

# OREHAM MANOR FARM, OREHAM COMMON, HENFIELD, BN5 9SB.

Preliminary Ecological Appraisal Report

*October 2025*



## Report Control Sheet

Project Name: *Oreham Manor Farm.*  
Project Reference: *CW20-3587*  
Report Title: *Preliminary Ecological Appraisal Report*  
Report Reference: *CW20-3587-001*  
Printing Instructions: *Print at A4 Portrait, Double Sided.*

<b>Rev</b>	<b>Date</b>	<b>Description</b>	<b>Prepared</b>	<b>Reviewed</b>	<b>Approved</b>
/	13/10/2025	Draft report.	JH	OC	KB

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## EXECUTIVE SUMMARY

<b>Site Address</b>	Oreham Manor Farm, Oreham Common, Henfield, West Sussex, BN5 9SB
<b>Grid Reference</b>	ST 78652 16001
<b>Approximate Site Area</b>	0.67ha
<b>Current Site Use</b>	<p>The site comprises of three farm buildings located within a predominantly sealed surface farmyard area, accessed by a tarmac and gravel surface driveway via Horn Lane to the north.</p> <p>Most of the site consists of sparsely vegetated land, developed land and sealed surface with agricultural buildings located within the footprint. Vegetation exists within the site as volunteer and scattered ruderal and opportunistic species typical of a frequently disturbed and unmanaged storage yard.</p> <p>It is bounded on the north by further residential properties, to the west by an unmanaged mature native hedgerow, on the east by a residential property with managed native hedgerow and to the south by agricultural land predominantly in use as pastoral grazing and consists of neutral and modified grassland parcels extending to riparian and woodland habitat.</p>
<b>Designated Sites within Zone of Influence</b>	<p>The site falls within the zone of influence of the Beeding Hill to New Timber Hill SSSI and Tottington wood LNR.</p> <p>As the development will likely add some additional light pollution into the surrounding habitat and given that the designation of the SSSI is predominantly regarding grassland and floral considerations, it is suggested that there will be minimal effect on either site.</p> <p>It is recommended that a lighting plan is detailed pre-development to mitigate against changes in the light values around the immediate and wider site boundaries.</p> <p>It is expected that there will be no considerable increase in the number of people and vehicle traffic using the site as it will remain a residential site for one additional dwelling.</p> <p>Due to the nature of the development no foreseeable impact upon the designated habitats or the surrounding site conditions is expected, however Natural England is required to be consulted on the project as per guidance stipulated within the MAGIC.gov.uk website for construction projects within the Z.O.I of SSSI designations.</p>
<b>Notable Habitat Features</b>	No notable habitats are present within or along the boundary of the site.
<b>Notable Species Applicable to the Assessment</b>	<ul style="list-style-type: none"> <li>• Bats (Potential roosting, foraging and commuting).</li> <li>• Breeding birds.</li> <li>• Reptiles.</li> <li>• Amphibians, including great crested newts.</li> <li>• Badger.</li> <li>• Hedgehog.</li> </ul>
<b>Mitigation Recommendations</b>	<ul style="list-style-type: none"> <li>• PWMS for reptiles.</li> <li>• PWM's for GCN</li> </ul>
<b>Recommended Further Surveys and Assessment</b>	<ul style="list-style-type: none"> <li>• EDNA sampling of the two offsite ponds P1 and P2 during the optimal season.</li> </ul>
<b>Recommended Ecological Enhancements</b>	<ul style="list-style-type: none"> <li>• Planting of soft landscaping to facilitate invertebrates beneficial to bats, birds and mammals around the boundaries of the site, to include provision of soft linear features such as hedgerows and green buffer zones, these will add habitat to the site and offer foraging and shelter for a wide variety of flora and fauna.</li> <li>• Bat and bird boxes built into/affixed to the new dwelling.</li> </ul>

- Hibernacula provisions along the adjoining hedgerow boundaries for reptiles, amphibians and invertebrates.

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## 1 INTRODUCTION

### 1.1. SCOPE & PURPOSE

1.1.1. Collington Winter Environmental Ltd was commissioned by Andrew Barrott to undertake a Preliminary Ecological Appraisal (PEA) at Oreham Manor Farm, Oreham Common, Henfield, BN5 9SB. This report has been prepared to inform a planning application to include the demolition of three existing buildings and the construction of a new residential dwelling onto the existing footprint of the buildings which incorporates some of wider farmyard area along with landscaping to the site. (See proposals drawing in Appendix)

1.1.2. The author of this report is Jon Hayter Technical bat lead and Senior Ecologist at Collington Winter Environmental Ltd. Jon is highly experienced managing schemes and has produced many ecological reports to inform planning applications.

### 1.2. LOCATION

1.2.1. Please refer to Figure 1.1 below for the site location and Figure 1.2 for site red line boundary plan.

1.2.2. The site is located on the eastern outskirts of the village of Small Dole approximately, 2.5km south of the town of Henfield in West Sussex. It occupies a sheltered position within a predominantly arable and pastoral landscape. It contains three buildings and is used for building material storage and other maintenance purposes associated with the owner's building business.

1.2.3. The site is accessed via a tarmac and sealed surface track from Horn Lane approximately 600m to the north of the main site.

*Figure 1.1- Site Location and access.*

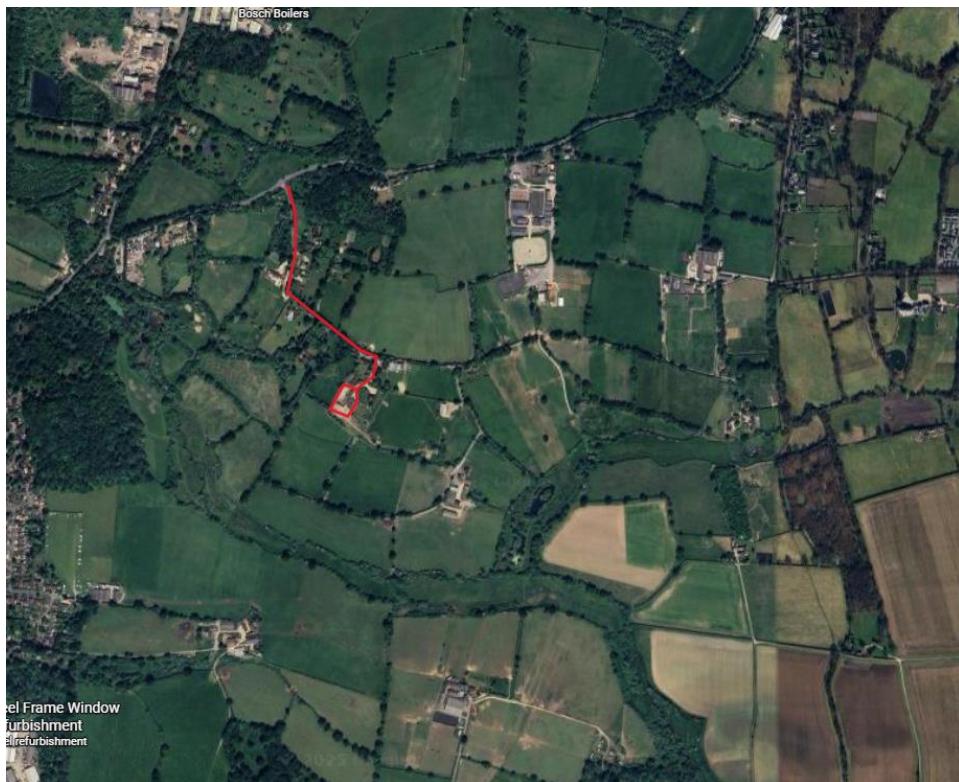


Figure 1.2- Site boundary plan



### 1.3. OBJECTIVES

1.3.1. The objectives of the Preliminary Ecological Appraisal are as follows:

- Identify the major habitats present.
- Ascertain the presence or potential presence of any legally protected or notable species or habitats
- Identify any mitigation or further surveys required and opportunities for strategic wildlife enhancements and long-term management.

## 2 METHODOLOGY

### 2.1. DESK STUDY

2.1.1. An initial desk-based assessment of the site was undertaken to collate baseline data. The desk study included:

- Obtaining local records from SBRC (Sussex Biodiversity Records Centre) of notable species and locally designated sites within 1km of the site.
- Review of Magic.gov.uk website for details of any designated sites, notable habitats and presence of European Protected Species Licences.
- Review of aerial and OS maps for habitat information, as well as determining locations of potential waterbodies to be considered in the assessment.
- Review of potential habitat links on and off site, to determine the potential zone of influence of the proposed development.
- On site consultation with the landowner which provided valuable information regarding historic land use and known species and habitats present within the ownership.

2.1.2. Please note, a lack of records for a species does not confirm absence. Instead, local surveys may not have been undertaken or records not submitted to SBRC.

2.1.3. It is noted that the Sussex Wildlife Trust offices are located at Wood Mill Nature Reserve, therefore considerable records exist for the area, and they are detailed and provide historic and up to date information on the surrounding area and the nature reserve itself.

