlife friendly pathways across a site. This can include a range of things such as wildlife corridors, such as hedgerows and scrub or rough grassland corridors, but also installing holes in fences. Wildlife holes, often referred to as hedgehog holes, help wildlife migrate through areas. The holes need to be at least 13cm by 13cm, at ground level.

Compensatory Planting

5.40 Additional tree and shrub planting could be incorporated into the landscape proposals to compensate for any removal to facilitate the works. Planting should include a high proportion of native species and be of local provenance where possible. These should be carefully selected to ensure they contain species suitable for the area. Some species of known wildlife value are listed in Appendix E.

6. Conclusions

6.1 The site survey revealed the following habitats:

- Buildings (u1b5);
- Developed land/sealed surface (u1b6); and
- Modified grassland (g4).

6.2 The site is not subject to any statutory or non-statutory designations. The closest statutory site is South Downs National Park (SDNP) which is located 0.7km to the south at its closest point and the survey area supports limited habitat features that contribute to the designation of this site.

6.3 No further protected species surveys are recommended for the site.

6.4 In addition, a precautionary approach to site clearance in respect to breeding birds, badgers, hedgehogs, herpetofauna, water voles and otters is recommended to minimise any adverse impacts on these species group(s).

6.5 It is recommended that a sensitive lighting strategy is implemented during the works and post construction in order to maintain the sites value for foraging and commuting bats.

6.6 It has been recommended that the site is enhanced by introducing some compensatory planting and installing bat and bird boxes.

7. References

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8. Glossary of Terms

BAP	Biodiversity Action Plan
BRC	Biological Records Centre
CIEEM	Chartered Institute of Ecology and Environmental Management
DBW	Daytime Bat Walkover
Habitats Directive	Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
LNR	Local Nature Reserve
LWS	Local Wildlife Site
MAGIC	Multi-Agency Geographical Information for the Countryside
NNR	National Nature Reserve
Nomenclature	The system of devising of names for plants
NPPF	National Planning Policy Framework
PEA	Preliminary Ecological Appraisal- formerly referred to as a Phase 1 Habitat Survey
PRA	Preliminary Roost Assessment
PRF	Potential Roost Feature
SAC	Special Area of Conservation
SINC	Site of Importance for Nature Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

Figures and Appendices

Appendix A

Habitat Map

Target Notes (TN)

The following features of interest were noted during the survey and have been marked on Figure 1:

- TN1 – Scrap Metal Pile

Appendix B

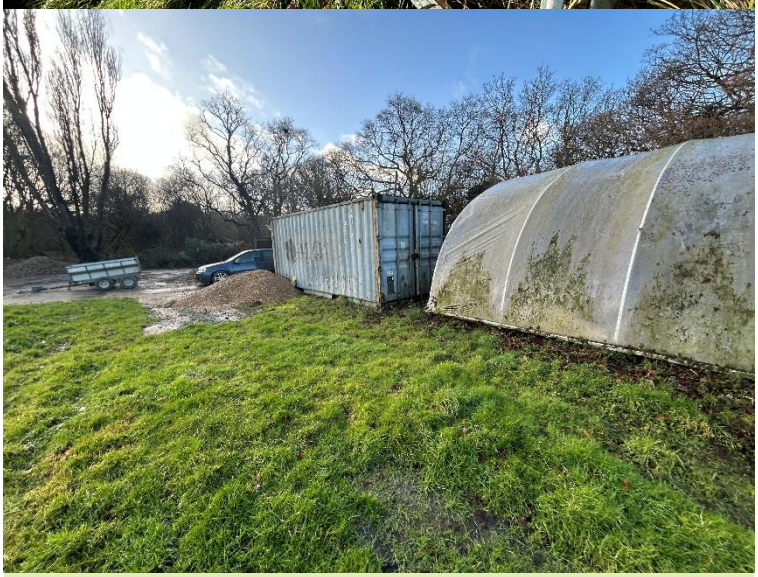
Photographs

Photographs

Photo No.	Feature	Photograph of Feature
1	Facing east along the southern boundary showing the access track and the boundary trees and offsite habitats	
2	Facing east along the southern boundary showing an adjacent offsite treeline	

3	The main habitats on site were the grassland and polytunnel buildings	
4	Polytunel east (B2)	 

		 
5	Facing south showing the main development area	

6	Polytunnel west (B2)	  

7	Shows dilapidated sheds, scrap metal piles and shipping containers at the southwest corner	
8	A small stream was present offsite within the woodland habitat	

Appendix C

Legislation

Legislation

This section contains information pertaining to the legislation and planning policy applicable in Britain. This information is not applicable to Northern Ireland, the Republic of Ireland the Isle of Man or the Channel Islands. Information contained in the following appendix is provided for guidance only.

Species

The objective of the EC Habitats Directive[5] is to conserve plants and animals which are considered to be rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and also implements the obligations set out for species protection from the Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Various amendments have been made since the Wildlife & Countryside Act came into force in 1981. Further details pertaining to alterations of the Act can be found on the following website: www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000) and Nature Conservation (Scotland) Act 2004.

There are a number of other legislative Acts affording protection to species and habitats. These include:

- Countryside and Rights of Way (CRoW) Act 2000;
- Deer Act 1991;
- Natural Environment & Rural Communities (NERC) Act 2006;
- Protection of Badgers Act 1992; and
- Wild Mammals (Protection) Act 1996.

Badgers

Badgers and their setts are protected under the Protection of Badgers Act (1992), which consolidated and added to the previous Badger Acts of 1973 and 1991. Under this legislation it is an offence to:

- cruelly ill-treat a badger, including use of tongs and digging;

[5] Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

- intentionally or recklessly cause a dog to enter a badger sett;
- intentionally or recklessly damage, destroy or obstruct access to a badger sett[6] or any part thereof;
- intentionally or recklessly disturb[7] a badger when it is occupying a badger sett;
- possess or control a dead badger or any part of a badger;
- sell or offers for sale, possesses, or has under his control, a live badger; and
- wilfully kill, injure, take, or attempt to kill, injure, or take a badger.

