AEWC Ltd

Animal Ecology & Wildlife Consultants

Ecological Impact Assessment and Enhancement Plan

Whitebreads Farm

Stane Street
Slinfold
Horsham
RH13 0RE

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23-004
May 2024

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Summary

- AEWC Ltd were commissioned by Batcheller Monkhouse on behalf of their client to undertake an Ecological Impact Assessment (EcIA) at Whitebreads Farm, Stane Street, Slinfold, Horsham, RH13 0RE at grid reference TQ 10700 30361 to support a retrospective planning application for the site.

- This report details the results of the survey, which was carried out on the 24th April 2024 by Natalie Arscott, qualified ecologist, to record and map the habitats present, assess the site for the potential presence of any protected species or species of conservation concern and identify habitats of conservation importance. This was an update survey following one carried out in April 2023 for a smaller site boundary.

- Additional information regarding the present and historical ecological interest of the site and within a 2km radius was provided by the *Sussex Biodiversity Record Centre*. Historic satellite imagery and photos, where available, were used to estimate habitats present prior to works commencing, to inform the likelihood of protected species previously occurring within the site boundary and assess impacts of the development.

- The site is approximately 0.8ha and largely comprises hardstanding, buildings, an area of recently established ruderal vegetation, and two short sections of tree lines.

- The site is subject to a part retrospective planning application for change of use of Unit 1 from Use Class B1 to caravan and motorhome showroom and office, change of use of Unit 2 from Use Class B8 to caravan and motorhome repairs, and use of adjacent hardstanding for the display and storage of caravans and motorhomes and erection of fencing to enclose the site, following clearance of the on-site habitats between April 2020 and June 2021.

- The site in its current state is composed of artificial unvegetated, unsealed surface, developed land; sealed surface, mixed scrub, ruderal/ephemeral vegetation, lines of trees, and a small urban tree. There is limited potential for protected species given the site layout and current habitat condition.

- From the site visit and desk study, previously existing habitats were determined to largely comprise hedge and tree lines, grassland, scrub and ruderal vegetation, with potential to support a range of protected species including GCN, bats, hazel dormice, reptiles, breeding birds, hedgehogs and other small mammals.

- In the absence of mitigation, clearance of the site had potential direct impacts to the above protected species if they were present on site during the clearance works, as well as potential indirect impacts on GCN, hazel dormice and bats through disturbance and destruction of their place of shelter, should these have been present on site prior to works.

- The application will include re-instatement of species-rich hedgerow and wildflower meadow within and to the north of the site, with planting of three new pedunculate oak *Quercus robur* trees within one of the new hedgerows. Additional recommendations are made within Section 6 of this report.

This report has been prepared by AEWC Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the 'Guidelines for Preliminary Ecological Appraisal' and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1 Introduction

1.1 AEWC Ltd were commissioned by Batcheller Monkhouse on behalf of their client to undertake an Ecological Impact Assessment (EcIA) at Whitebreads Farm, Stane Street, Slinfold, Horsham, RH13 0RE to support a retrospective planning application for the site.

1.2 This survey comprised a desktop study of historic satellite imagery for the site, biological records within the vicinity of the site, an ecological walkover survey to record and map the habitats present, and an assessment for protected wildlife and species of conservation importance pre- and post-development, including habitats, and was carried out by a qualified ecologist Natalie Arscott on the 24th April 2024.

1.3 This report presents the results of the following:

- Desktop Biodiversity Report
- UK Habs Habitat Survey
- Protected Species Walkover Survey

1.4 The site was initially assessed in April 2023 as a smaller site and an Ecological Impact Asessment produced for a retrospective planning application. A new survey has now been carried out and this report has been updated to cover a larger site boundary.

2 Background

2.1 The proposed development site is located at Whitebreads Farm, Stane Street, Slinfold, Horsham, RH13 0RE at central grid reference TQ 10700 30361. See Figure 1. The site is located along the A29 in a semi-rural area approximately 900m south-east of the village of Slinfold. The surrounding landscape comprises a mosaic of farmland and wooded belts and blocks interspersed with low-density residential and light industry properties and associated amenity facilities.

2.2 The previous survey site in 2023 was approximately 0.17ha and largely comprised a shared hard standing access drive and artificial unsealed surface within the body of the site, with two trees on the eastern site boundary. See Figure 2.

2.3 The current survey site in 2024 is approximately 0.8ha and largely comprises hardstanding, buildings, an area of recently established ruderal vegetation, and two short sections of tree lines. See Figure 3.

2.4 The part retrospective planning application for change of use of Unit 1 from Use Class B1 to caravan and motorhome showroom and office, change of use of Unit 2 from Use Class B8 to caravan and motorhome repairs, and use of adjacent hardstanding for the display and storage of caravans and motorhomes and erection of fencing to enclose the site, following clearance of the on-site habitats between April 2020 and June 2021. See Figure 4. Habitats within the site likely to have been removed include broadleaved trees, areas of grassland, scrub, ruderal vegetation, and mature hedgerow and/or broadleaved tree line. The application will include re-instatement of hedgerow with three oak *Quercus robur* trees along the eastern boundary of the site.