### 2.2. VEGETATION AND HABITAT ASSESSMENT

2.2.1. An Ecological Appraisal of the site was undertaken by Jon Hayter, Bat Technical Lead and Senior Ecologist at Collington Winter Environmental Ltd on the 18<sup>th</sup> of September 2025. The weather was overcast (7/8 oktas), with no precipitation, wind speed 3mph and temperature 15°C.

2.2.2. The walkover survey was undertaken in line with standard UK HAB Methodology, Version 2 (2023). The assessment is undertaken with consideration of methodology as per "Preliminary Ecological Appraisal" (CIEEM, 2018).

2.2.3. A UK HAB Plan has been produced and is presented within the appendix of this report. Standard methodology has been used, though adjustments have been made based on judgement to demonstrate habitats in a clearer manner, or where standard guidance does not fit the conditions found on site.

### 2.3. FAUNA ASSESSMENT

2.3.1. A search for signs of protected and notable species of fauna was undertaken during the site walkover. This included both field signs of species, as well as potential for species to be present based on habitat availability.

2.3.2. The searches broadly included the following:

- Assessment of waterbodies on site and within 250m of the site boundary along with terrestrial habitats for suitability to support notable amphibians.
- Searches for field signs of, and habitat suitability for bats.
- Suitability of habitats to support reptiles, amphibians, hedgehogs and badgers comprising of searches for incidental field signs.
- Assessment of the suitability of habitats to support notable birds and recording any field sightings of birds during the walkover.
- Assessment of the sites ability to support notable invertebrates and flora.
- Searches for non-native invasive species of flora and fauna.

## 2.4. PRELIMINARY ROOST ASSESSMENT AND BAT ACTIVITY ASSESSMENT

2.4.1. A Preliminary Bat Roost Assessment (PRA) and Ground Level Tree Assessment (GLTA) of the site was undertaken during the PEA assessment by Jon Hayter who holds a Class 2 Bat Survey Licence from Natural England (Reference CL18-2019-39842-CLS-CLS).

2.4.2. The survey was undertaken following guidance set out in Collins (2023). This includes undertaking a detailed internal and external inspection of any features to compile information on potential and actual bat entry/ exit points, roosting locations and evidence of bats.

2.4.3. The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 4<sup>th</sup> edition (Collins 2023).

2.4.4. The GLTA and Potential flightpaths and foraging habitats were assessed as per categories listed in Table 4.1, below (Collins 2023).

2.4.5. If negative impacts on bat activity are suspected, further surveys may be required. Negative impacts anticipated on bats flights paths and foraging habitats may include:

- Modification of flight paths or foraging habitats either physically or through disturbance such as light spill/noise
- Severance of flight paths (fragmentation)
- Loss of Foraging habitats

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible*	No obvious habitat features on site 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.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions <sup>a</sup> and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats <sup>b</sup> ).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions <sup>a</sup> and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines 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.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions <sup>a</sup> and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

## 2.5. HABITAT SUITABILITY INDEX (GREAT CRESTED NEWT)

2.5.1. Two ponds were located within 90 metres of the site, both outside of the site boundary. As great crested newts' upper dispersal limit is generally considered to be up to 250m from a waterbody (though occurrence of greater distances does exist), ponds beyond this distance were not assessed due to their limited connectivity (English Nature, 2001).

2.5.2. Investigation of the offsite ponds was possible, therefore a full HSI assessment was conducted on each. The

evidence collected from the HSI, data search and desk study would suggest that both ponds are suitable for great crested newts due to their location within suitable habitat and the immediate connectivity between pond, refugia and hibernacula.

2.5.3. Please find below Figure 2.5 showing location of the ponds within 250m.

*Figure 2.5. Location of Ponds within 250 m of the site boundary.*



2.5.4. The ponds underwent a Habitat Suitability Index (HSI) assessment following the methodology set out in ARG UK Advice Notice 5 (Oldham et al., 2010). Two habitat suitability indices were assessed and inputted into the HSI equation, which generates a score between 0 and 1. The calculated score corresponds to the estimated pond suitability for great crested newt. (Details of the full HSI data can be found in the appendix)

## 2.6. SURVEY LIMITATIONS

2.6.1. This survey does not constitute a full botanical survey. Key species for each habitat type have been identified to give a broad representation of habitats present within the site.

2.6.2. No access was possible into the southern end of B1, this is not considered a limitation given the access to all other areas and the consistent construction style identified across all buildings.

2.6.3. It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the natural environment. Plant species may have been under-recorded, unidentifiable or not visible due to several factors including the time of year the survey was carried out or recent grass cutting and clearance work.

2.6.4. The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. This is based on the suitability of the habitat, known distribution of the species in the local area (provided by data searches) and any direct evidence within the survey area.

2.6.5. The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.

## 2.7. PROPORTIONALITY

2.7.1. Collington Winter Environmental Ltd provide recommendations in line with the British Standard for Biodiversity (BS42020). Within BS42020, proportionality is encouraged for both ecologists and Local Authority Decision Makers. Please refer to the below extract from Section 5.5 of BS42020.

*“The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.*

*NOTE 1 This approach is entwined in Government planning guidance, for example, paragraph 193 of the National Planning Policy Framework for England [41].*

*NOTE 2 The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary.”*

## 3 SURVEY RESULTS

### 3.1. SITE CONTEXT

3.1.1. The site comprises of three farm buildings set within an actively used farm and building storage yard which consists of sparsely vegetated sealed and developed land, accessed via a sealed surface track. The site is bound by residential properties to the north and east and a mature native hedgerow on the western boundary. The eastern boundary borders the landowners current residential dwelling, which is divided by a managed native hedgerow and immature trees. The southern aspect opens out onto arable and pastoral farmland.

3.1.2. The surrounding habitat outside the site redline boundary, is dominated by pastoral grassland with mature native hedgerows leading away from the site boundaries. To the north are located small, isolated woodland blocks and further residential properties and the larger town of Henfield. In the remaining directions the landscape is dominated by a rural, open grassland and marshland habitat interspersed with larger woodland blocks with the Woods mill stream located 350m south of the site boundary at its closest point. The site itself is located 20 m outside the boundary of the South Downs National Park to the southeast.

3.1.3. Overall, the site is predominantly rural with good habitat connectivity via unmanaged hedgerows, with examples of unimproved and wet grassland through to blocks of deciduous broadleaved woodland, resulting in a good mosaic of surrounding habitats anticipated to be suitable for a wide variety of flora and fauna.

### 3.2. DESIGNATED SITES

3.2.1. There are three designated sites within a 3km radius of the site as detailed in Table 3.1 below.

Table 3.1 Designated Sites

Site Name	Distance from site (km)	Direction	Designation	Citation
Tottington wood	0.9km	SW	LNR	<i>This wood is a very good example of a semi-ancient woodland dating back to at least 1600 and contains a fine example of an oak tree thought to be between 250 to 300 years old. Wildlife, ranging from roe deer to birds such as woodpeckers and blue tits' butterflies and bats together with a range of flora - bluebells and wood anemones. The site totals 5.07ha</i>
Horton Clay Pit	1.4km	SW	SSSI	<i>This pit shows the thickest and the stratigraphically most important Lower Gault sequence in the country and is a vital collecting ground for the eodentatus to daviesi Subzone faunas. The quarry is also the type locality of the Horton Wood Clay of regularis Subzone age which is a local and unusual development of the upper Folkestone Beds. The lithological and stratigraphic evidence from Horton is important in showing the sedimentary evidence of a major structural basin which controlled Lower and Middle Albion sedimentation in the Western Weald. The site is currently assessed as a disused quarry (ED) but should be reclassified as a finite buried interest (FB) - planting should be avoided to enable site re-excavation to access the Gault sequence, however, habitats are already being actively developed that may impede or prevent re-excavation. The viability of the site needs to be reviewed. Currently assessed as destroyed unless re-excavation is viable. The site totals 0.35ha.</i>
Beeding Hill to	2.2km	S	SSSI	<i>The site totals 320ha, however the proposals only</i>