A Development Licence will be required from Natural England for any development works affecting an active badger sett, or to disturb badgers while individuals are occupying the sett. Depending on the nature of the works and the specifics of the sett, badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett itself. Natural England has issued guidelines on what constitutes a licensable activity. There is no provision in law for the capture of badgers for development purposes and therefore it is not possible to obtain a licence to translocate badgers from one area to another.

Bats

Bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). This act protects individuals from:

- intentional or reckless disturbance (at any level);
- intentional or reckless obstruction of access to any place of shelter or protection; and
- selling, offering, or exposing for sale, possession or transporting for purpose of sale.

In addition, all species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- deliberate killing, injuring, or capturing of Schedule 2 species (all bats);
- deliberate disturbance of bat species as to impair their ability:

  (i) to survive, breed, or reproduce, or to rear or nurture young; and

  (ii) to hibernate or migrate.

[6] A badger sett is defined in the legislation as *"any structure or place which displays signs indicating current use by a badger"*. This includes seasonally used setts. Natural England (2009) have issued guidance on what is likely to constitute current use of a badger sett: www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pdf

[7] For guidance on what constitutes disturbance and other licensing queries, see Natural England (2007) Badgers & Development: A Guide to Best Practice and Licensing. www.naturalengland.org.uk/Images/badgers-dev-guidance_tcm6-4057.pdf, Natural England (2009) Interpretation of 'Disturbance' in relation to badgers occupying a sett www.naturalengland.org.uk/Images/WMLG16_tcm6-11814.pdf, Scottish Natural Heritage (2002) Badgers & Development. www.snh.org.uk/publications/online/wildlife/badgersanddevelopment/default.asp and Countryside Council for Wales (undated) Badgers: A Guide for Developers. www.ccw.gov.uk.

- deliberate disturbance of bat species as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part thereof.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake activities listed above. A licence is required to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Breeding Birds

Under the Wildlife & Countryside Act, 1981 (as amended), a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. Game birds, however, are not included in this definition (except for limited parts of the Act). They are covered by the Games Acts, which fully protect them during the closed season.

Under the Wildlife & Countryside Act, 1981 (as amended), all birds, their nests and eggs are protected under Sections 1-8 of the Act and it is an offence, with certain exceptions, to:

- intentionally (or recklessly in Scotland) kill, injure, or take any wild bird;
- intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird;
- have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act;
- have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act;
- use traps or similar items to kill, injure or take wild birds;
- have in one's possession or control any bird (dead or alive) unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations; and
- in Scotland only, intentionally or recklessly obstruct or prevent any wild bird from using its nest.

Certain rare species receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). This affords them protection against:

- intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young;
- intentional or reckless disturbance of dependent young of such a bird;

- in Scotland only, intentional or reckless disturbance whilst lekking; and
- in Scotland only, intentional or reckless harassment.

The British Trust for Ornithology (BTO) has a list of birds that are Species of Conservation Concern. These birds are not legally protected but where they are found on site they should be given planning consideration. The criteria for birds listed as amber (medium conservation concern) include:

- historical population decline during 1800-1995, but recovering: population has more than doubled over last 25 years;
- moderate (25-49%) decline in UK breeding population over last 25 years;
- moderate (25-49%) contraction of UK breeding range over last 25 years;
- moderate (25-49%) decline in UK non-breeding population over last 25 years;
- species with unfavourable conservation status in Europe (Species of conservation Concern);
- five year mean of breeding pairs in the UK;
- ≥50% of UK breeding population in 10 or fewer sites;
- ≥50% of UK non-breeding population in 10 or fewer sites;
- ≥20% of European breeding population in UK; and
- ≥20% of NW European (wildfowl), East Atlantic Flyway (waders) or European (others) non-breeding populations in UK.

Hazel Dormice

The hazel dormouse (*Muscardinus avellanarius*) is fully protected under The Conservation of Habitats and Species Regulations 2017 through its inclusion on Schedule 2. Regulation 41 prohibits:

- deliberate killing, injuring, or capturing;
- deliberate disturbance as to impair its ability:

  (i) to survive, breed, or reproduce, or to rear or nurture young; and

  (ii) to hibernate or migrate.
- deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part of this species.

The hazel dormouse is also currently protected under the Wildlife and Countryside Act 1981 (as amended) through its inclusion on Schedule 5. Under this Act, this species is additionally protected from:

- intentional or reckless disturbance;

- intentional or reckless obstruction of access to any place of shelter or protection; and
- selling, offering or exposing for sale, possession or transporting for purpose of sale.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect dormouse breeding or resting places (N.B. this is usually taken to mean dormouse 'habitat') or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence will allow derogation from the relevant legislation but will also to enable appropriate mitigation measures to be put in place and monitored.

Herpetofauna (Reptiles and Amphibians)

The following species receive full protection under the Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2.

- sand lizard (*Lacerta agilis*);
- smooth snake (*Coronella austriaca*);
- natterjack toad (*Epidalea calamita*);
- great crested newt (*Triturus cristatus*); and
- pool frog (*Pelophylax lessonae*).

Under this legislation, Regulation 41 prohibits:

- deliberate killing, injuring or capturing of species listed on Schedule 2;
- deliberate disturbance of any Schedule 2 species as to impair their ability:

  (i) to survive, breed, or reproduce, or to rear or nurture young; and

  (ii) to hibernate or migrate.
- deliberate disturbance of any Schedule 2 species as to affect significantly the local distribution or abundance of the species;
- deliberate taking or destroying of the eggs of a Schedule 2 species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part of a species.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- intentional or reckless disturbance (at any level);
- intentional or reckless obstruction of access to any place of shelter or protection; and

- selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). These species include:

- adder (*Vipera berus*);
- grass snake (*Natrix natrix*);
- common lizard (*Zootoca vivipara*); and
- slow-worm (*Anguis fragilis*).