FIGURE 1: SHOWING THE SITE LOCATION



FIGURE 2 : AERIAL VIEW OF THE SITE SHOWING THE SITE BOUNDARY FOR THE 2023 SURVEY



FIGURE 3: AERIAL VIEW OF THE SITE SHOWING THE SITE BOUNDARY AND BUILDINGS SUBJECT TO SURVEY FOR THE 2024 SURVEY

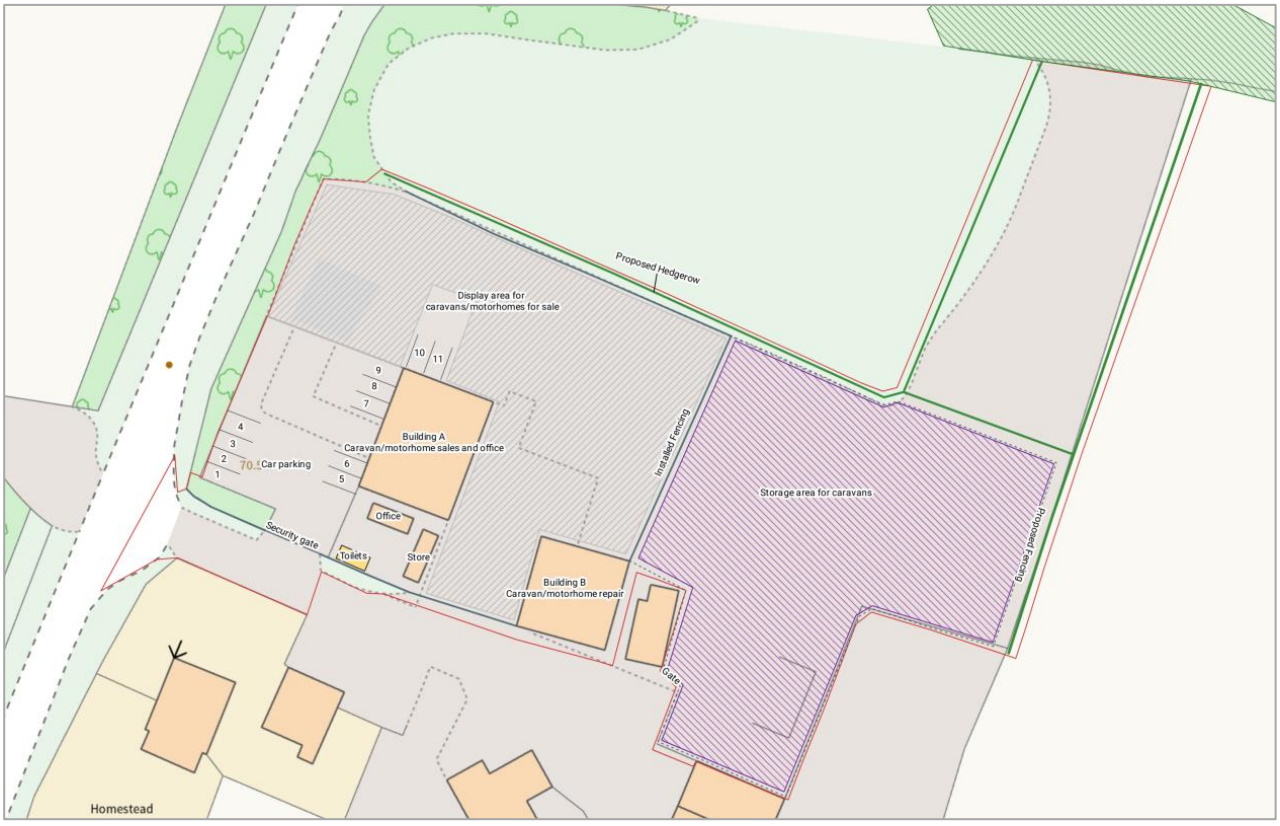

FIGURE 4: PROPOSED PLAN

3 Methods

Desk Study

3.1 The Multi Agency Geographic Information for the Countryside (MAGIC) website provided by the Department for Environment, Food and Rural Affairs (Defra) was consulted to obtain information about any international or European level designated nature conservation sites within 2km of the site boundary, afforded protection either directly by the Conservation of Habitat and Species (Amendment)(EU Exit) Regulations 2019 or to the same level of protection through planning policy (the National Planning Policy Framework and Local Development Framework). Information regarding statutory designated sites, such as Sites of Special Scientific Interest (SSSI) within a 2km radius of the site, were also obtained from MAGIC.

3.2 Aerial photos of the site (Google Earth) spanning from 2001 to 2024 were examined to determine habitats surrounding the site and hence species likely to be present, as well as infer likely habitat types present on site prior to works being undertaken, in order to make appropriate recommendations in the wider landscape context.

3.3 Records of protected and notable species and non-statutory designated sites within 2km of the site were requested from the local biological records centre (*Sussex Biodiversity Record Cente*) in April 2023.

3.4 Records were screened for relevance and age with only those from the last 10 years and of species that could occur on site considered further.

3.5 A search for waterbodies within 500m of the site boundary was undertaken using MAGIC mapping in order to assess their connectivity to the site.

UK Habs Habitat Survey

3.6 A daytime ecological walkover assessment was carried out on the 24th April 2024 to record and map the habitats present, evaluate the site for its current potential to support protected species in addition to other species of conservation importance that could be relevant in respect of planning policies, and evaluate the surrounding habitats to infer habitats likely present on site prior to works being undertaken.

3.7 The survey involved a UK Habitat Classification System Survey which was carried out based on the standard methodology produced by UKHab Ltd (2020) and included searches for signs of protected species, as described in the Guidelines for Preliminary Ecological Assessment (CIEEM, 2012). This involves the following elements:

- Habitat mapping using a set of standard colour codes to indicate habitat types on a UK Habitat Classification Map.
- Description of features of ecological or nature conservation interest in notes relating to numbered locations on the UK Habitat Classification Map, called Target Notes (for habitat and features of possible interest).
- A plant species list with subjective estimates of the relative abundance of species in selected habitat parcels using a modified DAFOR scale. The DAFOR scale ranks species according to their relative abundance in a given parcel of

land as follows: d – dominant, a – abundant, f – frequent, o – occasional, r – rare. In addition, the following prefixes are used: l – locally, v – very.

3.8 Plant nomenclature in this report follows Stace (2010) for native and naturalised species of vascular plant. Nomenclature for mosses and liverworts follow the Checklist for British and Irish Bryophytes 2009. Plant names in the text are given with the English name first, followed by the Latin name. Latin names for all species are given just once and not repeated.

Protected Species Walkover

3.9 An assessment was made of habitat suitability in and around the site for those protected species that occur in the region. Obvious signs and incidental sightings of protected species are noted when encountered, but walkover surveys do not usually confirm species presence or absence.

3.10 Taking into consideration the geographical region and habitat type, species that could be encountered are:

- badger;
- bats;
- breeding birds;
- great crested newt;
- hazel dormice;
- reptiles;
- other mammals; and
- other Species of Principal Importance (SPI) (e.g. hedgehog, stag beetle etc);

3.11 In addition, observations of any invasive species, important plant communities, plant species of note, Habitats of Principal Importance (HPI) or other valuable ecological features will be recorded and detailed.

3.12 Details of the initial survey method for each species are given below.

3.13 **Badger** – an initial assessment was carried out to identify areas that might be used by badgers (*Meles meles*). Signs of badgers including setts, incidental foraging signs, runs, hairs and latrines are recorded if encountered during the survey. Where possible the area within 30m of the site is also searched for badger setts.

3.14 **Bats** – The site was assessed for bat roosting potential and the surrounding area was assessed for the suitability of the habitat to support bats. Any buildings were examined and assessed for evidence of bats, such as rub marks, staining or droppings or for features that have good potential to be used by bats, such as loft voids, raised tiles, hanging tiles, gaps in soffits and lead flashing cracks, crevices and mortise joints. Trees were assessed for their potential to be used by bats such as woodpecker holes, splits, cracks and crevices or loose bark plates which can be used as roost features by bats. Such features are noted and examined by using equipment such as a high-powered torch and binoculars, in order to determine their suitability for bats.

3.15 **Breeding Birds** - habitats were assessed for their suitability for nesting birds. This would centre on birds that favour hedgerows, areas of longer grassland, scrub, trees as well as buildings.

3.16 **Great Crested Newt** - initial surveys centre on identifying suitable habitat within the site. If breeding ponds are present within the locality then great crested newt (*Triturus cristatus*) could potentially be using the terrestrial habitat on the site. Maps are used to identify any ponds (that are not isolated by unsuitable habitat or physical barriers) within 500 metres of the site. A Habitat Suitability Index (HSI) is used to quantifiably assess whether a pond is suitable, this is undertaken for any onsite ponds during the walkover survey.

3.17 **Hazel Dormice** – scrub and areas of dense vegetation are assessed for their suitability for foraging and nesting hazel dormice (*Muscardinus avellanarius*). Favoured berry and nut bearing species such as hawthorn, hazel and bramble were looked for in particular. Additionally, the connectivity of this habitat and to suitable habitat beyond the site is also assessed. If hazel nuts are present a brief search for nuts that have been chewed by hazel dormouse (i.e. displaying the characteristic smooth round hole) was conducted.

3.18 **Reptiles** - the site was assessed for habitat suitable for reptiles, such as long grassland and areas of scrub, with particular attention paid to those features that provide suitable basking areas (e.g. south-facing slopes and walls), hibernation sites (e.g. banks, log piles and piles of rotting vegetation) and opportunities for foraging (e.g. rough grassland and scrub).