New timber Hill				<p>affect two of the westernmost segments of the SSSI known as the Edburton escarpment and the Truleigh hill parcels fall within the 3km radius totalling 50 ha, however, the proposed site falls within the SSSI impact risk zone of the entire designation.</p> <p>The SSSI is a mix of calcareous grassland Beeding Hill to Newtimber Hill situated on the scarp slope of the South Downs is a site of both geological and biological importance. Three nationally uncommon habitats are represented: south-east chalk grassland, juniper scrub and calcareous pedunculate oak-ash and beech woodland. The site supports a rich community of invertebrates, especially harvestmen and has some uncommon butterflies and moths.</p> <p>The site lies on chalk which is capped in parts by clay with flints. Most of the area consists of unimproved chalk grassland, with occasional areas of scrub. In places this scrub has developed into woodland, and there are also some areas of mature beech woodland. The plateau of Newtimber Hill has an area of neutral grassland on clay with flints and has a dewpond. A chalk spring arises in a steep valley. Most of the chalk grassland is very rich in plant species with as many as 40 flowering plants per square metre. There are local variations in the composition of the sward according to the locality and the grazing regime. The richest areas are dominated by upright brome <i>Bromus erectus</i> and fine-leaved grasses such as sheep's fescue <i>Festuca ovina</i> and crested hairgrass <i>Koeleria macrantha</i>. Frog orchid <i>Coeloglossum viride</i>, round headed rampion <i>Phyteuma tenerum</i> and pyramidal orchid <i>Anacamptis pyramidalis</i> are among the species occur here. It is a locality of a nationally uncommon plant, the red star thistle <i>Centaurea calcitrapa</i>. Other areas are dominated by taller grasses such as tor grass <i>Brachypodium pinnatum</i>, cock's foot <i>Dactylis glomerata</i> and oat grass <i>Arrhenatherum elatius</i>. Two disused chalk quarries also support a rich chalk flora. The neutral grassland consists mainly of Yorkshire fog <i>Holcus lanatus</i>, red fescue and gorse <i>Ulex europaeus</i>, with wood sage <i>Teucrium scorodonia</i>, betony <i>Stachys officinalis</i> and bramble <i>Rubus fruticosus</i>.</p> <p>Scrub is scattered throughout the grassland and forms dense belts in some areas. It is composed of gorse, hawthorn <i>Crataegus monogyna</i>, ash <i>Fraxinus excelsior</i>, oak <i>Quercus robur</i> and wayfaring tree <i>Viburnum lantana</i>. The scrub has invaded the areas of chalk heath which formerly occurred on the plateau. The site supports a small colony of juniper <i>Juniperus communis</i> in its most easterly locality on the south downs.</p> <p>The woodland consists of beech <i>Fagus sylvatica</i>, oak and ash, with field maple <i>Acer campestre</i> and wild cherry <i>Prunus avium</i>. Hazel <i>Corylus avellana</i>, hawthorn and elder</p>
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				<p><i>Sambucus nigra</i> form a scattered scrub layer over bramble, dog's mercury <i>Mercurialis perennis</i> and slender false-brome <i>Brachypodium sylvaticum</i>. Yellow bird's nest <i>Monotropa hypopitys</i> and bird's nest orchid <i>Neottia nidus-avis</i> are also found.</p> <p>Near the chalk spring there is an area of willow carr which consists of common sallow <i>Salix cinerea</i> and white willow <i>Salix alba</i> scrub over nettle <i>Urtica dioica</i>, fool's watercress <i>Apium nodiflorum</i> and goose grass <i>Galium aparine</i>. This type of habitat is uncommon on chalk in the county and this is the locality of an uncommon cranefly <i>Gonomyia simplex</i>. A pond has recently been constructed here. A dewpond on the plateau supports colonies of all three species of newt. The site supports a nationally important assemblage of the Opilionid group of Arachnids (harvestmen). It is a locality of the nationally uncommon scarce forester moth <i>Procris globularia</i> and the adonis blue butterfly <i>Lysandra bellargus</i></p>
<b>Key:</b>				
NNR – National Nature Reserve.				
SSSI – Site of Special Scientific Interest.				
Ramsar – Wetlands of international importance designated under the Ramsar Convention.				
SAC – Special Area of Conservation.				
SPA – Special Protection Area.				
LNR- Local Nature Reserve				

### 3.3. PRIORITY HABITATS

3.3.1. There are four blocks of ancient woodland within 1km of the site.

- An un-named parcel located 1km northeast totalling 0.85ha
- North Paddock Wood 850m to the north totalling 1.7ha
- Flacketts Wood located 870m to the south totalling 4.5ha
- Hoe Wood located 520m to the west totalling 9.7ha

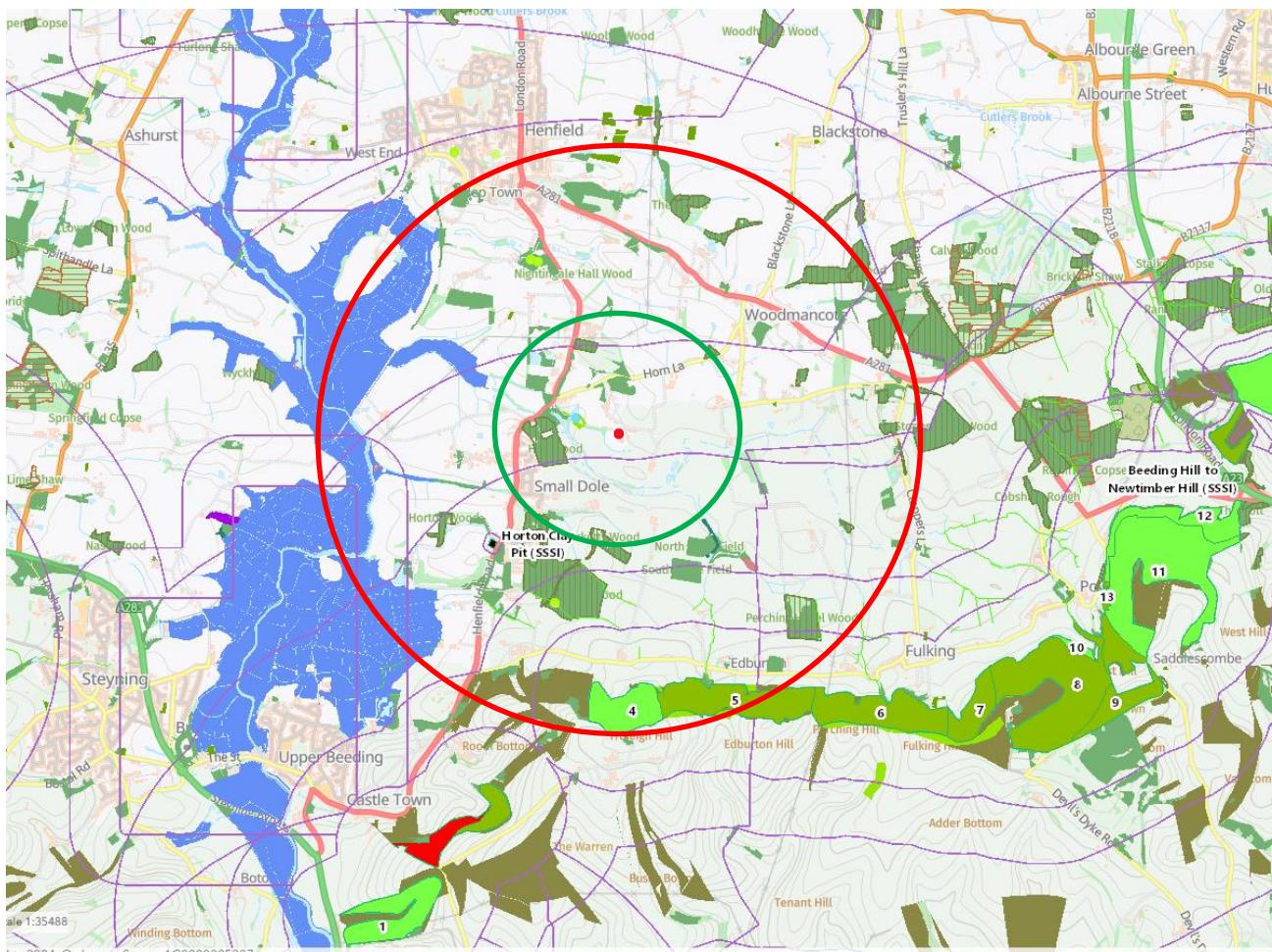
3.3.2. There are five priority habitat woodland sites within 1km of the site, a scattered selection of small individual coppice blocks are centred around the northern periphery of the site in the village of Horton and its associated golf course between 0.8 and 1km from the site and total 6.5ha.

- Oreham Common Woods located 500m north of the site and totalling 3.5ha designated as a LWS (local Wildlife Site).
- Wood Mill Nature Reserve woodland located 550m to the west and totalling 11ha
- The northern segment of Tottington Woods 900m to the southwest totalling 13ha

3.3.3. There is one priority habitat lowland meadow site located 400m to the northwest totalling 0.55ha associated with the Woods Mill Nature Reserve, headquarters of the Sussex Wildlife Trust.

3.3.4. There is one priority habitat reedbed located 950m to the southeast totalling 1.12ha.

Figure 3.1 Designated sites overview within 3km highlighted by red circle, priority sites highlighted by green circle within 1km.



### 3.4. HABITATS

3.4.1. Please refer to Drawing 20-3587 included in the appendix for the UK HAB Map for the site showing referenced habitats. Photographs of the site are also presented in the appendix.

#### SPARSELY VEGETATED LAND. (S (81,82,510,518,521))

3.4.2. The site consists of predominantly sparsely vegetated land (SV), which is a mixture of sealed surface, hardstanding and crushed building materials used to form a solid surface for storing materials. It has been colonised by ruderal vegetation and volunteer flora and is in an unmanaged state.