Under this legislation, for these species it is prohibited under Section 9(1) & (5) to:

- intentionally (or recklessly in Scotland) kill or injure these species; or
- sell, offer, or expose for sale, possess, or transport for purpose of sale these species, or any part thereof.

The following species are listed in respect to Section 9(5) of Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) which only affords them protection against sale, offering or exposing for sale, possession, or transport for the purpose of sale:

- common frog (*Rana temporaria*);
- common toad (*Bufo bufo*);
- smooth newt (*Lissotriton vulgaris*); and
- palmate newt (*L. helveticus*).

Water Voles

Water voles (*Arvicola amphibius*) (=*terrestris*) are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- intentionally kill, injure, or take (capture) this species;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
- intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection; and
- sell, offer, or expose for sale, or have in his possession or transport for the purpose of sale, any live or dead water vole or part of this species.

Where development works are liable to affect habitats known to support water voles, Natural England must be consulted. All alternative design options must have been explored and communicated to Natural England in order to demonstrate that works have tried to avoid contravening the legislation e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable etc. Conservation licences for the capture and translocation of water voles may be issued by Natural England for the purpose of development activities if it can be shown that the

activity has been properly planned and executed and thereby contributes to the conservation of the population.

Otters

Otters (*Lutra lutra*) are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

- deliberate killing, injuring, or capturing of otters;
- deliberate disturbance as to impair their ability:

  (i) to survive, breed, or reproduce, or to rear or nurture young; and

  (ii) to hibernate or migrate.
- deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part of this species.

Otters also receive protection under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- intentional or reckless disturbance (at any level);
- intentional or reckless obstruction of access to any place of shelter or protection; and
- selling, offering, or exposing for sale, possession or transporting for purpose of sale.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect breeding or resting places or for activities likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Wild Mammals

All wild mammals are protected against intentional acts of cruelty under the Wild Mammals (Protection) Act 1996. Under this legislation it is an offence to:

- mutilate, kick, beat, nail, or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention of this legislation, due care and attention should be taken when carrying out works that have the potential to impact any wild mammal as described above.

Plants

Wild plants are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Some rare plant species also receive full protection under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits:

- intentionally (or recklessly in Scotland) picking, uprooting, or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only); and
- selling, offering, or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or parts.

In addition to the legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2017. Regulation 45 makes it an offence to:

- deliberately pick, collect, or destroy a wild Schedule 5 species; and
- be in possession of, or control, transport, sell, or exchange any wild live or dead Schedule 5 species or anything derived from it.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect species of plant listed under The Conservation of Habitat and Species Regulations 2017.

Invasive Plant Species

Certain plants are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Species include:

- Japanese knotweed (*Reynoutria japonica*);
- giant hogweed (*Heracleum mantegazzianum*);
- Himalayan balsam (*Impatiens glandulifera*);
- certain species of rhododendron (*Rhododendron* sp.); and
- certain species of cotoneaster (*Cotoneaster* sp.).

Species listed are non-natives whose establishment or spread in the wild may be detrimental to native wildlife. Inclusion on Part II of Schedule 9 therefore makes it an offence to:

- plant or otherwise cause these species to grow in the wild.

This legislation makes it is an offence to cause species listed to grow in the wild. Therefore, if they are present on site and development activities have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this.

Habitats

International Statutory Designations

- Special Protection Areas (SPAs): Terrestrial SPAs are afforded protection by The Conservation (Natural Habitats, &c.) Regulations 1994 ((as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019) and offshore SPAs are afforded protection under The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended by EU Exit Regulations 2019). SPAs are designated under the EC Birds Directive (Council Directive 2009/147/EC on the Conservation of Wild Birds). SPAs are areas recognised as important habitat for rare and migratory birds within the European Union (rare birds as listed on Annex I of the Directive).
- Special Areas of Conservation (SACs): These areas are designated under the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora), designated for the habitats and (non-bird) species listed on Annexes I and II to the Directive under the same regulations as detailed for SPAs.
- Ramsar sites: These areas are wetlands designated under the Convention on Wetlands of International Importance (1971). Wetlands can include areas of marsh, fen, water, or peatland and may be natural or artificial, permanent, or temporary. Ramsar sites are underpinned through prior notification as Sites of Special Scientific Interest (SSSIs) and as such receive statutory protection under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CRoW) Act 2000.

National Statutory Designations

- Sites of Special Scientific Interest (SSSIs): These sites are designated by the countryside agencies (for example Natural England) under the Wildlife & Countryside Act 1981 (as amended). Prior to 1981 these were designated under the National Parks and Access to the Countryside Act 1949. Improved mechanisms for the protection of SSSIs have also been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales).
- National Nature Reserves: These sites are also designated by the countryside agencies under the Wildlife & Countryside Act 1981 (as amended).

Local Statutory Designations

- 1949 Local Nature Reserves (LNRs): These sites are designated by local authorities under the National Parks and Access to the Countryside Act 1949. These are sites recognised for their wildlife or geological interest at a local level and are managed for nature conservation.

Non-Statutory Designations

- Local Wildlife Sites: Areas of local conservation interest may be designated by local authorities. The terminology for these sites varies depending on the county. They can be called Sites of Nature Conservation Importance (SNCI's), Sites of Importance for Nature Conservation (SINCs), County Wildlife Sites (CWS), Listed Wildlife Sites (LWS), Local Nature Conservation Sites (LNCS), and Sites of Biological Importance (SBIs). The designation criteria may vary between counties. Local Wildlife Sites are of material consideration when planning applications are being determined.
- The Hedgerow Regulations 1997: These have been compiled to protect 'important' countryside hedgerows from damage or removal. A hedgerow is considered important if it (a) has existed for 30 years or more; and (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations. Under the Regulations, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. Hedgerows covered by these regulations include those on or adjacent to common land, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry, and land used for the keeping or breeding of horses, ponies, or donkeys.

