

# Preliminary Ecological Appraisal

## Land at Kitchens

Balshall Eaves, Ribble Valley

June 2022

Prepared for: Ms Howard

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## EXECUTIVE SUMMARY

- On 7<sup>th</sup> June 2022 a Preliminary Ecological Appraisal was undertaken on land at Kitchens, Bashall Eaves.
- The proposals comprise the construction of a sand school and stables.
- The site comprises a horse grazed field of improved grassland. A hedgerow runs along the northeast boundary along the adjacent Cross Lane. There is a fenced boundary to the east and the south, along a ditch. To the southwest the site is continuous with open grassland.
- Baddup Wood South Biological Heritage Site lies approximately 128m to the southeast of the survey site. The woodland is connected to the site by the linear hedgerow and fence-line to the northeast and south.
- Ecological constraints relate to the hedgerow along the northern boundary, foraging and commuting bats, badger, hedgehog, common toad, reptiles and nesting birds.

### *Hedgerow*

- Hedgerows are a Habitat of Principal Importance under the NERC Act, 2006. An approx. 5m length of the hedgerow to the northeast (extended from an existing entrance) will be removed to allow improved sight line along Cross Lane.
- Planting of hedgerow along the eastern and southern fence line will improve linkage to the woodland from west to east compensating for the loss of the hedgerow to the northeast.

### *Badupp Wood South and North Biological Heritage Site*

- Badupp Wood South and North are very unlikely to be impacted by the proposals which are small scale. However, the Badupp Wood South is directly connected by the hedgerows and tree lines. The loss of the hedgerow to the northeast may result in some minor temporary disruption to species that might regularly utilise the corridors, for example commuting bats, other small mammals and birds that might be associated with the woodland. Interest features associated with the woodland, including plant species, are unlikely to be affected.
- The reinforcement of the hedgerow along the fence line to the south and east will significantly improve connection to the woodland from east to west.

### *Bats*

- Bats are likely to utilise the southern and western boundary hedgerow to forage and commute. Recommendations have been made to minimise the risk of disturbance to this species group as a result of lighting.

### *Badger*

- Precautionary mitigation is recommended to avoid harm to badger that may occasionally cross the site.

### *Hedgehog*

- Precautionary mitigation is recommended to avoid harm to hedgehog that may occasionally cross the site.

*Reptiles and Amphibians*

- Avoidance mitigation to minimise the risk of harm to reptiles common toad is recommended.

*Nesting birds*

- The survey site has potential to support nesting birds within trees and vegetation. Mitigation to avoid harm to nesting birds in the spring and summer months is recommended.
- If the proposed mitigation is followed, the development will have no foreseeable impact upon protected species or species and habitats of conservation importance in the locality.

*Enhancement*

- The proposals provide the opportunity to significantly enhance the site for wildlife and recommendations for this have been made, including planting of native species hedgerow and installation of bird and bat boxes.



## 1 Introduction

### 1.1 Application Site

- 1.1.1. This report details a Preliminary Ecological Appraisal of land at Kitchens, Bashall Eaves, Ribble Valley, BB7 3NA. Ordnance Survey grid reference (centre of site): SD 6981 4422.
- 1.1.2. Ms Howard commissioned Verity Webster Ltd to undertake a Preliminary Ecological Appraisal to inform the planning application.

### 1.2 Objectives

- 1.2.1 The objectives of the Preliminary Ecological Appraisal are to determine:
  - The potential for protected species and/or habitats of importance within and surrounding the site.
  - The presence of any designated sites within the surrounding area, or if the site is designated.
  - How the proposed works might impact protected species and/or habitats of importance.
  - How the proposed works might impact designated sites within the surrounding area.
  - How any impacts might be avoided, mitigated and/or ameliorated, including recommendations for further survey work if required.
  - Potential for enhancement of the site for protected species, habitats of conservation interest and overall biodiversity.

### 1.3 Proposals

- 1.3.1 The proposals for the site comprise the development of a sand school and stables.

### 1.4 Ecologist

- 1.4.1 The Ecological Assessment was undertaken by Verity Webster. Verity is a Chartered Ecologist and a full member of the Chartered Institute of Ecology and Environmental Management.
- 1.4.2 Verity has worked as an ecological consultant for over 15 years. She has undertaken Ecological Assessments and protected species surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes and method statements when necessary.



## 2 Site Location and Description

### 2.1 Site Location

- 2.1.1 The survey site is located in a rural location in Bashall Eaves, approximately 4.2km northwest of Clitheroe town. The site is surrounded by open countryside comprising a matrix of grazed pasture, arable land and woodland divided by a matrix of tree lines and hedgerows.
- 2.1.2 There are numerous brooks and streams threading throughout the landscape. The River Hodder weaves east to west approximately 2km southwest of the site.
- 2.1.3 Cross Lane runs along the northern boundary of the site, beyond which there are a couple of houses with gardens.

**Figure 1: Ordnance survey map showing the location of the proposed development site.**



Ordnance survey 1:25000

Key

Survey site





**Figure 2: Aerial image showing the proposed development site and immediate surroundings**



From BING Maps

250m

Key



Survey site





## 2.2 Site Description

- 2.2.1 The survey site comprises a field of improved grassland (horse-grazed) south of Cross Lane. A hawthorn hedgerow with trees runs along the northern boundary adjacent to the road. The site is continuous with grazed pasture to the east and southwest. To the south of the development site there is a fence line running east to west and then angling south. A ditch runs along this boundary. A fence also runs north to south to the east of the site.