3.4.3. Species diversity is consistent with the habitat type and usage of the site as a storage and farmyard; the habitat extends from the formal driveway at the northern end of the site around the western elevations of the buildings within the centre of the site to the southern boundary and then continues alongside the eastern elevations of the

buildings.

3.4.4. The majority of the yard space is dominated by storage of building materials both in pallets and loose and they are stacked and positioned alongside buildings and across the western open space meaning vegetative cover is considered less than 40% of the available land surface.

3.4.5. The area of sparsely vegetated land totals 0.29ha, Species observed include annual meadow grass (*Poa annua*), red clover (*Trifolium pratense*), mouse eared hawkweed (*Pilosella officinarum*), bristley ox-tongue (*Helminthotheca echioides*), common nettle (*Urtica dioica*), bramble (*Rubus fruticosa*), greater burdock (*Arctium lappa*), oxeye daisy (*Luecanthemum vulgare*), curled dock (*Rumex crispus*), ribwort plantain (*Plantago lanceolata*), thorn apple (*Datura stramonium*), Common mallow (*Malva sylvestris*), goat willow (*Salix caprea*), ground elder (*Aegopodium podagraria*), black nightshade (*Solanum nigra*), wild teasel (*Dipsacus fullonum*), creeping buttercup (*Ranunculus repens*), weld (*Reseda luteola*), chickweed willowherb (*Epilobium alsinifolium*), hogweed (*Heracleum sphondylium*), smooth meadow grass (*Poa pratensis*), creeping cinquefoil (*Potentilla reptans*), selfheal (*Prunella vulgaris*), dandelion (*Taraxacum sp*), and fig (*Ficus carica*).

#### DEVELOPED LAND/ BUILDINGS (u (u1, u1b, u1e, 800, ulb5, 825)).

3.4.6. Three buildings are present on site; (See Figure 3.2 below) which occupy the central area of the site and are in use for storage of machinery and equipment with B1 having a small residential flat located at the southern end.

3.4.7. B1 is situated on a north/south axis to the northern end of the site where the residential driveway meets the farmyard. It is a single storey breeze block building which has been rendered on the eastern side and clad in horizontal timber on the western elevation. It has a pitched asbestos sheet roof and consists of a series of small rooms, with the southernmost two rooms being inhabited as a flat and the northernmost rooms as storage areas.

3.4.8. No access was possible into the southern sections in use as a residential dwelling. However, given the construction techniques used throughout the building this was not deemed detrimental to understanding the buildings construction.

3.4.9. B2 is largest building on site and consists of a two-section pitched and domed roof building, again constructed from breeze block with an asbestos sheet roof covering. The western portion is the smaller subservient section which is currently split into two rooms and has the domed roof.

3.4.10. The southern room is open at the southern gable end with no door present and has considerable open space present. There are remnants of what appears to be a suspended ceiling formed from chipboard. The northern section is currently used as storage; and is divided by a block wall and securely fitted door creating two separate spaces. The northern room is again open at the northern end with no door present and linked to the larger barn by a covered walkway.

3.4.11. The larger structure to the east, is of a concrete stressed frame construction with breeze block infill. It is fully open plan with windows along the eastern elevation. The southern and northern gable ends have no doors so there is open access to the entirety of the internal space and considerable natural light. It is used for machinery storage and has considerable open space available within and is uncluttered.

3.4.12. B3 is an old breeze block construction animal pen, with an asbestos roof. It is fully open on the northern elevation and there are small stalls extending into a covered space to the south, in total there are seven separate bays, however all are connected to form one structure.

3.4.13. The total area covered by all three of the buildings is 0.30ha.

Figure 3.2 Building plan and numbering.



#### HEDGEROWS (h (h2, h2a, h2a6, 516,521))

3.4.14. There are two hedgerows present on the site both contain scattered immature trees.

3.4.15. Hedgerow one (H1) (h2,521) is located on the western side of the sparsely vegetated ground and forms the western boundary of the site it is roughly 16m in length. It consisted of mainly blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), elder (*Sambucus nigra*), bramble (*Rubus fruticosus*) goat willow (*Salix caprea*) and hedge bindweed (*Calystegia epium*) which is unmanaged. There is one ornamental sycamore (*Acer pseudoplatanus f purpureum*) to the northern end of the site.

3.4.16. Hedgerow two (H2) (h2, h2a, h2a6, 516) encircles the eastern boundary from the southern end of B2 to the access point at B1 at the northernmost end of the site it is roughly 60m in length. It consists of a heavily managed beech (*Fagus sylvatica*) hedge, interspersed with immature oak (*Quercus robur*) and copper beech (*Fagus sylvatica x purpurea*) trees and early mature goat willow, medlar (*Mespilus germanica*), quince (*Cydonia oblonga*), walnut (*Juglans regia*) and apple (*Malus domestica* sp) trees all of which form part of the wide hedge row at the northern end of the site.

#### TREE (u (200))

3.4.17. There is one tree within the sparsely vegetated land and developed land area of the site. It is an immature ash (*Fraxinus excelsior*) tree which has severe signs of ash die back and appeared to be moribund at the time of the survey it had a DBH (Diameter at Breast Height) of 280mm and was located growing between the smaller and larger sections of B2. Access was not fully possible due to the size of the space, but the tree filled the available space between the building which enable accurate measurement of its stem.

### 3.5 SPECIES

#### FLORA

3.5.1. A total of 127 records were returned within a 1km radius of the site, a selection of the most notable of these being marsh mallow (*Althea officinalis*), quaking grass (*Briza media*), sand soft brome (*Bromus hordeaceus*), box (*Buxus*

*semperflorens*), narrow fruited water starwort (*Callitrichia palustris*), star sedge (*Carex echinata*), chamomile (*Chamaemelum nobile*), cowbane (*Cicuta virosa*), crossword (*Cruciata laevipes*), hounds tongue (*Cynoglossum officinale*), wild strawberry (*Fragaria vesca*), fritillary (*Fritillaria meleagris*), fine leaved fumitory (*Fumaria parviflora*), stinking hellebore (*Helleborus foetidus*), water violet (*Hottonia palustris*), bluebell (*Hyacinthoides non-scripta*), frogbit (*Hydrocharis morsus ranae*), marsh pennywort (*Hydrocotyle vulgaris*), marsh ragwort (*Jacobaea aquatica*), field scabious (*Knautia arvensis*), bitter vetch (*Lathyrus linifolius*), fringed water lily (*Nymphaoides peltata*), tubular water dropwort (*Oenanthe fistulosa*), fly orchid (*Ophrys insectiflora*), spiked star of Bethlehem (*Ornithogalum pyrenaicum*), wood sorrel (*Oxalis acetosella*), annual beard grass (*Polypogon monspeliensis*), tormentil (*Potentilla erecta*), sanicle (*Sanicula europaea*), ragged robin (*Silene flos cuculi*), corn parsley (*Sison segetum*), corn spurrey (*Spergula arvensis*), water soldier (*Stratiotes aloides*), devils bit scabious (*Succisa pratensis*), strawberry clover (*Trifolium fragiferum*), common valerian (*Valeriana officinalis*), heath speedwell (*Veronica officinalis*), marsh speedwell (*Veronica scutellata*) and heath dog violet (*Viola canina*).

3.5.2. No species of note were observed during the survey, furthermore the continued disturbance and unmanaged nature of the site is likely to allow the ruderal vegetation and low species assemblage to dominate the site in small, isolated parcels as was observed during the site walkover.

3.5.3. It is confidently assessed that the site does not support any notable plant species, as the assemblage noted in the data search were heavily associated with calcareous grassland, woodland and aquatic/riparian settings which are not present within the site.

## INVERTEBRATES

3.5.4. The data search returned a total of 221 records of invertebrates within the local area; these were heavily associated with butterflies and moths making up 152 of the records. The remainder concerned beetles, spider, true flies, true bugs, dragonflies and damselflies, caddis flies and ants, sawflies and wasps. It is noted that within the wider environs the habitat is deemed optimal for invertebrates, so some of the more common species may be present on or nearby the site.

3.5.5. A selection of the most notable species returned include, brown banded carder bee (*Bombus humilis*), sharp collared furrow bee (*Lasiglossum malacharum*), orange vented mason bee (*Osmia leaiana*), scarce four spot pin palp (*Bembidion quadripustulatum*), stag beetle (*Lucanus cervus*), great silver water beetle (*Hydrophilus piceus*), black headed cardinal beetle (*Pyrochroa coccinea*), purple emperor (*Apatura iris*), small blue (*Cupido minimus*), swallowtail (*Papilio machaon*), adonis blue (*Polymmatus bellargus*), white letter hairstreak (*Satyrium w-album*), scarce chaser (*Libellula fulva*), brilliant emerald (*Somatochlora metallica*), grey dagger (*Acronita psi*), green brindled crescent (*Allophyes oxyacanthae*), deep brown dart (*Aporophyla lueneburgensis*), minor shoulder knot (*Brachylomia viminalis*), sallow (*Irrhia icteritia*), figure of eight (*Diloba caeruleocephala*), September thorn (*Ennomos erosaria*), autumnal rustic (*Eugnorisma glareosa*), small emerald (*Hemistola chrysoprasaria*), rosy rustic (*Hydracia micacia*), brindled beauty (*Lycia hirtaria*), lackey (*Malacosoma Neustria*), white ermine (*Spilosoma lubricipedia*), feathered gothic (*Tholera cespitis*), oak hook tip (*Watsonalia binaria*), broad groove head spider (*Monocephalus castaneipes*), four lined horsefly (*Atylotus rsuticus*), golden haired robber fly (*Choerades marginatus*) and yellow legged centurion (*Sargus flavipes*).