National Planning Policy

- The National Planning Policy Framework (NPPF), last updated December 2024 sets out the Government's planning policies for England and how these should be applied. The Framework specifies the need to protect and enhance valued landscapes, biodiversity and geodiversity, identify and safeguard components of local wildlife-rich habitats and wider ecological networks including the hierarchy of international, national, and locally designated sites of importance for biodiversity; wildlife corridors; and stepping that connect them Minimising impact on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs. Plus, partnerships for habitat management, enhancement, restoration, or creation. The Framework aims to promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate. In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; appropriate mitigation or compensation measures are in place where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

Local Planning Policy

Horsham District Planning Framework (2015)

Policy 25 - District Character and the Natural Environment:

- As set out in the introduction to this chapter, the rural qualities of Horsham district are highly valued by those who live and work here, and the landscape and environment also contribute to the economy of the district, both directly and indirectly. The Council is seeking to maintain and where appropriate enhance the beauty and amenity of both the natural and built-up areas of the district. The potential for development to result in small changes which cumulatively impact on landscape, settlement character and the natural environment will be a key consideration, particularly in terms of the impact on smaller scale and local features. In addition to the protected landscapes, as shown on the Policies map, Neighbourhood Plans and other development proposals will need to demonstrate that proposals conserve and enhance the character of the district as identified in documents such as the Horsham District Landscape Character Assessment 2003, and that development is located in areas with the greatest landscape capacity to accommodate development, as indicated in the Landscape Capacity Assessment 2014. Where appropriate, local greenspace designations may also have a role in conserving and enhancing the character of the district, where it can be demonstrated that they are special to the local community.
- Consideration of the townscape character of settlements will be informed by broad based studies of historic character, Conservation Area Appraisals, Village or Parish design statements and any emerging Neighbourhood Plans. Maintenance of the existing settlement pattern is a key objective for the Council, and in particular maintaining the separation between settlements.
- Neighbourhood Plans and development proposals will also need to demonstrate that proposals contribute to the multi-functional network of green spaces, water and other environmental features in urban and rural areas known as Green Infrastructure. It includes trees, parks, road verges, allotments, cemeteries, woodlands, rivers and wetlands. The Council's Green Infrastructure Strategy identifies current and potential future provision of Green Infrastructure. This includes the opportunity to enhance existing biodiversity in identified opportunity areas or any subsequent updates. Neighbourhood Plans and development proposals will also be required to demonstrate that existing biodiversity is protected and enhanced, including the hierarchy of designated sites indicated on the proposals maps and where necessary, demonstrate the requirements of the Habitats Regulations have been met.
- Whilst it is recognised that the undeveloped nature of rural areas must be protected, it is acknowledged that there may be circumstances where development is necessary to ensure the continued sustainable development of rural areas. This might include development which is required to sustain social and economic needs of rural communities, such as subsidised housing, business uses, community, leisure, cultural and tourism facilities, and necessary upgrades to infrastructure, such as water supplies, or high speed broadband and renewable energy.

Policy 26 – Countryside Protection:

- Horsham district covers a large area and contains a diverse range of characteristics, from the heavily wooded character in the north, to more open river floodplains in the south. The Council is seeking to identify the most valued parts of the district for protection, as well as maintain and enhance this natural beauty and the amenity of the district's countryside. It is considered important that the unique characteristics of the district's landscapes are retained and where practicable, enhanced. It will be necessary to ensure that development proposals take into account the key characteristics of the landscape character areas.

Policy 30 – Protected Landscapes:

- Designated for their national importance in terms of landscape and scenic quality, sections of both the High Weald Area of Outstanding Natural Beauty (AONB) and the South Downs National Park fall within the administrative area of Horsham district. The South Downs National Park Authority is the Planning Authority for the National Park Area of Horsham district, and this policy, in common with all others in this plan does not apply to the land within the National Park Area.
- It is essential that the key qualities of these protected landscapes are conserved and enhanced. In the AONB, this includes the heavily wooded character, gill streams, and historic farmsteads and into the locally distinctive hammer ponds whereas a key feature of the South Downs are the steep scarp slopes which form a backdrop to many of the settlements in the south of the district. The conservation and enhancement of protected landscapes will be actively supported, particularly as defined in the High Weald AONB Management Plan and the South Downs Integrated Assessment Plan or any other relevant updates to these documents.
- Development has the potential to harm protected landscapes. Major development will not normally be permitted, and will need to demonstrate that the need for development cannot be met elsewhere or in another way, and that the development is in the public interest. It is however acknowledged that protected landscapes need to be able to adapt to cope with new pressures and meet the needs of residents in the area, and there may be cases where small scale development that helps to maintain economic or social well being in or adjoining these landscapes is necessary.
- Development close to the edge of both the AONB and the South Downs National Park has the potential to have adverse impacts on the qualities of these landscapes, and applicants will need to be mindful of this in relation to any proposals close to the boundary of either of these protected landscapes.

Policy 31 – Green Infrastructure and Biodiversity:

- Green Infrastructure is a term used to describe a multi-functional and connected network of green spaces, water and other environmental features in urban and rural areas. It includes trees, parks, road verges, allotments, cemeteries, woodlands, rivers and wetlands. Green Infrastructure can contribute to the provision of 'ecosystem services'. This includes flood protection, water purification, carbon storage, land for food

production, places for recreation, landscape and nature conservation. Without these services, life as we know it would not be possible, and increased flooding or drought episodes will have severe economic consequences.