3.19 **Other mammals** – any signs of occupancy by other mammals (e.g. Rabbit warrens) are recorded.

3.20 **Other Species of Principal Importance (SPI)** – the habitats present on site were assessed for the likelihood of presence for species of regional and national importance.

3.21 **Invasive species** - Any invasive plant or animal species identified during the site walkover are recorded.

3.22 **Plant species of note** – Any plant species of conservation concern found on the site are recorded.

3.23 **Habitats of Principal Importance** - Habitats of Principal Importance within or adjacent to the site (such as arable field margins, traditional orchards, ponds, rivers, wet woodlands) are recorded.

3.24 **Other valuable ecological features -** Other ecological features e.g. ancient woodland, veteran trees, bird feeding stations etc, habitat enhancements etc. within or adjacent to the site are recorded.

4 Constraints/Limitations

4.1 An initial site assessment such as this is only able to act as a snapshot to record any flora or fauna that is present at the time of the survey. It is therefore possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.

4.2 Some protected species records are confidential and therefore not included within the data search results provided by the records centre. Absence of records does not automatically correspond to absence of species within the impact zone of the development.

4.3 No site survey data or photographs are available from prior to clearance works to accurately identify the types and extent of habitats lost. These are inferred as closely as possible using Google satellite imagery and surrounding habitats.

5 Results

Desk Study

Sites

Statutory Designated Sites

Sites of Special Scientific Interest (SSSIs)

5.1 There is one statutory designated site located within 2km of the proposed site, this is Slinfold Stream and Quarry Site of Special Scientific Interest (SSSI) approximately 1.9km NE of the site.

5.2 Whilst the site does have connectivity to the SSSI via tree lines, hedgerows and woodland blocks, the vast majority of the SSSI falls outside of the 2km buffer around the site, and the clearance works are therefore not considered to have had any notable impacts on the SSSI.

Non-statutory Designated Sites

Local Wildlife Sites (LWS)

5.3 There are five non-statutory sites located within 2km of the proposed site. The nearest non-statutory designated site is Smithwood and Tittlesford Copses Local Wildlife Site approximately 1.05km north-west of the site.

Habitats of Principal Importance

5.4 Habitats data available via MAGIC was reviewed for the presence of Habitats of Principal Importance (HPI). There are no HPI located within or immediately adjacent to the site. The closest HPI is deciduous woodland priority habitat 70m to the north-east of the site. See Figure 5.

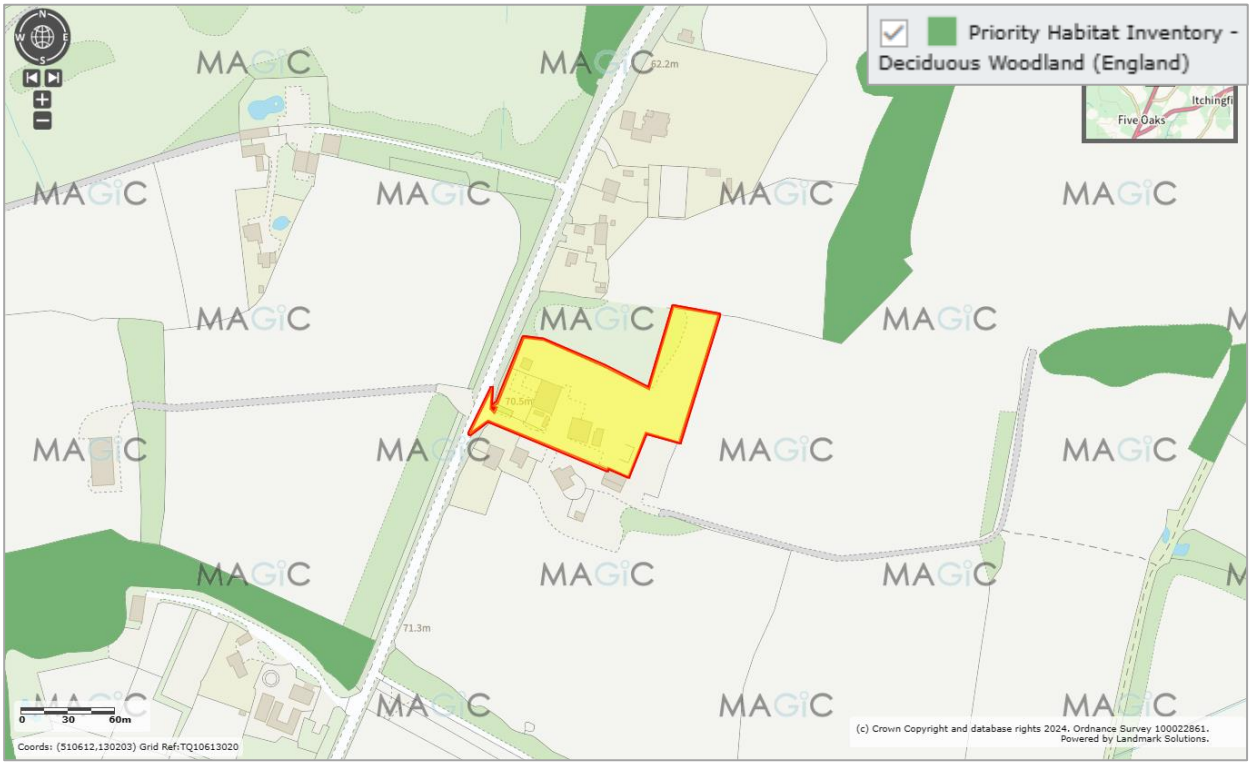

FIGURE 5: HABITATS OF PRINCIPAL IMPORTANCE ON AND ADJACENT TO THE SITE

Waterbodies within 500m of the site boundary

5.5 The Ordnance Survey map available via MAGIC was reviewed for ponds within the accepted dispersal distance of 500m that are not separated from the site by significant barriers to dispersal. 26 ponds were found occurring in all directions (see Figure 6), including ponds on both sides of the A29 which is known to be crossed by GCN: These are listed below:

- Ponds 1-11: from 170m to 490m north-west of the site across the A29.
- Ponds 12-15: from 100m to 450m north-east of the site.
- Ponds 16-19: from 255m to 350m to the east of the site.
- Ponds 20-23: from 205m to 390m to the south of the site.
- Ponds 24 & 25: 460m and 340m to the south-west of the site across the A29.
- Pond 26: 50m to the southeast of the site.