3.5.6. As the majority of these records relate to dragonflies, butterflies and moths with specific food plants, calcareous grassland, woodland, or riparian habitats required to complete their life cycles, due to the absence of these habitats within the site it is confidently determined that they are not present.

3.5.7. The sparsely vegetated land is of low value to invertebrates, as the low diversity of floral species observed on the site provides negligible resources for invertebrate species to complete their lifecycles. It is therefore determined that the site holds low potential for invertebrates.

## AMPHIBIANS

3.5.8. A total of 29 records of common toad (*Bufo bufo*) and 44 records of common frog (*Rana temporaria*) were returned in the data search. Along with 40 records for palmate newt (*Lissotriton helveticus*) and 32 records smooth newt (*Lissotriton vulgaris*) all within a 1km radius. The records indicate that the nearby ponds, reedbeds and stream at Wood Mills Nature Reserve located 500m to the west and Oreham Common LWS 400m to the north, hold important populations for all species.

3.5.9. A total of 28 records of great crested newts (*Triturus cristatus*) were returned within the data search, with the most

recent being recorded in 2023, it was located within the Woods Mill Nature Reserve 500m to the west.

3.5.10. Consultation with Magic.gov.uk confirmed there was one registered EPSL license for great crested newts located within a 1km radius of the site. This record dates to 2010 and is deemed historic and divided by considerable anthropogenic barriers from the site.

3.5.11. One pond located 650m to the west was returned as having great crested newt absence pond surveys between 2017-2019.

3.5.12. The site offered suitable habitat to provide foraging resources and cover for common amphibians such as common toads and common frogs, with overwintering and hibernation resources available within the piles of rubble and building materials scattered around the site. The two waterbodies within 80m of the site also offered potential breeding sites for the species.

3.5.13. The HSI score for the two off-site ponds is detailed below in Table 3.1. P1 returned a score of good and P2 an excellent rating due to their location and availability of suitable features and resources (as per ARG UK advice note 5).

*Table 3.1 HSI scoring of ponds.*

Pond Ref	Pond Zone	Pond Area	Permanence	Water Quality	Shading	Waterfowl	Fish	Pond density	Terrestrial habitat suitability	Macro phytes	Score	Result
P1	Zone A	212m2	Rarely Dries	Good	0%	Minor	Minor	5	Good	20%	0.73	Good
P2	Zone A	100m2	Rarely Dries	Good	0%	absent	absent	5	Good	60%	0.86	Excellent

3.5.14. Presence of great crested newt is unknown within P1 and P2 but provide suitable conditions.

3.5.15. Common amphibians are also anticipated to be present within the site.

## *REPTILES*

3.5.16. The data search returned 102 records of reptile species within the 1km radius search area, which consisted of 21 for slow worm (*Anguis fragilis*), with the most recent record being returned in 2024. 65 records of grass snake (*Natrix Helvetica*) with the most recent being in 2022. Two records of adder (*Vipera berus*) with the last record being 2008 and 14 records of common lizard (*Zootoca vivipara*) most recently in 2023.

3.5.17. As these records are mostly recent and associated with the Woods Mill Nature Reserve, the presence of reptiles on site cannot be reasonably discounted. Given that the sparsely vegetated land and buildings form the majority of the habitat on site it is deemed suboptimal for anything other than use for refugia and hibernaculum, however it is in close proximity to suitable habitat.

3.5.18. Common reptiles are expected to be present in proximity to the site; however, the surrounding grassland, woodland and riparian habitats are expected to be more suitable.

## *BIRDS*

3.5.19. A total of 181 records of birds were returned in the 1km data search. These again were mostly related to the Woods Mill Nature Reserve and surrounding areas, where recording has been detailed and consistent over a prolonged period.

3.5.20. A selection of the most relevant and notable are detailed including all schedule 1 species, marsh harrier (*Circus aeruginosus*), hen harrier (*Circus cyaneus*), white tailed eagle (*Haliaeetus albicilla*), red kite (*Milvus milvus*), osprey (*Pandion haliaetus*), bewicks swan (*Cygnus columbianus bewickii*), Garganey (*Spatula querquedula*), hoopoe (*Upupa epops*), swift (*Apus apus*), nightjar (*Caprimulgus europaeus*), little ringed plover (*Charadrius dubius*), golden plover (*Pluvialis apricaria*), lapwing (*Vanellus Vanellus*), dunlin (*Calidris alpina*), knot (*Calidris canutus*), black tailed godwit (*Limosa limosa*), curlew (*Numenius arquata*), jack snipe (*Lymnocryptes minimus*), curlew (*Numenius Arquata*), bittern (*Botaurus stellaris*), little egret (*Egretta garzetta*), little bittern (*Ixobrychus*

*minutus*), white stork (*Ciconia Ciconia*), turtle dove (*Streptopelia turtur*), kingfisher (*Acisio atthis*), cuckoo (*Cuculus canorus*), merlin (*Falco columbarius*), peregrine (*Falco peregrinus*), hobby (*Falco Subbuteo*), quail (*Coturnix coturnix*), grey partridge (*Perdix perdix*), crane (*Grus grus*), sedge warbler (*Acrocephalus schoenobaenus*), skylark (*Alauda arvensis*), woodlark (*Lullula arborea*), treecreeper (*Certhia familiaris*), cettis warbler (*Cettis cetti*), corn bunting (*Emberiza calandra*), yellowhammer (*Emberiza citronella*), reed bunting (*Emberiza schoeniclus*), lesser redpoll (*Acanthis cabaret*), hawfinch (*Coccothraustes coccothraustes*), brambling (*Fringilla montifringilla*), linnet (*Linaria cannabina*), twite (*Linaria flavirostris*), bullfinch (*Pyrhulla pyrhulla*), grasshopper warbler (*Locustella naevia*), yellow wagtail (*Motocilla flava*), spotted flycatcher (*Musicopa striata*), willow tit (*Poecile montanus*), marsh tit (*Poecile palustris*), tree sparrow (*Passer montanus*), wood warbler (*Rhloscopus sibilatrix*), firecrest (*Regulus ignicollis*), redwing (*Turdus iliacus*), song thrush (*Turdus philomelos*), lesser spotted woodpecker (*Dryobates minor*), wryneck (*Jynx torquilla*), short eared owl (*Asio flammeus*), long eared owl (*Asio otus*), little owl (*Athene Noctua*) and barn owl (*Tyto alba*)

3.5.21. Most of these records relate to species which prefer woodland, wetland and specialist habitats to breed and forage, as the site offers little in the way of opportunities for most of the species listed above to nest and feed, they are confidently considered not present on site.

3.5.22. The site holds minimal potential to support most of these species, but the setting and open construction of several of the buildings is suitable for providing roosting and nesting habitat for barn owl, little owl, swallow, house martin and other smaller passerines.

3.5.23. It was noted in the western section of B3 that approximately 26 owl pellets, contemporary with little owl size and structure, were observed on the floor and low-level wall of the building. They appeared to be historic given the heavy degradation of the structure of the majority of the pellets and greying of the usually black colour of fresh pellets. Nevertheless, it is anticipated that little owl may have in the past or continue to utilise the building for night roosting.

3.5.24. One woodpigeon nest (*Columba palumbus*) was observed in the northern gable concrete beams of B2 during the site walkover, it was not known if the nest was active.

3.5.25. Species recorded whilst undertaking the PEA consisted of goldfinch (*Carduelis carduelis*), Jay (*Garrulus glandarius*), woodpigeon, carrion crow (*Corvus corone*), rook (*Corvus frugilegus*), blackbird (*Turdus merula*), great tit (*Parus major*), robin (*Erithacus rubecula*), wren (*Troglodytes troglodytes*), dunnock (*Prunella modularis*), collared dove (*Streptopelia decaocto*), chiff chaff (*Phylloscopus collybita*), magpie (*Pica pica*), barn swallow (*Hirundo rustica*), Jackdaw (*Corvus monedula*) and house martin (*Delichon urbica*). These birds were all observed in close proximity of the site in neighbouring habitats or flying close to the site.

3.5.26. Ground nesting birds are not anticipated to be present on site, due to the dominance of the sparsely vegetated ground and buildings within the site, disturbance is regularly expected, and no suitable cover is present.