- The Council has identified the key strategic Green Infrastructure Assets and opportunities in the district. In addition to existing features such as woodland and rivers, there are also new opportunity areas where new elements of green infrastructure could be provided in the future. It should also be recognised that Green Infrastructure extends beyond Council boundaries - the Downs Link for example extends north to Guildford and south to Shoreham-by-Sea. Green Infrastructure also exists at a smaller scale, in towns, villages and neighbourhoods, and new developments can also provide new green infrastructure through the provision of sustainable drainage systems that can also be used as green spaces, or by providing new recreation routes that are planted to benefit biodiversity.
- The network of Green Infrastructure within the district must be maintained and enhanced. Further detail on the precise location of the strategic green infrastructure assets is available in the Council's Green Infrastructure strategy documentation. Applicants will also need to be mindful of other policies in this document which also contribute to the provision of Green Infrastructure.
- Forming part of the Green Infrastructure network of the district, Horsham district contains a rich network of biodiversity (variety of life). The nature of the habitats and species found across the District is very varied, but key characteristics include the network of woodland habitats, which is particularly dense in the north of the district. Much of this woodland has been present since at least 1600. Designated as ancient woodland, these areas are of particular importance to wildlife and are irreplaceable. As identified by the Local Economic Partnership, woodland has the potential to play a key economic role in the district in the future, providing a low carbon fuel source together with biodiversity benefits. Another key habitat in the District is the dense network of hedgerows, which support a range of wildlife in their own right, and act as corridors, linking wildlife habitats across the district. The floodplains of the Arun and Adur are also distinctive habitats within the district, and the Arun Valley in is of both national and international importance for nature conservation. Farmland is another key habitat across the district, and the south-west of the district provide an important feeding ground for the internationally important Barbastelle bats.
- Development has the potential to harm biodiversity both directly and indirectly. Direct effects include loss of land to new development, whereas indirect effects include increased traffic resulting in a decline in air quality, which can impact habitats and species some distance from a development site. Development does however have potential to create places for biodiversity, for example by planting native species as part of site landscaping, or incorporating features such as bat or bird boxes.
- This policy seeks to ensure that development does not cause a net loss in biodiversity, and provides net gains in biodiversity where possible. The Policies Map shows the location of key nature conservation sites and further information regarding the location of areas with potential for enhancing biodiversity (biodiversity opportunity areas) available in the Council's Green Infrastructure Strategy and the Sussex Biodiversity

Action Plan. Further information on habitats and species that have been recorded in the District is available from the Sussex Biodiversity Record Centre.

- Development proposals must provide sufficient information to assess the effects of development on biodiversity, and should provide any necessary ecological surveys together with any proposed prevention, mitigation or compensation measures. All development proposals should seek to enhance biodiversity through a range of measures, including enhancements either on or off the site, and provide buffer strips around protected sites, including Ancient woodland and other vulnerable habitats, and maintain, re-instate and enhance wildlife corridors. Applicants will also need to be mindful of the presence of any invasive species on the site and seek to remove these in accordance with any relevant legislation.
- Although located in the South Downs National Park, applicants will need to be particularly mindful of the impact development within Horsham district could have on Arun Valley Special Protection Area (SPA) and The Mens Special Area for Conservation (SAC). Both these sites are of international importance for nature conservation, and applicants will need to demonstrate that development does not have adverse impacts on either of these sites in accordance with relevant legislation. In the case of Arun Valley, proposals must demonstrate that they will avoid harm to the water quality and water levels on the site. In the case of The Mens, development must not impact on bat flight paths in the district. As recommended in the Council's Habitat Regulations Assessment of this plan, a 'bat sustenance zone' has been identified and is shown on the Policies Map. Within this area, it may be necessary for compensatory measures such as hedgerow enhancement to be undertaken prior to any development.
- In addition to the wider importance of woodland and Ancient Woodland identified above, individual trees, including 'veteran trees' are also important contributors to the character and biodiversity of the District, and many are protected by Tree Preservation Orders. It should be recognised that it may sometimes be necessary to undertake work on or fell protected trees (eg due to disease or storm damage). Applicants wishing to undertake work on protected trees are advised to consult the available Government Guidance on this issue. Where replacement planting is required, replanting with native species will be encouraged to ensure that ecological networks remain functional and to prevent the isolation of trees and woodland in the landscape.

Appendix D

Plant Species List

Plant Species List

Scientific nomenclature follows Stace (2019) for vascular plant species and British Bryological Society (BBS) Special Volume No. 5 *English Names for British* Bryophytes for bryophyte species. Vascular plant common names follow the Botanical Society of the British Isles 2003 list, published on its web site, www.bsbi.org.uk. The plant species list was generated as part of a Phase 1 Habitat survey and does not constitute a full botanical survey.

Abundance was estimated using the DAFOR scale as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare.

Key to qualifiers: G = garden origin, P = planted, Y = young, S = seedling or sucker, T = tree, H = hedge, W = water, ? = identification uncertain.

Scientific Name	Common Name	Abundance	Qualifier
Aquilegia vulgaris	Common columbine	R	
Alliaria petiolata	Garlic mustard	O	
Bellis perennis	Daisy	O	
Helminthotheca echioides	Bristly ox tongue	O	
Lolium perenne	Rye grass	D	
Lecanthium vulgare),	Ox eye daisy	R	
Myosotis sylvatica	Forget me not	R	
Pulicaria dysenterica	Common fleabane	R	
Rannunculus spp.	Buttercup	O	
Rumex spp.	Dock	O	
Rubus fruiticosus	Bramble	D	
Urtica dioica	Nettle	F	

Appendix E

Suggested Compensatory Planting

Suggested Compensatory Planting

This section provides a list of plants which are of proven value to wildlife. The list is not exhaustive and merely provides a guide for suggested planting for wildlife value. Planting should be tailored on a site by site basis. The list includes some native and ornamental species however the emphasis should always be on the use of predominantly native species.

N = Native, NN = Non-native.

This list includes species that may be harmful if handled or ingested. Schedule 9 (Part 2) of the Wildlife and Countryside Act, 1981 (as amended) includes a list of invasive plants, including aquatic species, that should always be avoided in planting schemes.

Large Shrubs

Hedge veronica/Hebe (*Veronica* spp.) NN

Hawthorn (*Crataegus monogyna*) N

Blackthorn (*Prunus spinosa*) N

Rose: dog rose (*Rosa canina*), field rose (*R. arvensis*), burnet rose (R. *pimpinellifolia*) N

California lilac (*Ceanothus* spp.): (*C. arborea*) NN

Wild privet (*Ligustrum vulgare*) N

Common holly (*Ilex aquifolium*) N

Barberry (*Berberis* spp.): (*B. darwinii*), (*B. thunbergii*), (*B. x stenophylla*) NN

Daisy Bush (*Olearia* spp.): (*O. x hastii*), (*O. macrodonta*), (*O. traversii*) NN

Firethorn (*Pyracantha coccinea*) NN

Hazel: (*Corylus avellana*) N, (*C. maxima*) NN

Viburnum (*Viburnum* spp.): wayfaring tree (*V. lantana*) N, guelder rose (*V. opulus*) N, laurustinus (*V. tinus*) NN. Note: *V. lantana* can become invasive in more open habitats.