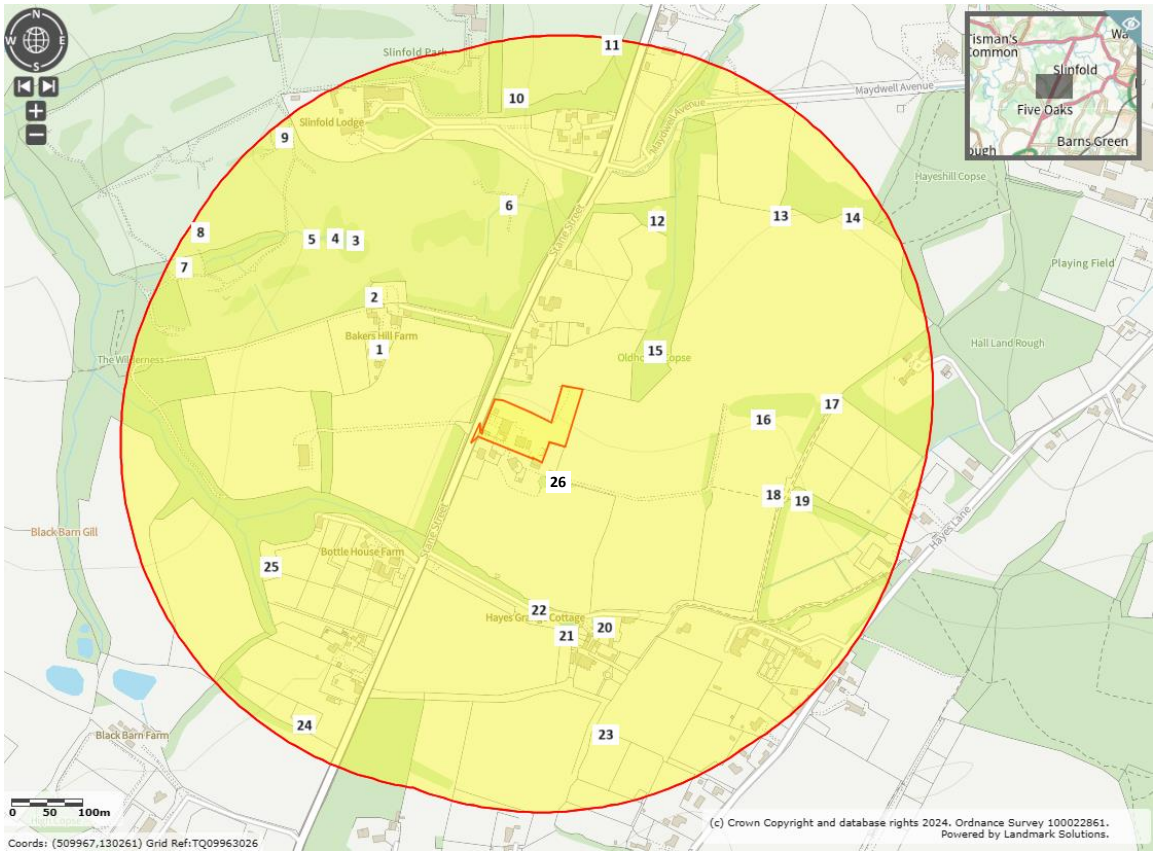

FIGURE 6: WATERBODIES WITHIN 500M

Protected Species

Badger

5.6 Badger records are confidential and are therefore not included in the report.

Bats

5.7 Records of 11 bat species were recorded within 2km of the site: Common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, serotine *Eptesicus serotinus*, western barbastelle *Barbastella barbastellus*, noctule *Nyctalus noctula*, Bechstein's bat *Myotis bechsteinii,* Natterer's bat *Myotis nattereri*, whiskered bat *Myotis mystacinus*, Daubenton's bat *Myotis daubentonii*, Brandt's bat *Myotis brandtii* and brown long-eared bat *Plecotus auritus.*

Birds

5.8 113 bird records of 25 notable and protected bird species have been recorded within 2km of the site within the last 10 years, including five Schedule 1 species barn owl *Tyto alba*, red kite *Milvus milvus*, hobby *Falco subbuteo,* kingfisher *Alcedo atthis,* and black redstart *Phoenicurus ochruros*.

Great crested newt

5.9 75 records of great crested newts were recorded within 2km of the site, on both sides of the A29. These were predominantly from Slinfold Golf Course to the north-west across the A29 and from Park Lane approximately 1.3km north-east of the site, with a peak count of 83 GCN in April 2019. More recent surveys undertaken by AEWC

Ltd at Slinfold Golf Course in April 2023 in relation to works at another site in the area have recorded a peak count of 101 GCN.

Hazel dormice

5.10 Only a single record of hazel dormouse was returned within 2km of the site, this was from 2001 to the east of the site.

Reptiles

5.11 Records of reptiles were recorded in the local area with most recent records from 2022. Species recorded were slow-worm *Anguis fragilis*, grass snake *Natrix helvetica* and common lizard *Zootoca vivipara.*

Other Mammals

5.12 Other mammals were recorded within 2km of the site in the last 10 years include the west European hedgehog *Erinaceus europaeus* and European rabbit *Oryctolagus cuniculus.*

Other Species of Principal Importance (SPI)

5.13 Records of other species of importance recorded within 2km of the site include common toad *Bufo bufo*, two butterfly species and six moth species.

Field Survey

Habitats and Plants

Current Existing Habitats

5.14 A UK Habs Habitat map showing the habitats currently on the site in 2024 is included in Figure 7. These habitats are described below.

Artificial unvegetated, unsealed surface

5.15 The main yard area covering the west of the site is predominantly covered by shingle. In the south-east corner of the site is a hardstanding area with emergent ruderal plants.



Photograph 1: *Shingle covering the west of the site.*



Photograph 2: *Hardstanding in the south-east corner with ruderal plants.*

Developed land; sealed surface

5.16 The access drive within the site, along the southern site boundary, comprises hardstanding, predominantly concrete but becoming tarmac close to the A29. There are also two large barns on the site.



Photograph 3: *The access drive in the south of the site.*



Photograph 4: *A large barn on the site.*

Mixed scrub

5.17 There is a very small block of scrub in the south-west of the site, adjacent to the access drive. This comprises garden privet (*Ligustrum ovalifolium*), hawthorn (*Crataegus monogyna*), bramble (*Rubus fructicosus* agg.), common nettle (*Urtica dioica*), and willowherb (*Epilobium* sp.).



Photograph 5: *Small block of scrub in the southwest of the site.*



Photograph 6: *Small block of scrub in the southwest of the site.*

Ruderal/Ephemeral

5.18 The eastern half of the site is mostly covered by ruderal vegetation. This area has been cleared previously and there is a large volume of rubble, with low-level ruderal vegetation having established itself recently. There is also a small area of ruderal/ephemeral in the south-west of the site associated with a line of trees. Species

include bristly oxtongue (*Helminthotheca echioides*), dock (*Rumex* sp.), spear thistle (*Cirsium vulgare*), green alkanet (*Pentaglottis sempervirens*), creeping thistle (*Cirsium arvense*), perennial ryegrass (*Lolium perenne*), dandelion (*Taraxacum* sp.), common nettle, buddleia (*Buddleja davidii*), ribwort plantain (*Plantago lanceolata*), sedge (*Carex* sp.), and creeping buttercup (*Ranunculus repens*).



Photograph 7: *Ruderal/Ephemeral in the east of the site.*



Photograph 8: *Ruderal/Ephemeral in the east of the site.*

Line of trees

5.19 There are two lines of trees on the site. In the north-east corner, there is a line of mature oak (*Quercus* sp.) trees along the site boundary, with this tree line extending further offsite to the east. In the south-west corner, the line of trees that borders the A29 extends a short way into the site. Species include hornbeam (*Carpinus betulus*) and hawthorn.



Photograph 9: *Line of oaks on the site boundary in the north-east corner.*



Photograph 10: *Line of trees extending into the south-west of the site from the A29.*

Individual tree

5.20 There is a single, small individual tree on the site, associated with the small block of scrub adjacent to the access drive. The tree is ivy-clad and has been heavily cut back. It did not have any suitable features for roosting bats.



Photograph 11: *Small individual tree on the site.*



FIGURE 7: UK HABS HABITAT MAP

Previously existing habitats

5.21 Google Earth satellite imagery of the site dates back to 2001. Early imagery shows the site to have comprised the same existing barns surrounded by hard surfacing, with the area to the east/north-east of this being vegetated, likely comprising varying degrees of rough grassland, ruderal/ephemeral vegetation and scrub. There was a hedgerow/broadleaved tree line along the eastern boundary and extending partway into the south of the site.