## BATS

3.5.27. A search using MAGIC.gov.uk produced the following results for granted EPSL licenses within 5km of the site (see Table 3.2).

3.5.28. A total of five records of granted EPSL licenses for bats were returned within 5km of the site boundary, two of which related to roosts licensed for destruction and disturbance of breeding places for common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long eared (*Plecotus auritus*) and whiskered (*Myotis mystacinus*) bats. The results highlighted that roosts for seven species of bats are known within 5km of the site, indicating a diverse species assemblage.

3.5.29. The data search returned 171 records for roosts with 1km of the site. These were heavily biased to records involving common pipistrelle and soprano pipistrelle which returned 70 of these records, myotis species including bechsteins (*Myotis bechsteinii*), daubentons (*Myotis daubentonii*), whiskered, brandts (*Myotis brandtii*) and natterers (*Myotis nattereri*) make up 49 further records associated with the woodland environs to the south and the remaining records relate to noctule (*Nyctalus noctule*), serotine (*Eptesicus serotinus*) and brown long eared bat.

3.5.30. A total of 10 species of bats were returned from the data search, further confirming that the site is located within

an area with a diverse species assemblage of bats and consideration must be given to fragmentation and additional lighting that the proposals will bring to the surrounding habitat even if the buildings do not directly support roosting bats.

*Table 3.2 Granted EPSL licenses.*

Case reference of granted application	Species on the licence*	Distance from site (KM)	Direction from Site	Licence Start Date	Licence End Date	Does the Licence				
						impact on a breeding site	allow damage of breeding site	allow damage of a resting place	allow destruction of breeding site	allow destruction of a resting place
2019-38766-EPS-MIT	BLE, C-PIP, S-PIP	1.5	NE	2019	2019	Y	Y	N	N	Y
201-29484-EPS-MIT	C-PIP, S-PIP	2.3	N	2017	2017	N	N	N	N	Y
2020-46082-EPS-MIT	C-PIP, S-PIP, WHISK	1.4	SE	2020	2030	Y	N	N	Y	Y
2017-29445-EPS-MIT	BRAN, BLE, C-PIP, NATT, SER, S-PIP	3.9	SW	2018	2022	N	N	N	N	Y
2019-39268-EPS-MIT	C-PIP, S-PIP	4.5	NE	2019	2026	N	N	N	N	Y

*Table 3.3 Species assemblage within 5km of the site.*

Species name	Latin
Common pipistrelle	<i>Pipistrellus pipistrellus</i>
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>
Brown long-eared bat	<i>Plecotus auritus</i>
Serotine bat	<i>Eptesicus serotinus</i>
Brandts bat	<i>Myotis brandtii</i>
Natterers bat	<i>Myotis nattererii</i>
Whiskered bat	<i>Myotis mystacinus</i>
Bechsteins bat	<i>Myotis bechsteinii</i>
Daubentons bat	<i>Myotis daubentonii</i>
Noctule bat	<i>Nyctalus noctula</i>

3.5.31. A full PRA (Preliminary Roost Assessment) was undertaken on all three buildings during the site walkover and detailed in Table 3.4. A previous PRA was conducted in 2022 by Sylvatica Ecology Ltd and it concluded that all three buildings held negligible potential for bats and conditions on site appeared to have changed little between the two visits, even though they were 3 years apart.

*Table 3.4 - PRA findings.*

Description of findings and Rating.	Building and Feature Photographs
-------------------------------------	----------------------------------

**Building 1- Breeze block construction with asbestos sheet roof.**

The eastern elevation is rendered and painted with the southern section in use as a residential dwelling, the northern rooms are used for storage. No potential rooms features were observed, and no evidence of bats was found.

The building is rated as holding **NEGLIGIBLE** bat roosting potential.



Internal view of the northern rooms of B1 with single sheet asbestos roof evident and storage.



Western elevation of B1 showing the horizontal timber cladding, this was single skin and affixed onto the blockwork, and no overlaps were present meaning no potential roost features were observed between or behind the cladding.



Second northern storage room in B1, no evidence of bats was observed.



**Building 2- Split into two distinct sections, each constructed from breeze block and with eastern section having a pitched and the western section a domed single sheet asbestos roof.**

This is viewed from the south and shows the open nature of the structure, no suitable PRF features were identified, and no evidence of bats was observed within either section.

The building was rated as holding **NEGLIGIBLE** bat roosting potential.



Southern end of the western section of B2 showing the domed single skin asbestos roof and open nature of the structure to prevailing weather along with the remnants of the suspended ceiling.



Northern end of western section of B2 showing uses as storage area, no evidence of bats observed and note the open eaves level and light ingress into the space from the open gable end.

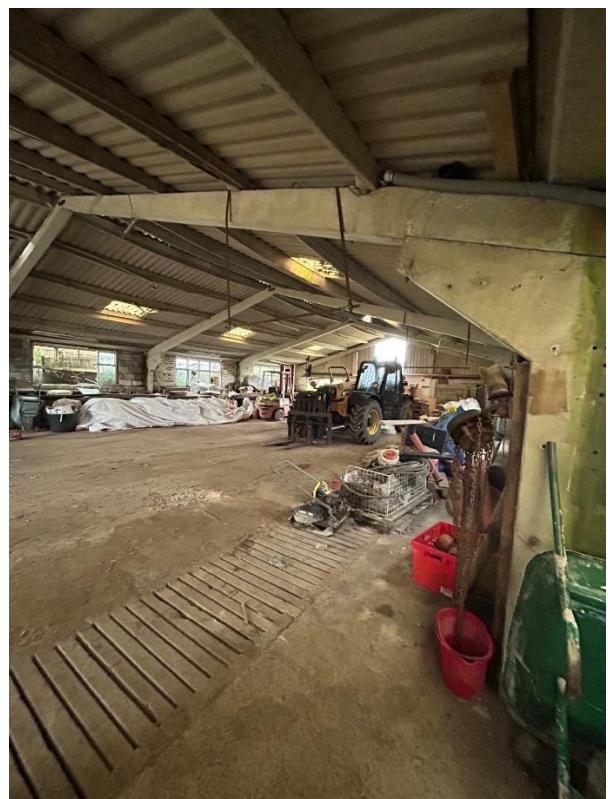


Connecting walkway between eastern and western sections of B2, with clear plastic roof sheets, no roosting features were present.



Main span and open space of the eastern section of B2, showing the stressed concrete beam and asbestos roof, no evidence of bats was observed within the space.

Note the light levels being high due to all of the windows within the walls and the open north and south gable ends.



Wood pigeon nest at northern gable end of B2 above the door.



**Building 3- Open fronted animal shelter from breeze block construction with single skin asbestos roof.**

The building was open to the northern elevation resulting in full daylight ingress, no evidence of bats was found within the structure and there were no visible PRF features.

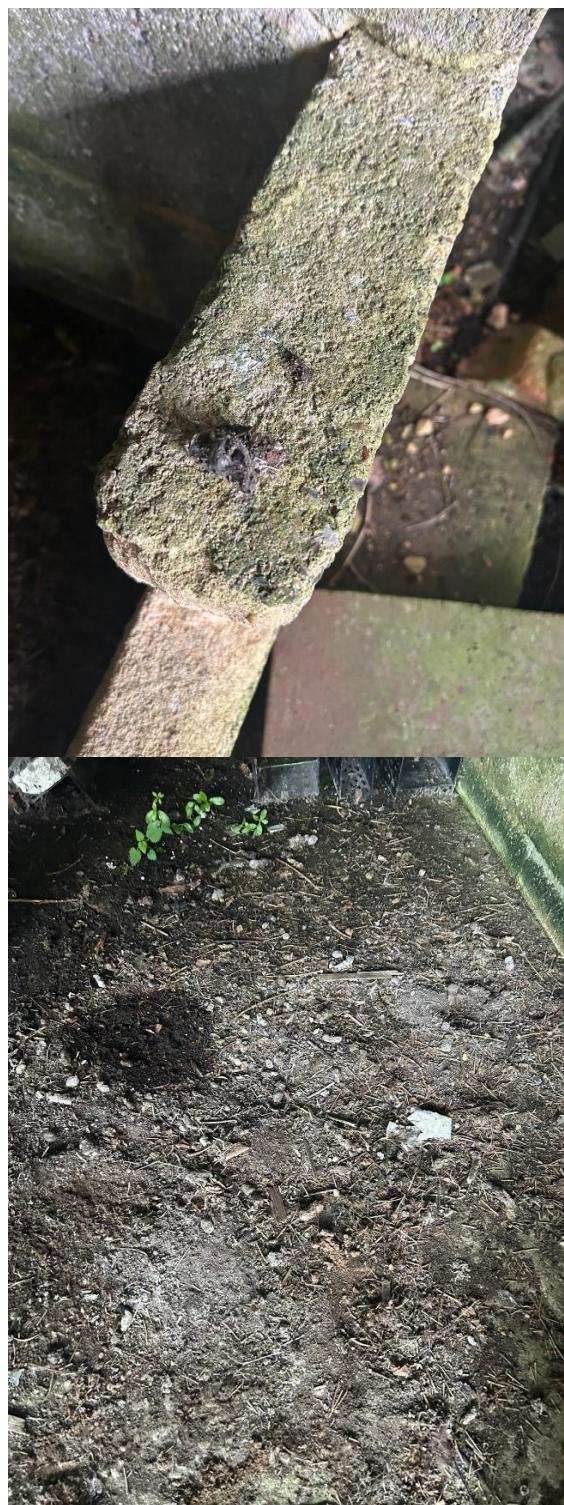
The building was rated as holding **NEGLIGIBLE** bat roosting potential



Internal view of B3 showing the small stalls created to rear of the structure and open nature of the front. All sections were connected and full of storage materials.