Dogwood (*Cornus sanguinea*) N

Broom (*Cytisus scoparius*) N

Escallonia (*Escallonia macrantha*) NN

Hardy fuchsia (*Fuchsia magellanica*) NN

Buckthorn (*Rhamnus cathartica*) N

Spindle (*Euonymus europaeus*) N

Tutsan (*Hypericum androsaemum*) N

Yew (*Taxus baccata*) N

Trees

Cherry (*Prunus* spp.): wild cherry (*P. avium*), bird cherry (*P. padus*), domestic plum (*P. domestica*) N, or cherry plum (*P. cerasifera*) NN

Ash (*Fraxinus excelsior*) N

Apple (*Malus* spp.): edible apple (*M. domestica*), crab apple (*M. sylvestris*) N

Pear (*Pyrus* spp.): edible pear (*P. communis*) NN

Small-leaved lime (*Tilia cordata*) N

Silver birch (*Betula pendula*) N

Yew (*Taxus baccata*) N

Black poplar (*Populus nigra*) N

Foxglove tree (*Paulownia tomentosa*) NN

Beech (*Fagus sylvatica*) N

Climbers

Jasmine (*Jasminum* spp.): summer jasmine (*J. officinale*), winter jasmine (*J. nodiflorum*) NN

Ivy (*Hedera helix*) N

Climbing hydrangea (*Hydrangea anomala* ssp. *petiolaris*) NN

Honeysuckle (*Lonicera* spp.): (*L. periclymenum*) N

Clematis (*Clematis* spp.) NN

Hop (*Humulus lupulus*) N

Firethorn (*Pyracantha atalantioides*) NN

Bulbs

English bluebell (*Hyacinthoides non-scripta*) N

Squill species (*Scilla* spp.) N/NN

Snowdrop (*Galanthus nivalis*) N

Winter aconite (*Eranthis hyemalis*) E

Crocus species (*Crocus* spp.) NN

Wild Daffodil (*Narcissus pseudonarcissus*) N

Onion species (*Allium* spp.) N/NN. Note: *Allium triquetrum* (three cornered leek) and *Allium paradoxum* (few-flowered leek) are Schedule 9 invasive plant species.

Wood anemone (*Anemone nemorosa*) N

Lesser celandine (*Ficaria verna*) N

Appendix F

Bird and Bat Box Designs

Bird and Bat Box Designs

Bird Boxes

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	**Schwegler Nest Box 1B** Hole-fronted 26mm entrance hole	16 x 16 x 23	Multi-purpose, including: blue-, marsh-, coal-, and crested tit, and possibly wren. All other species are prevented from using the nest box due to the smaller entrance hole.	Suitable walls or semi-mature/mature trees and shrubs; attached to a tree trunk or hung from branches. Ideal points include discrete areas away from predators, such as against walls, plant, and metal supports.
	**Schwegler Bird House** 32mm entrance hole	15 x 21 x 33	Multi-purpose, including: great-, blue-, marsh-, and coal tit, redstart, nuthatch, pied flycatcher, and sparrows.	Fixed to a semi-mature/mature tree trunk, wall or fence using the hanging bracket on the back. Between 1.5 m and 3 m high, and should be sited higher if area has a particularly high cat population.

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	**Schwegler Sparrow Terrace 1SP**	20 x 43 x 24.5	House sparrow. It may also occasionally attract tits, redstarts, and spotted flycatchers.	In an elevated position such as on post/platform within dense shrub/tree planting or on top of lighting columns. Alternatively, they could be attached to the side of a building. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds, and factories. Due to its weight (15kg), it is not suitable for fences or garden sheds. Ideally place the terrace two metres or more above the ground. Either install on the surface of the wall using the plugs and screws provided or install directly into the wall. Cleaning is not necessary. The front panel can be removed by turning the screw hook.

Bat Boxes

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	**2F Schwegler Bat Box (General Purpose) with or without Double Front Panel**	16 x 16 x 33	Without panel: Particularly successful with brown long-eared bat. Also used by noctule. With panel: Ideal for crevice-dwelling species: pipistrelles, Myotis species (particularly Daubenton's), Leisler's, and serotine.	On trees or buildings and at a height of 3 to 6m. In open sunny positions and in groups of 3 to 5 facing different directions. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.
	**Chavenage Bat Box**	10 x 18 x 38	Small crevice-dwelling bats: e.g. pipistrelles.	On trees in gardens or woodland and also on house walls. 2.5 - 5m high on a building, mature tree, or vegetation line (trees/tall hedge) or on a feeding/flight route in partial daytime sun. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.

Appendix G

Priority Habitat Map(s)