5.22 The site appeared to have remained largely unchanged between the 2001 and 2020 satellite images, except that the vegetation appeared to mature. By April 2020, in the north-east of the site an area of tall scrub and/or young trees had developed adjacent to the boundary hedgerow/tree line. The centre of the site, adjacent to the hardstanding, was densely vegetated likely with a combination of scrub and/or ruderal vegetation and/or young trees. Grassland was visible in the area between these two areas of dense vegetation.

5.23 Between April 2020 and June 2021, the majority of the vegetation on the site was cleared, except for a low number of trees on the eastern boundary, one tree within the site, and a strip of likely grassland in the north-east. Between June 2021 and July 2022, the remaining trees were removed and the strip of likely grassland was pushed back.

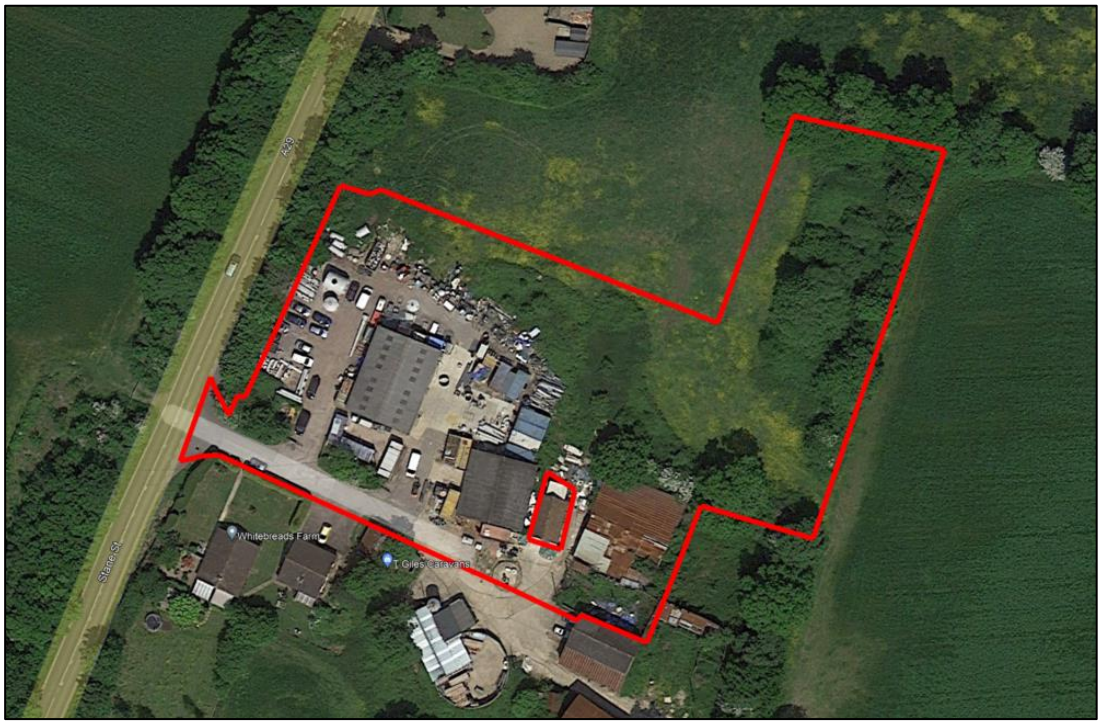

FIGURE 8: GOOGLE SATELLITE IMAGE OF THE SITE FROM JUNE 2013

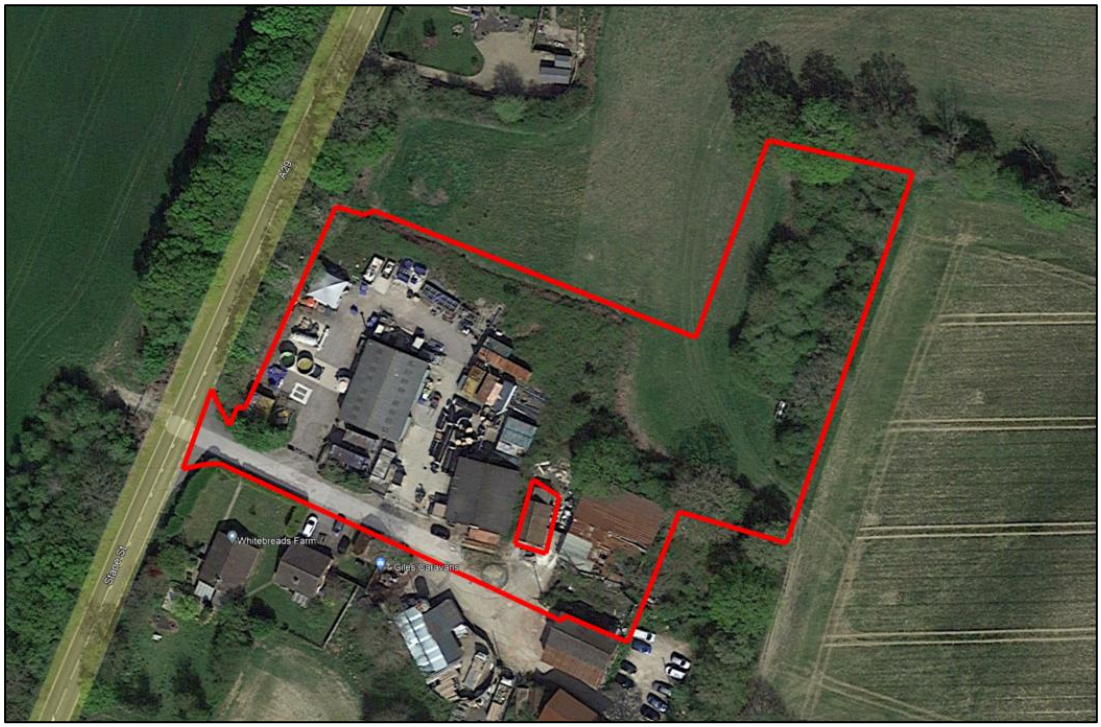

FIGURE 9: GOOGLE SATELLITE IMAGE OF THE SITE FROM APRIL 2020



FIGURE 10: GOOGLE SATELLITE IMAGE OF THE SITE FROM JULY 2022

Habitat evaluation

5.24 The habitats present on site prior to clearance were common and widespread. Ruderal and scrub habitats and hedge and tree lines are frequently used for commuting, foraging and shelter by a wide range of species including bats, birds, amphibians, reptiles, hedgehogs and other small mammals.

Protected species and species of conservation concern

Badger

5.20 No badger setts were identified present on site or within 30m of the site. No evidence of badger activity such as latrines, tracks, guard hairs or snuffle holes were observed on or directly adjacent to the site, which would suggest that the site is otherwise used for foraging.

5.21 Badgers are considered likely to be present in the surrounding areas, and whilst it is not possible to ascertain whether any setts were present on or adjacent to the site prior to clearance, the previous habitats on site would have offered foraging opportunities for badgers.