Evidence of suspected little owl, pellets within the westernmost compartment of B3, these appeared historic due to the greying of the pellets and heavy degradation of structure observed.



3.5.32. The site has good connectivity to the surrounding optimal habitat, however, the foraging resources within the site are limited to the boundary hedgerow to the western boundary, given the construction methods used for each of the buildings the initial ratings from 2022 were confirmed during the site visit to be correct in that B1, B2 and B3 hold negligible bat roosting potential.

#### OTHER TERRESTRIAL MAMMALS

3.5.33. Seven records of European hedgehog (*Erinaceus europaeus*) were returned within the search area. It is anticipated that hedgehogs are present in the wider locale as there are suitable foraging resources available. The site does hold potential for hibernating hedgehogs within the piles of rubble and stored materials.

#### HAZEL DORMOUSE

3.5.34. No records of hazel dormouse (*Muscardinus avellanarius*) were returned within the 1km search area.

3.5.35. Given the current site conditions, it is assumed that hazel dormouse can be discounted from the site. Very little suitable structure exists for an arboreal mammal to move across the site apart from the hedgerow to the west which is not due to be affected by the proposals. The sparsely vegetated ground habitat is suboptimal and given the proposed development does not affect any suitable vegetation the species is discounted from requiring further assessment.

#### **BADGER**

3.5.36. No records of badger (*Meles meles*) were returned from the local data search.

3.5.37. There were no signs of badger observed when undertaking the site walkover. However, given the site's location and surrounding habitat it is anticipated that badgers are present within the wider offsite habitats but not within the site confines.

#### **NON-NATIVE INVASIVE SPECIES**

3.5.38. There was no evidence of invasive or non-native species observed during the site walkover.

3.5.39. Twenty records of grey squirrel (*Sciurus carolinensis*) were returned within the data search, along with 29 records of American mink (*Neovison vison*), and one record of muntjac deer (*Muntiacus reevesi*).

3.5.40. Multiple records of nonnative birds were returned including mandarin duck (*Aix galericulata*), Egyptian goose (*Alopochen aegyptiaca*), Canada goose (*Branta canadensis*), barnacle goose (*Branta leucopsis*), night heron (*Nycticorax nycticorax*) and ring-necked parakeet (*Psittacula krameri*), none of these species were observed on site and suitable habitat is not present to support these avian species.

3.5.41. Eighteen records of INNS plants were returned, these included giant hogweed (*Heracleum mantegazzianum*), red valerian (*Centranthus ruber*), montbretia (*Corosmia aurea x*), Canadian waterweed (*Eloda canadensis*), nuttals waterweed (*Elodea nuttalli*), Spanish bluebell (*Hyacinthoides non scripta x hispanica*), himalayan balsam (*Impatiens glandulifera*), parrots feather (*Myriophyllum aquaticum*), cherry laurel (*Prunus laurocerasus*), and evergreen oak (*Quercus ilex*). No evidence of any of the above species was observed on site.

#### **SPECIES DISCOUNTED FROM ASSESSMENT**

3.5.42. Water vole (*Arvicola amphibius*), Otter (*Lutra lutra*), Beaver (*Castor fiber*) and White-clawed crayfish (*Austropotamobius pallipes*) have been discounted from assessment as no suitable aquatic habitats are located on site and given the proposals are only to replace the existing buildings and sparsely vegetated land with a new dwelling no negative impacts would occur on aquatic species or habitats nearby during the proposed development.

3.5.43. Red squirrel (*Sciurus vulgaris*) has been discounted from the assessment. Red squirrel populations are limited to small areas of northern England and Brownsea Island, Dorset; with no previous records returned in the data search. It is anticipated that high abundances of grey squirrel are present within this region (Shuttleworth/RSST n.d.). This species will displace red squirrel through competition as well as cause increased red squirrel mortality through the spread of squirrel pox (The Mammal Society, 2020).

## 4 MITIGATION RECOMMENDATIONS

### 4.1 DESIGNATED SITES

4.1.1. The site is located within the impact risk zone of the Beddington and New timber SSSI site and Tottington Wood LNR site. It is anticipated that the sites are a sufficient distance away and separated by anthropogenic barriers such as roads and distance to have any detrimental impact, furthermore the proposals are to construct a new dwelling onto the footprint of three old buildings and a developed land surface along with plans to considerably enhance the site, therefore it is anticipated and there will be minimal impacts on any of the SSSI or LNR sites.

4.1.2. The proposed development meets the criteria listed on Magic.gov.uk which would require consultation with Natural England. Therefore, it is suggested that communications are entered into to assess the potential effects of the proposal on the nearby SSSI designations.

**You should consult Natural England on all planning applications at this location.**

Send your consultation to: [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk)

The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) indicate that at the location selected, there is potential for all proposed developments to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and those Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.

Therefore, you should consult Natural England for advice on the nature of the potential impacts and how these might be avoided or mitigated.

### 4.2 HABITATS

#### TREES, HEDGEROWS AND FLORA

4.3.1. Where possible the existing hedge lines should be retained along with the immature trees on the eastern boundary, and if possible enhanced within the landscaping plan to connect to existing features and enhance site connectivity within the landscape.

4.3.2. It is proposed that a new area of wildflower meadow is to be included within the new landscaping plan to aid with softening the proposals into the wider landscape and this is beneficial for the site.

4.3.3. The ash tree located between the two sections of B2 is considered moribund and therefore no restrictions on its removal are imposed to facilitate the works.

4.3.4. No constraints upon the removal of the existing flora within the site are necessary, as no species of interest were noted, and no INNS were recorded on site.

### 4.3 FAUNA

#### AMPHIBIANS

4.5.1. Common amphibians such as common toad and common frog along with smooth newt and palmate newts may be present nearby to the site, although they are not expected to be found within the site boundary outside of potentially using the rubble piles and materials as winter hibernation sites. The presence of great crested newt is unknown within the offsite ponds. No known presence of great crested newt is known within 500 m of the site, with 250 m being the general dispersal distance for the species, however interlinking ponds are present which could allow dispersal of the species.

4.5.2. Using the Natural England Rapid Risk Assessment Tool located in the GCN Method Statement, it can be seen that the proposed works, without mitigation, result in **“Amber; Offence Likely”**, should great crested newts be present within the offsite ponds.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0

Land within 100m of any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.5
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
Maximum:		0.5
Rapid risk assessment result:	<b>AMBER: OFFENCE LIKELY</b>	

4.5.3. Based on the small scale of proposals, largely working within the existing building footprint, it is not considered likely that the works will have a significant impact on the population of great crested newt, should they be present, and appropriate mitigation can be applied to avoid negative impacts.

4.5.4. A small area of rubble (circa 0.08 ha) requires clearance. It is therefore recommended that works proceed under a detailed Great Crested Newt Method Statement, to be secured under an appropriately worded planning condition. The Method Statement will detail the following measures:

- Use of Great Crested Newt Detection Dog to first search the area for great crested newt. Should a detection be made, a Natural England Licence will be required.
- Should no detection be made, works can proceed to clear the rubble and make the site fully unsuitable for great crested newt under the supervision of an Ecological Clerk of Works working with a Class 1 licence from Natural England.
- Ideally, the works should be timed to be in Spring/ Summer to avoid the terrestrial phase of great crested newt life cycle.

## REPTILES

4.5.5. Common species of reptile are deemed likely to be found within the surrounding wider site, therefore it is suggested that the following Precautionary Working Methods (PWM's) are followed in relation to reptiles if undertaking any clearance of stockpiled materials and rubble, and demolition work to the buildings prior to the construction of the new property. these measures are also applicable to the amphibians noted above:

- An experienced Ecological Clerk of Works (ECoW) shall be appointed to ensure PWM's are enforced.
- A copy of this method statement must be kept on site (we suggest having a laminated copy in the site office/ compound).
- A walkover of the area should be undertaken by the ECoW to determine any change in status of the habitats/structures on site prior to the initiation of any works.
- A toolbox talk by the appointed ECoW will be given to the contractors working on site with respect to the surrounding habitats and potential for protected/notable species. A copy of species factsheets relating to reptiles and amphibians will be provided for display within the site office.
- Suitable vegetation over 400mm in length is to be strimmed under ECoW to approximately 15cm in a northern to southern direction. It is to be checked by the ECoW prior to and following strimming to identify any amphibians or reptiles. If discovered, they will be removed from the working area and covered with a suitable refugia or placed into the nearby ponds. Once the areas are deemed free of reptiles or amphibians, they are to be strimmed to ground level and maintained at this length for the remaining works.
- Any excavations will be backfilled on the same day as excavation or checked by the ECoW immediately prior to backfilling. If not possible, a ramp, will be provided in all excavations that cannot be backfilled on the same day or alternatively, all excavations should be well-covered with plywood.
- No new piles of loose construction materials are to be created during works – all material will be kept on hardstanding, stored on pallets, removed immediately from the site or checked by an ECoW prior to being removed.
- In the event reptiles or amphibians are discovered whilst the ECoW is not on site, works will halt immediately and the ECoW will be contacted for advice. Contractors are not to handle reptiles unless informed to do so by the ECoW.