Priority Habitat Maps

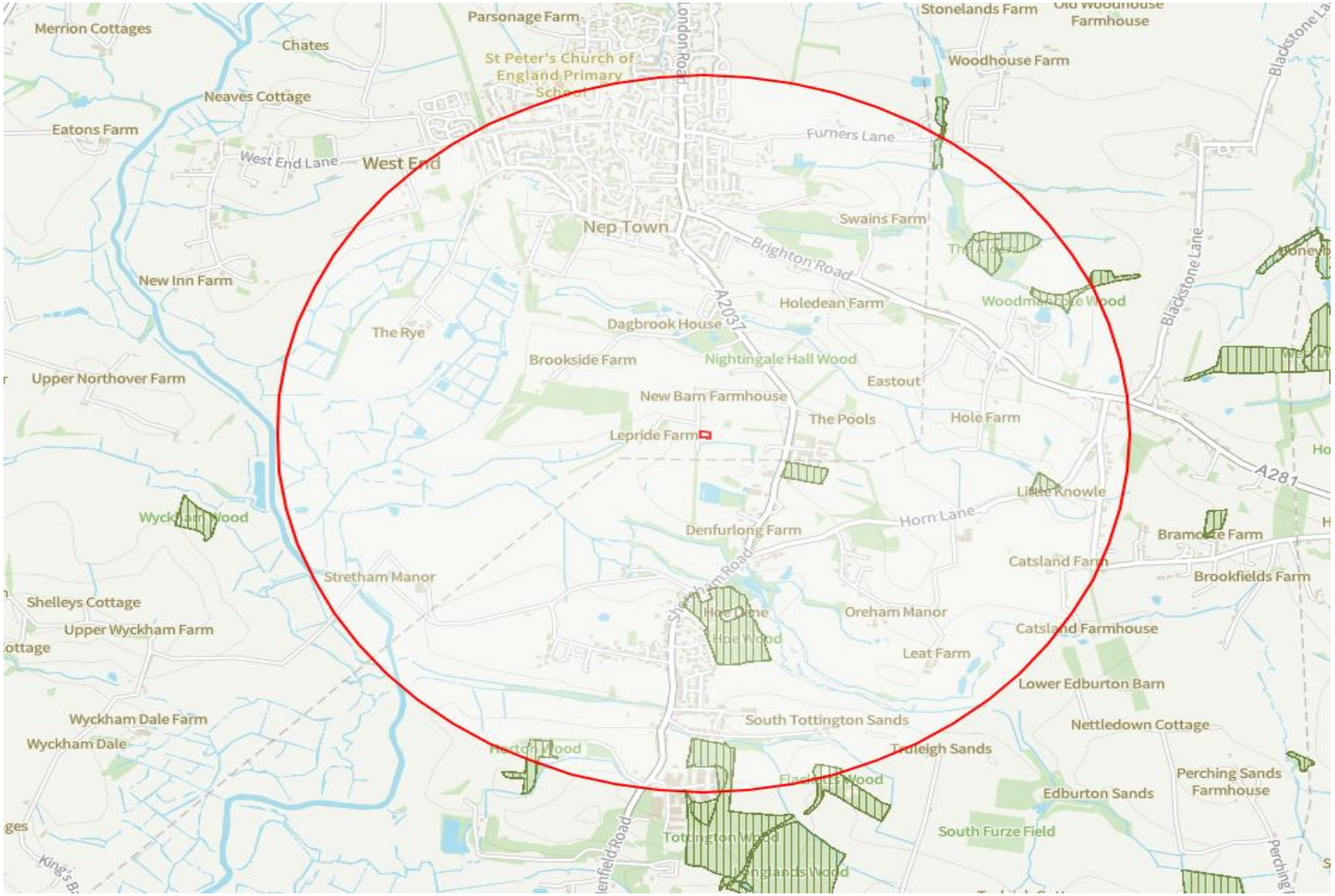


Image 3; Priority ancient woodland habitat in the wider surroundings. Site boundary is shown in red. A 2km search buffer is shown in red.

Ancient and Semi-Natural Woodland

Ancient Replanted Woodland

(Magic, 2025)