Bats

5.22 There are two barns on the site, referred to here as 'Building A' and 'Building B' as illustrated in Figure 3, which have been present on the site since before any clearance works were undertaken. These were both subject to an inspection as part of a bat assessment, which is detailed below. There were also a small number of portable cabins adjacent to the south of Building A. These were assessed and were found to be in good condition and were not considered to offer any suitable features for roosting bats.

Building A:

5.23 Building A is the north-western of the two buildings. It is a large, open-plan barn with an unlined asbestos gable roof edged with bitumen felt, corrugated metal sheet walls, and some timber weatherboarding on the western elevation.

5.24 The barn was found to be in excellent condition. All features were tightly fitting, including the timber weatherboards, and no crevices suitable for bats were found on the exterior or interior of the building. There were gaps beneath the bitumen felt and beams where these overlaid the grooves of the corrugated sheets, however the gaps were too large to provide suitable roosting space. Gaps beneath the eaves would provide open access into the building for bats, however it is considered to be highly unlikely that bats would use the building interior. There were no roosting features such as crevices and no enclosed roof void. The barn is in active use by tenants and there are high internal light levels, which would deter day roosting. No evidence of bats, such as droppings, was found.

5.25 It is considered that Building A currently has negligible potential for roosting bats. Whilst the condition of the building pre-works cannot be confirmed, the satellite imagery review suggests the roof has been of the same or similar fabric and construction for some time. From the nature of the structure and lack of suitable roost features, it is considered to be unlikely that it would have previously been suitable for or supported a bat roost.



Photograph 12: *Building A viewed from the west.*



Photograph 13: *Inside Building A.*





Photograph 14: *Tightly fitted timber weatherboards.*	**Photograph 15:** *Gaps created by the corrugated sheets were too large for crevice roosting.*

Building B:

5.26 Building B is the south-eastern of the two buildings. It is a large, open-plan barn with an unlined asbestos gable roof, concrete block walls overlaid with corrugated asbestos sheets on the north and south elevations, and large metal double doors.

5.27 The barn was found to be in excellent condition. The concrete blocks were tightly fitting with no cracks. One area of damage was found in a concrete block adjacent to a window on the western elevation, however this had only created a shallow indentation which would not provide a suitable roosting space. Where corrugated sheets overlaid the exterior walls, the gaps beneath these had been filled with insulation and/or foam, preventing them from being used by bats. No crevices suitable for bats were found on the exterior or interior of the building. There were gaps beneath beams where these overlaid the grooves of the corrugated sheets, however the gaps were too large to provide suitable roosting space. Gaps beneath the eaves would provide open access into the building for bats, however it is considered to be highly unlikely that bats would use the building interior. There were no roosting features such as crevices and no enclosed roof void. The barn is in active use by tenants and there are high internal light levels, which would deter day roosting. No evidence of bats, such as droppings, was found.

5.28 It is considered that Building B currently has negligible potential for roosting bats. Whilst the condition of the building pre-works cannot be confirmed, the satellite imagery review suggests the roof has been of the same or similar fabric and construction for some time. From the nature of the structure and lack of suitable roost features, it is considered to be unlikely that it would have previously been suitable for or supported a bat roost.

	
Photograph 16: *Building B viewed from the west.*	**Photograph 17:** *Inside Building B.*

	
Photograph 18: *Sealed gaps beneath corrugated sheets.*	**Photograph 19:** *Gaps created by the corrugated sheets and beams were too large for crevice roosting.*

5.29 The single individual tree on the site was found to offer negligible potential to support bats due to a lack of suitable roosting features. It is not possible to ascertain if any trees within the cleared tree lines contained features with suitability for roosting bats and if any roosts were lost during the site clearance.

5.30 The previous hedgerow/tree line and scrub habitats would have offered foraging opportunities for a range of open- and edge-foraging bat species, with the hedge/tree line additionally providing linear connectivity for commuting bats between areas of woodland to the north and south of the site.

Breeding birds

5.31 The two lines of trees on the site hold potential for nesting birds. Birds may also access and nest in the barns.

5.32 The previous hedge/tree lines and scrub would have offered foraging and nesting opportunities to a range of bird species.

Great Crested Newt (GCN)

5.33 There are no ponds on site and in its current state, the site is considered to have negligible potential to support terrestrial GCN due to the nature of the vegetation. The ruderal/ephemeral habitat is sparse and low level, and the small block of scrub is isolated amongst hardstanding.

5.34 The Ordnance Survey map available via MAGIC showed 26 ponds present within 500m of the site. The closest of these is Pond 26 (see Figure 6) within 50m of the site boundary. The next nearest pond is Pond 15 approximately 100m north-east of the site. Both ponds scored 'Poor' on the Habitat Suitability Index (HSI) and are therefore not considered suitable for GCN. See Table 1.

Table 1: HSI calculations for Ponds 15 and 26

Pond ref	**15**	**26**
SI[1] - Location	1	1
SI[2] - Pond area	1	0.1

SI[3] - Pond drying	0.5	0.5
SI[4] - Water quality	0.33	0.33
SI[5] - Shade	0.3	0.6
SI[6] - Fowl	0.01	0.67
SI[7] - Fish	1	0.67
SI[8] - Ponds	1	1
SI[9] - Terrestrial habitat	0.67	0.33
SI[10] - Macrophytes	0.3	0.3
HSI Score	**0.40**	**0.46**
HSI Category	**Poor**	**Poor**

5.35 The data record search returned records for GCN to the north and north-east of the site on both sides of the A29, with a peak count of 83 newts; these included a record of a terrestrial phase juvenile GCN within 600m of the current site in 2021. Surveys carried out by AEWC Ltd in 2023 have confirmed the presence of a high population for GCN within ponds at Slinfold Golf Club for another site in the area, several of the ponds fall within 500m of the current site.

5.36 The habitats previously present on site would have held good potential for commuting and foraging GCN.

5.37 Whilst the two nearest ponds to the site are considered unsuitable for GCN, the high number of ponds within 500m of the site and the known presence of a large population of GCN within 350m of the site increase the likelihood that GCN could have been present using the habitats on site prior to clearance works as they are known to disperse up to 2km where large populations are present, are recorded to cross the A29 during dispersal in this area, and habitat connectivity was present between the known breeding locations and the survey site prior to habitat clearance.

5.38 Based on the area of habitat lost, suitability of habitat prior to clearance, connectivity and the distance from the site to the nearest potential breeding pond, a Rapid Risk Assessment calculation carried out for the site identifies that in the absence of mitigation, an offence was highly likely.

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)	No effect	0
Land 100-250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.1
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	Significant disturbance of newts	0.8
	Maximum:	0.8
Rapid risk assessment result:	**RED: OFFENCE HIGHLY LIKELY**	

FIGURE 11: RAPID RISK ASSESSMENT OF THE SITE

Hazel dormice

5.39 The site currently holds some potential for hazel dormice in the tree lines on the site. However, the portion of the tree lines that fall within the site represent the end of each tree line, and therefore dormice cannot commute any further at the point of the site. As such, the likelihood of dormice being present within these short sections of tree lines is considered to be very low.

5.40 The aerial imagery shows the hedge/tree lines previously present on site likely contained mixed broadleaf species, including hawthorn. Together with unmanaged scrub, the site would likely have provided suitable foraging habitat for hazel dormice, connected to further suitable habitat such as woodland in the wider area.

Reptiles

5.41 In its current state the site has negligible potential to support reptiles due to the nature of the vegetation. The ruderal/ephemeral habitat is sparse and low level, and the small block of scrub is isolated amongst hardstanding.