4.5.6. During the construction period, the development zone will be maintained clear of vegetation to remove the likelihood of any reptiles re-colonising the site.

## BIRDS

4.5.7. Birds are known to utilise the site, surrounding habitats and buildings, but the proposed works should not affect any nesting opportunities if conducted outside of nesting bird season March through August. Therefore, it is suggested that should demolition of the buildings be required within this time period, suitable checks be undertaken prior to works starting by a suitably qualified ecologist.

4.5.8. The presence of multiple schedule 1 species locally, is not deemed to be constrictive given that the habitat on site is not suitable to support most of the species recorded. No evidence of Barn owl was found on site, and this species is considered the most likely to utilise the structures present.

4.5.9. It is recommended that within the planting and landscaping plan, provision is made to include shrubs and flora which offer a food resource throughout the season to support the local bird populations, native species should be favoured with fruits and seeds which exist already within the locale environs.

4.5.10. It is also suggested that several bird boxes should be included within the proposals to be affixed to the new dwelling or nearby retained trees. These could include colony boxes for small passerines and swallow and house martin cups given that the species were identified to be using the site during the site walkover. It is also suggested that a dedicated little owl box is installed into a retained nearby building or mature retained tree given the evidence observed during the site walkover.

4.5.11. The site ecologist can specify suitable boxes and installation recommendations for all suggested bird box enhancements.

## BATS

4.5.12. No evidence of roosting bats was found in any of the three buildings on site, and they all hold negligible suitability for bats given their open nature and high levels of disturbance, light and weather ingress and the construction methods do not offer any potential roosting opportunities in the form of cavities or voids. As such no further surveys are deemed necessary.

4.5.13. Local records show a reasonable assemblage of species locally and within a 5km radius of the site, therefore it is suggested that where possible the site be enhanced to facilitate foraging for bats. This can be in the form of new soft planting of linear features to assist with commuting routes and creation of dark corridors, devoid from artificial light spill associated with the new development. These features should link into the wider landscape. It could also be in the form of using planting which develops nectar rich areas within the site to encourage invertebrates and insects which are the preferred food choice of bats creating and overall biodiversity gain across the development.

4.5.14. It is recommended that although no further direct survey effort is required, a lighting plan will need to be submitted if the proposal is to include any form of considerable external lighting to facilitate use of the site after dusk.

4.5.15. Slow-flying species such as brown long-eared known to be in the local environment from the data search, are particularly sensitive to lighting and may be impacted by the proposed development, should no mitigation for lighting be considered.

4.5.16. Furthermore, the location of the site being adjacent to the South Downs National Park and within 1km of other surrounding SSSI and LNR designations, any new lighting should be focussed on ensuring no detrimental effect occurs to the local flora and fauna surrounding the site.

4.5.17. It is recommended that a lighting design is prepared predevelopment commencement, and any proposed new dwelling and associated lighting should follow the guidance outlined in the Institute for Lighting Engineers document "Guidance for the Reduction of Obtrusive Lighting" (2005) and BCT's "Bats and Artificial Lighting at Night" (2023).

Lighting plans should consider the following,

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).

- Lighting should feature peak wavelengths greater than 550nm.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres and hoods, that effectively contain light spill from unintended areas.
- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating habitats of value to the north and east of the site.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.

#### **TERRESTRIAL MAMMALS**

4.5.18. European Hedgehog are anticipated to be present near the site and are a Species of Principal Importance. If identified during the recommended PWMS for herpetofauna, they should be relocated carefully by hand to a location away from the working area.

4.5.19. Badgers are not anticipated to be utilising the site and no records of the species exists locally, therefore no further considerations for the species are required.

## 5 FURTHER SURVEYS AND CONCLUSION

### 5.1. FURTHER SURVEYS

5.1.1. No other surveys are deemed necessary to facilitate the proposed development, however PWM's are recommended for reptiles and amphibians.

### 5.2 CONCLUSION

5.2.1. The site was found to predominantly comprise of sparsely vegetated land in the form of a storage yard with three farm buildings located within it. The boundaries of the site comprised of native hedgerows interspersed with immature and early mature trees.

5.2.2. The surrounding environment holds high ecological value, and the proposals are to remove the areas of stored materials, demolish the existing buildings and build a new residential dwelling. Overall habitat loss on site is anticipated therefore to be minimal given the results of the site walkover and subsequent data searches.

5.2.3. There will be a moderate level of disturbance to the site during the demolition and construction phases, in particular vehicular traffic, noise and light pollution. However, as the site sits with an already utilised builders and farmyard setting, which is in daily use, disturbance levels are deemed to not be significantly altered from normal activity levels.

5.2.4. Although the site falls within the zone of influence of the Beeding Hill and New Timber Hill SSSI, Tottington Woods LNR, and within close proximity to Oreham Common Local Wildlife site and Woods Mill Nature Reserve, it is required that Natural England be consulted on the proposals as the effect on the designated sites.

5.2.5. The PWM's detailed above will be followed for reptiles and amphibians and a toolbox talk, and method statement will be provided prior to works commencing. It is also suggested that no works be undertaken to fully clear all the spoil heaps, stored materials until the winter hibernation period for both species has elapsed and the temperatures have increased sufficiently to facilitate movement away from any on site hibernacula.

5.2.6. Nesting birds will be required to be protected, should any demolition works occur to the surrounding hedgerows within the period March – August, if this cannot be avoided then additional ECOW will be required to search all areas prior to any clearance or pruning works being undertaken.

5.2.7. A lighting plan will be designed to maintain the dark corridors and suitable foraging habitat for bats and in relation to the wider national park setting within a 20m proximity of the site. As the new dwelling is likely to add additional light into the environment, consideration at the design stage will be required with regards to all external lighting and its location.

5.2.8. There is an opportunity to consider enhancement of the site which could include the following:

- Bat and bird boxes could be placed around the perimeter of the site on mature trees or built into the new dwelling. A plan to show the locations of these boxes and the specifications should be produced by a suitably qualified ecologist once the site layout is finalised.
- Consideration of boundary features to screen the new dwelling from the wider habitats with a preference for hedgerows and non-solid structures, if fencing is used then inclusion of hedgehog holes to allow movement between the site and the surrounding habitats.
- Soft landscaping to focus on native species with high nectar values for local invertebrate populations, the surrounding areas is rich in invertebrate records so the proposed wildflower area to the south of the site should allow for better connectivity between habitats.
- Provision of hibernacula created from rubble piles, and potentially from any building materials which are being disposed of along with woody debris, should be considered within the hedge lines and site boundaries to increase hibernation areas for reptiles, amphibians and invertebrates for both the site and the wider habitats. The site ecologist can provide specification for any hibernacula.

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## 7 APPENDIX

### UK Habs Plan

## Photographs

Description	Photographs
<p>Photograph 1</p> <p>View looking east at B1 taken from the area of sparsely vegetated land to the west part of the wider builder's yard.</p>	
<p>Photograph 2</p> <p>View looking south along side B1 and towards B2 showing the hard gravel track at the northern access to the site.</p>	
<p>Photograph 3</p> <p>View of eastern side of B2 showing the building material piled against the building.</p>	

<p>Photograph group 4</p> <p>View of the southern end of the site to the south of B2 and looking at the eastern end of B3.</p> <p>The large piles of debris and ruderal vegetation evident in the foreground.</p>		
<p>Photograph 5</p> <p>View looking north along the hedgerow H2 showing the trees in the background within the hedgeline.</p>		
<p>Photograph 6</p> <p>View looking west from outside the RLB towards the site, this shows its location within the environment surrounded by mature hedgerows and grassland habitats.</p>		

<p>Photograph 7</p> <p>Showing the southern end of the sparsely vegetated land and the southern aspect of B3.</p>		
<p>Photograph 8</p> <p>View of the western yard area and H1 to the background, showing the storage of materials and ruderal and sparse vegetation.</p>		
<p>Photograph 9</p> <p>Central area of the western yard showing the extensive material storage and looking south toward B3, with the western side of B2 in shot.</p>		

Photograph 10 View north along western yard area showing the rear of the western gable of B1		
Photograph 11 Pond P1		
Photograph 12 Pond P2		

## Site Proposals Drawing



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