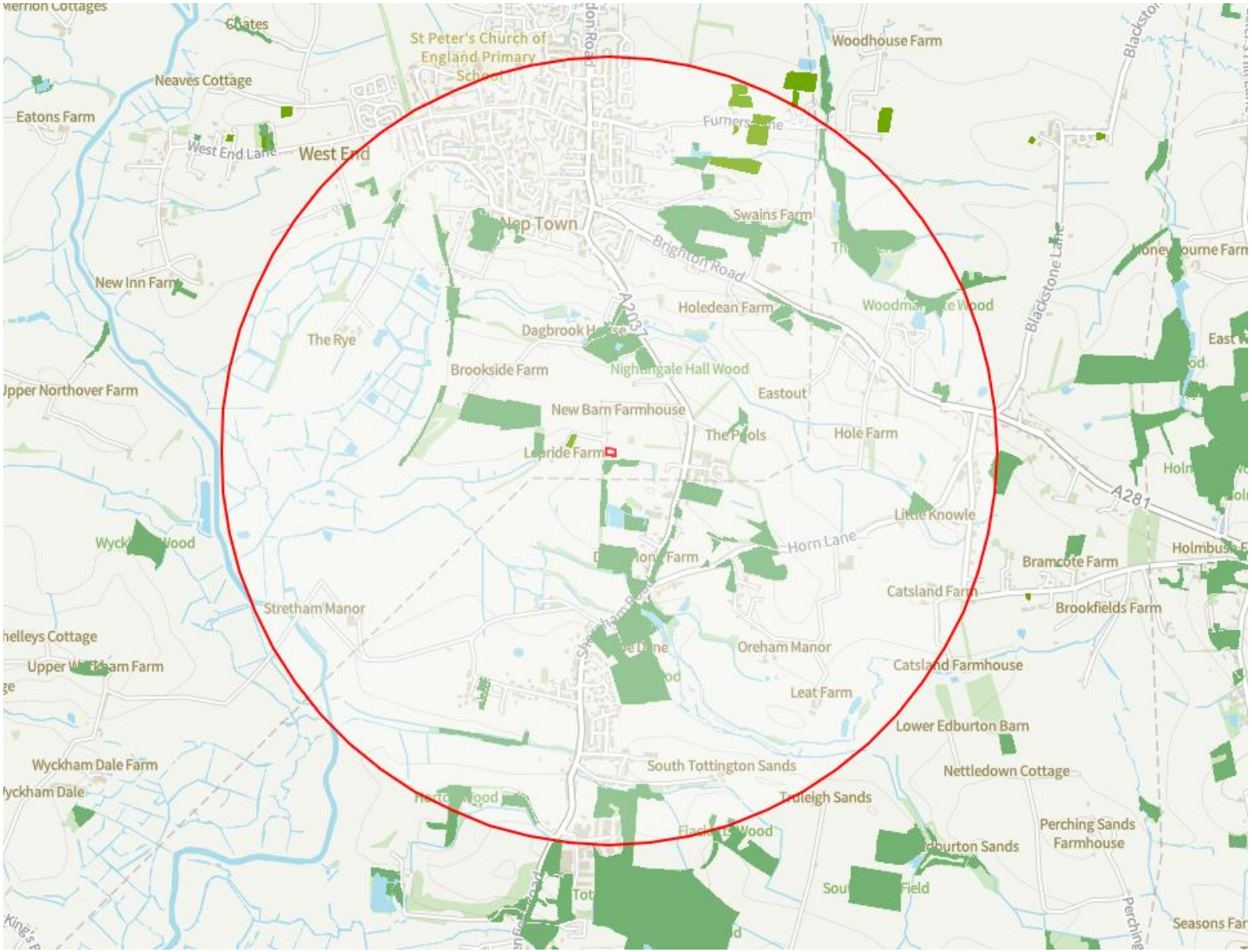


Image 4; Priority deciduous woodland habitat in the wider surroundings. Site boundary is shown in red. A 2km search buffer is shown in red.

Priority Habitat Inventory - Deciduous Woodland

Traditional Orchards

(England)

(Magic, 2025)

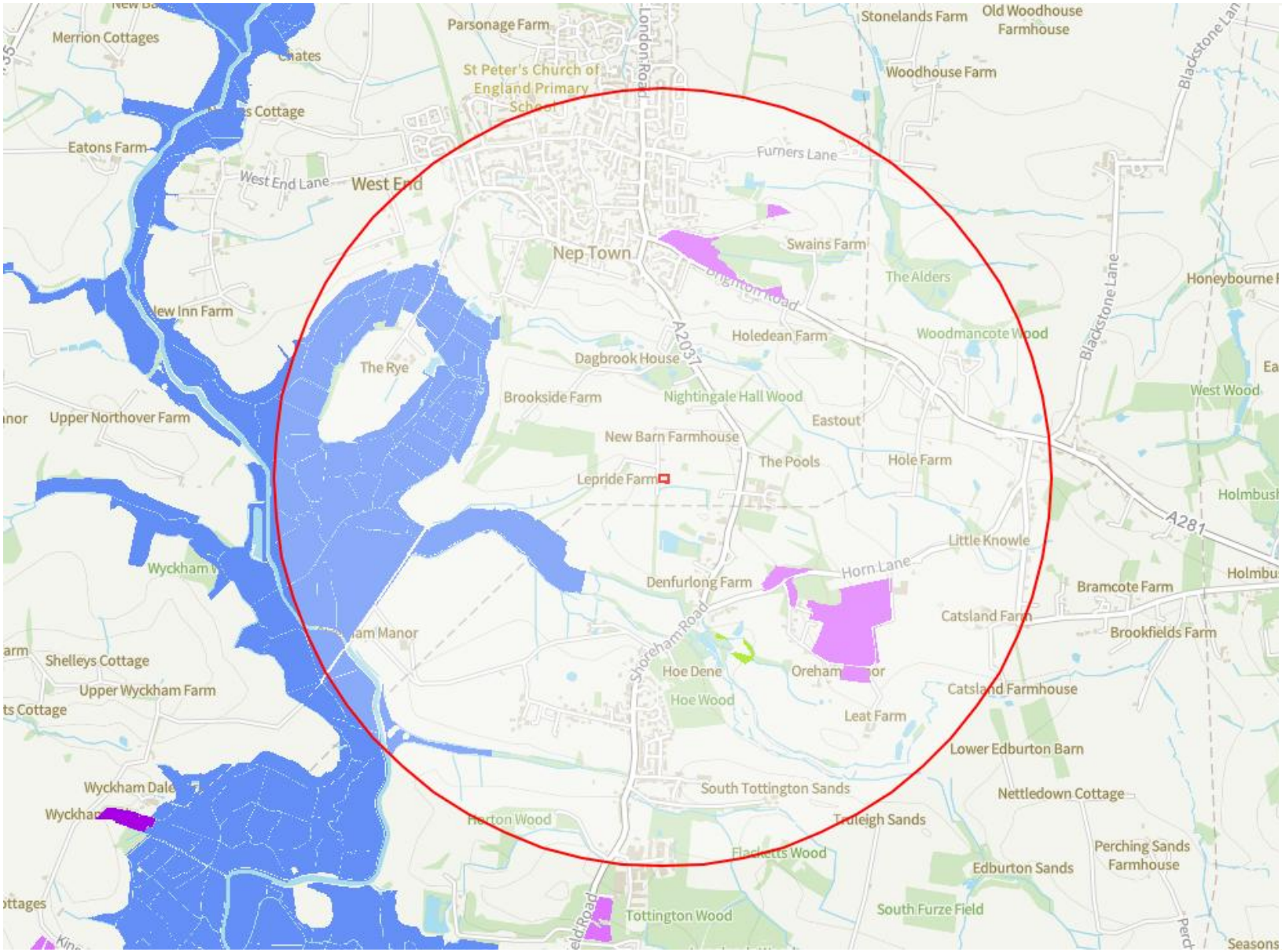


Figure 5; Priority grassland habitat in the wider surroundings. Site boundary is shown in red. A 2km search buffer is shown in red.

Good quality semi-improved grassland

Priority Habitat Inventory - Coastal and Floodplain Grazing

Priority Habitat Inventory - Lowland Meadows

Priority Habitat Inventory - Lowland Calcareous Grassland

(Magic, 2025)



Phlorum Limited

Head Office & Registered Office:
Unit 12
Hunns Mere Way
Woodingdean
Brighton
East Sussex
BN2 6AH
T: 01273 307 167

Western Office:
One Caspian Point
Pierhead Street
Cardiff Bay
Cardiff
CF10 4DQ
T: 029 2092 0820

info@phlorum.com
www.phlorum.com

Registered in England & Wales. Reg No. 4967256