5.42 The habitats previously present on site held some foraging and refuge potential for common reptile species.

Other Mammals

5.43 There is no evidence of, and low suitability for, the site to support other mammals in its current state. Prior to clearance it will have held higher suitability for a range of other mammal species.

Other Species of Principal Importance

5.44 The site currently holds very little suitability to support SPI due to a lack of vegetation cover. The vegetated areas provide some sub-optimal habitat for west European hedgehog to forage and/or commute.

5.45 The habitats previously present on site held suitability for foraging, commuting and refuge of west European hedgehog. The redundant building may have held potential to support nesting house sparrows, however this cannot be confirmed.

Invasive species

5.46 No invasive species were found present on the site.

Protected Species Evaluation

5.47 In the absence of mitigation, clearance of hedge and tree lines, scrub, ruderal vegetation and areas of grassland from within the site has resulted in the loss of these habitats as well as potential direct impacts to protected species such as badgers, hedgehogs, nesting birds, amphibians and reptiles through injury or death if they were present on site during the clearance works.

5.48 Bats, GCN and hazel dormice are additionally protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019* from disturbance and from damage or destruction of their place of shelter, these species may have been subject to direct and indirect impacts should any have been using the site as a place of shelter.

6 Conclusions & Recommendations

6.1 As a retrospective application, the habitats previously present within and adjacent to the current site have been lost. The application proposes that a new mixed native species hedgerow be planted along the eastern boundary of the site, extending north to join a nearby mature tree line, and to include three new oak trees within the hedgerow. This will, in time, restore connectivity between suitable habitats to the north and south of the site, and provide replacement foraging and refuge opportunities for a range of species.

6.2 An Ecological Enhancement Plan has been produced for the site, detailing enhancements to be included and appropriate management to adequately compensate for the loss of habitat on the site and restore previously existing lines of connectivity.

Ecological Enhancement Plan

General

6.3 Due to the rural location of the site and the proximity of ancient woodland and deciduous woodland, **the planting schemes for the application will use native species only.**

6.4 In line with best practice, **the use of peat in composts or topsoil will be avoided.**

Hedgerow

6.5 The application proposes planting of approximately 210m of native hedgerow. Native hedgerow will border part of the northern and western site boundaries and the entirety of the eastern site boundary. All lengths **will comprise of species-rich hedgerow planting, to include a minimum of five appropriate native woody species per 30m length,** but ideally more, to maximise the availability of flower, fruit and nut-bearing species available for protected species.

6.6 Species-rich mixed native hedge plants are readily available, either as 1m lengths in troughs where plants are established and 'knitted together', or as plant mixtures of appropriate native species, such as hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, common alder *Alnus glutinosa*, common dogwood *Cornus sanguinea*, hornbeam *Carpinus betulus*, field maple *Acer campestre*, guelder rose *Viburnum opulus*, hazel, dog rose *Rosa canina*, bird cherry *Prunus padus*, green beech, sweet briar rose *Rosa rubiginosa*, spindle *Euonymus europaeus,* wild privet *Ligustrum vulgare* and wild crabapple *Malus sylvestris.* **It is recommended that established hedging is used in this instance to minimise the maturing time and ensure that habitat is reinstated as swiftly as possible.**

6.7 New hedgerow planting should take place between October and March, and ideally in January. Avoid planting in freezing weather or when the ground is waterlogged.

6.8 Hedges must then be trimmed once to twice a year for the first five years in winter, early spring or late autumn outside of nesting bird season (March to August), or at the end of summer to ensure a dense structure.

6.9 After the first five years, the hedging must then be cut on a three-year rotation, cutting no more than 1/3 of the hedging within the site each time, avoiding nesting bird season. Once established, each section of hedging should be trimmed on all sides every three years and should aim to be maintained at least 1.5m wide. Any large gaps which begin to appear should be planted up with suitable species.

6.10 This cutting regime will ensure that a good yield of berries and flowers are produced by the hedgerow every year and that diverse hedgerow structures and heights are present for wildlife within the local area.

Grassland

6.11 To further enhance the area for biodiversity and provide compensation for protected species, **areas of meadow grassland will be created and enhanced where necessary through sowing of an appropriate wildflower seed mix in autumn, and must be subject to meadow management** to gradually improve the existing grassland that is currently beginning to colonise previously cleared areas outside of the site boundary. These include the northeast portion of the site, a strip along the eastern boundary, and an offsite area adjacent to the north.

6.12 Some species take several years for their seed to germinate (this includes both sown and self-seeded) therefore the grassland will be subject to gradual improvement over a number of years. In the first year the grassland should be cut to maintain a height of 10-15cm and the cuttings should be removed.

6.13 From the second year the meadow area should be cut at least once, in late summer/early autumn, to a height of 5cm, after the plants have flowered to ensure that they are able to set seed.

6.14 Yellow rattle can be introduced to further help diversify the species present within the grassland. This is a semi-parasitic plant which feeds off the nutrients in the roots of nearby grasses, reducing the vigorous growth of the grass and allowing more delicate grassland herb species to develop.

6.15 Additional seed should be sown in naturally occurring or created bare patches in subsequent years with an appropriate seed mix in order to aid the increase in floral diversity. Rank species such as common nettle, spear thistle, creeping thistle, broad-leaved dock, curled dock and common ragwort will be controlled if they begin to dominate; this can be achieved by a spring cut as necessary, spot-spraying or hand pulling.

Species Enhancement

Bats

6.16 **To increase the availability of potential roosting sites, two bat boxes will be installed on suitable trees near the site within the wider ownership boundary.** These will comprise of a mix of Schwegler 1FF bat box (below left, suitable for pipistrelle bats *Pipistrellus sp.*) and a Schwegler 2F bat box (below right, suitable for long-eared bats *Plecotus sp.*), or similar bat boxes.

6.17 Bat boxes must be woodcrete or similar hard-wearing material (rather than the less durable wooden boxes) and several boxes should be put up on a single tree facing in

different directions to provide a range of conditions. They should be at least 4m above the ground (where safe installation is possible) and sheltered from strong winds and exposed to the sun for part of the day (usually south or south-west).



Birds

6.18 **To provide additional nesting opportunities for birds, at least four bird boxes will be installed on suitable trees near the site within the ownership boundary.**

6.19 Bird boxes will comprise a mix of traditional 32mm round-holed (below left: which are suitable for tits, sparrows, redstarts and nuthatches) and open-fronted boxes (below right: these are suitable for pied wagtails, robins and wrens) and must be woodcrete or similar hard wearing material (rather than the less durable traditional wooden boxes).

6.20 Boxes should be installed with an aluminium nail or screw to prevent tree damage between 2m and 4m above ground for round-holed and low down, below 2m, well hidden in vegetation for open-fronted boxes and (unless shaded by buildings or trees) be facing north or east.



6.21 A hibernaculum will be created in a discrete south facing corner. This will be located in an area of meadow grassland adjacent to a mature tree line and proposed new hedgerow (to allow reptiles to potentially colonise the hibernacula). Its construction will use materials such as logs, inert hardcore, bricks or building rubble to form the

body of the hibernaculum, ensuring that materials likely to decompose are not placed beneath bricks or rubble to avoid collapse. Woodchips or soil may be incorporated to fill some of the larger cavities within the structure.

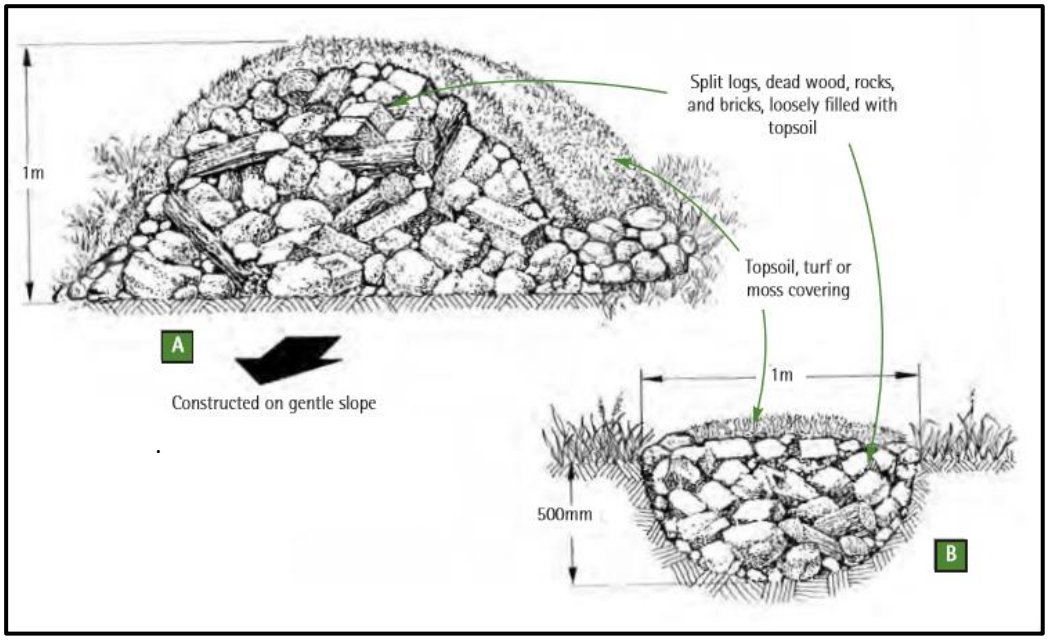

Image from Great Crested Newt Conservation Handbook: A: Impermeable soils. B: Free draining soils



FIGURE 3: PROPOSED ENHANCEMENT PLAN

Appendix 1 – Survey timetable

Species	Survey	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Badger	Bait marking & sett search												
Bats	Roost assessments												
	Ground level tree assess												
	Emergence and activity												
	Hibernation												
	Trapping												
Birds	Wintering												
	Breeding												
Great crested newt	HSI												
	eDNA												
	Presence/absence & popn												
	Refugia												
Hazel dormouse	Tube												
	Nut search												
Otter	Field signs												
Reptiles	Refugia & search												
Water vole	Field signs												
Invertebrates	Presence & communities												
Vegetation	Phase 1 habitat & NVC												

Optimal

Sub-optimal

Outside survey season

Appendix 2 – legal protection

General

This section briefly describes the legal protection afforded to protected species and habitats. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation but summarises the salient points.

Badger

Badgers are protected under the *Protection of Badgers Act 1992*. Under this legislation it is an offence to kill or injure a badger, to damage, destroy or block access to a badger sett, or to disturb a badger in its sett. The Act also states the conditions for the protection of badger's licence requirements.

Bats

All species of bats are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

A roost is defined as 'any structure or place which a bat uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present.

Furthermore, seven bat species (barbastelle, bechstein's, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe) are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Breeding Birds

All species of wild bird are protected under Section 1 of the *Wildlife and Countryside Act 1981 (as amended)*. Protection was extended by the *Countryside and Rights of Way (CRoW) Act 2000*. Under the above legislation, it is an offence to intentionally:

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

Certain species are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981 (as amended)* and receive protection under *Sections 1(4)* and *1(5)*. There are special penalties where the offences listed above are committed for any *Schedule 1* species and it is also an offence to intentionally or recklessly:

- disturb any such bird when it is building its nest or while it is in or near a nest containing dependant young; or

- disturb the dependant young of any such bird.

Amphibians

Natterjack toad, northern pool frog and great crested newt are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Palmate newts and smooth newts are also afforded protection against sale only under Schedule 5 of the *Wildlife and Countryside Act 1981 (as amended)*.

Natterjack toad, common toad, great crested newt and northern pool frog are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Hazel dormouse

Hazel dormouse is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Hazel dormouse is also a Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Otter

Otter is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Otter is also a Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Reptiles

Common lizard (*Lacerta vivipara*), grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*), and adder (*Vipera berus*) are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the *Countryside and Rights of Way (CRoW) Act 2000*. Under the legislation, it is an offence to:

- intentionally or deliberately kill or injure any individual of these species; or
- sell or attempt to sell any part of these species either alive or dead.

Smooth snake *(Coronella austriaca)* and sand lizard *(Lacerta agilis)* are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

All UK reptile species are Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Water vole

Water vole *(Arvicola amphibious*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. This makes it an offence to:

- capture, kill or injure;
- damage, destroy or block access to a place of shelter;
- disturb whilst in a place of shelter or possessing, and
- sell any part of a water vole, dead or alive.

Other Mammals

All mammals receive some protection under the *Wild Mammals (Protection) Act 1996*, which makes it an offence to crush or asphyxiate an animal (e.g. within its burrow).

Species and Habitats of Principal Importance

Section 41 of the *Natural Environment and Rural Communities (NERC) (2006)* requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list has 56 Habitats of Principal Importance and 943 species of principal importance listed and has been drawn up in consultation with Natural England.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under *Section 40* of the *Natural Environment*

and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Invasive species

It is an offence to plant, or otherwise cause to grow in the wild non-native plant species listed under *Schedule 9* of the *Wildlife and Countryside Act 1981 (as amended)*, for which *Section 14* of the Act applies. These include, but are not limited to:

- Himalayan balsam
- Cotoneaster sp.
- Japanese knotweed
- Giant hogweed.

Ancient woodland

The *National Planning Policy Framework (2012)* states that '*Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss'*. In addition, Natural England's standing advice for ancient woodland states that *an appropriate buffer zone of semi-natural habitat* [be in place] *between the development and the ancient woodland (depending on the scale and impact of development), a minimum buffer should be at least 15 metres to avoid root damage and at least 50m for pollution or trampling"*. Ancient woodlands, and ancient and veteran trees, may also be protected by Tree Preservation Orders.

Sites of Special Scientific Interest (SSSI's)

SSSI's are areas notified under the *Wildlife and Countryside Act 1981, as amended*, as being of special interest for nature conservation. They are the finest sites for wildlife and natural features supporting many characteristic, rare and endangered species, habitats and natural features. LPAs have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI.

National Site Network: Special Protection Areas (SPA), Special Areas of Conservation (SAC) & RAMSAR sites.

Development proposals which will adversely affect these sites are not permitted (except where there are no alternative solutions and the proposal is necessary for imperative reasons of overriding public interest). If a development could possibly impact on a SPA or SAC, the applicant will need to submit an assessment of potential impacts and their significance with their planning application for the local authority to make an 'Appropriate Assessment'.

Local Nature Reserves (LNRs)

These are a statutory designation made by local authorities. LNRs may be given protection against damaging operations and development on and around them via the local plan.

Local Wildlife Sites (LWS)

This is a non-statutory designation for sites identified at a county level. They typically form a network of sites that are recognised of being of conservation importance locally and are often included in Local Authority development plans.

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