*Looking north across the survey site*



*The northern hedgerow from Cross Lane*



*The northern hedgerow from the field*






Figure 3: The Survey Site in relation to Braddup Wood South and North Biological Heritage Site



Ordnance survey 1:25000

Key

-  Development site boundary
-  Braddup Wood South BHS
-  Braddup Wood North BHS





## 3 Legislation

Relevant legislation is listed here. For full details, refer to Appendix A.

### 3.1 Bats

3.1.1 All UK bats receive full protection under the Wildlife and Countryside Act 1981 and are also protected under The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regs).

3.1.2 This makes it an offence to:

- Capture, injure or kill any bat,
- Disturb a bat of any species,
- Damage or destroy a breeding site or resting place of a bat (ie. The roost)
- Possess any bat, or part of a bat
- Offer for sale or trade any bat, or part of a bat

### 3.2 Badger

3.2.1 Under the Badger Act 1992, it is an offence to:

- Take, injure or kill a badger, or attempt to do so
- Cruelly ill-treat a badger
- Interfere with a badger sett including:
  - Damaging a badger sett or any part of it
  - Destroying a sett
  - Obstructing access to, or entry to a sett
  - Causing a dog to enter a sett; or
  - Disturbing a badger whilst it is occupying a sett.

### 3.3 Reptiles

3.3.1 Smooth snake and sand lizard receive full protection under the Wildlife and Countryside Act 1981 and are also protected under The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regs).

3.3.2 This makes it an offence to:

- Capture, injure or kill one of these species,
- Disturb these species,
- Damage or destroy a breeding site or resting place of these species.
- Possess one of these species, or part of one
- Offer for sale or trade one of these species, or part of one

3.3.3 Common lizard, adder, grass snake and slow-worm are partially protected under the Wildlife and Countryside Act 1981. This makes it an offence to:

- Kill or injure one of these species.
- Offer for sale or trade one of these species, or part of these animals.

### 3.4 Amphibians

3.4.1 Great crested newts receive full protection under the Wildlife and Countryside Act 1981 and are also protected under The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regs).

3.4.2 This makes it an offence to:

- Capture, injure or kill one of these species,
- Disturb these species,



- Damage or destroy a breeding site or resting place of these species.
- Possess a great crested newt, or part of this animal
- Offer for sale or trade a great crested newt, or part of this animal.

3.4.3 Common lizard, adder, grass snake and slow-worm are partially protected under the Wildlife and Countryside Act 1981. This makes it an offence to:

- Kill or injure one of these species.
- Offer for sale or trade one of these species, or part of these animals.

3.4.4 Common toad, common frog, palmate newt and smooth newt are protected from sale or trade only.

### 3.5 Section 41 Habitats and Species of Principal Importance

3.5.1 Section 41 Habitats and Species of Principal Importance (NERC Act 2006) are a material consideration for planners. The list is derived from the UK Biodiversity Action Plan list and supports species and habitats of conservation concern.

3.5.2 Species relevant to this report include hedgehog and common toad.

### 3.6 Designated Sites

3.6.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.

3.6.2 Statutory sites can be designated under UK legislation (the Wildlife and Countryside Act 1981), European Law (the Habitats Regulations 2017) or International law (Ramsar Convention).

3.6.3 Non-statutory sites can be designated by the Local Planning Authority, and different counties have different ways of designating local wildlife sites. Examples are Local Wildlife Sites and Biological Heritage Sites.

### 3.7 Planning Policy and Legislation

3.7.1 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.

3.7.2 The National Planning Policy Framework (NPPF, 2021) encourages Local Planning Authorities to conserve and enhance biodiversity.

Chapter 15, Para 174 of NPPF states: *"The planning system should contribute to and enhance the natural and local environment by:*

- a) **protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils....**
- d) **minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures".**

Para 175 states: *"Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."*

Para 179 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

- a) **"Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for**



***biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and***

- b) *Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity.***

Para 180 states that "when determining planning applications, local authorities should apply the following principles:

- a) *if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"***

3.7.3 The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.



## 4 Survey Methodology

### 4.1 Desk Study

- 4.1.1 The following data sources used to establish background information about protected species and their likely presence in the locality:
- Magic Map, Natural England (2018)
  - Bing Maps (2019)
  - Biological records data from Lancashire Environment Record Network (LERN) (2022)
- 4.1.2 Online mapping facilities, including MAGIC (Defra 2015), Google earth (for aerial mapping) and Ordnance Survey maps for the area were consulted to assess the site in relation to the surrounding landscape and any statutory and non-statutory designated sites.
- 4.1.3 Records data from LERN includes records of protected species and habitats of conservation interest and sites of conservation interest within 2km of the survey site.

### 4.2 Site Survey

- 4.2.1 The survey site, comprising the development site and a 30m buffer, was walked in daylight on 7<sup>th</sup> June 2022, and during the visits the habitat was assessed for potential for protected species. The surveyor searched for signs of the presence of protected species where appropriate, including pathways, burrows / nests / resting places, scratch markings, footprints and droppings etc. The presence of all animals and birds, if seen or heard, was recorded.
- 4.2.2 Habitats on site were assessed and described.

#### Hedgerow Regulations Assessment

- 4.2.3 The aim of this assessment is to establish whether the hedgerows bounding the survey site are 'important' according to the criteria in Schedule 1 of the Hedgerow Regulations 1997. The level of importance of the hedgerows is to be evaluated in relation to the development proposals for the site to ascertain their conservation importance.
- 4.2.4 The Hedgerow Regulations Assessment was undertaken in accordance with the Hedgerow Regulations 1997, following the guidance The Hedgerow Regulations 1997: A Guide To the Law and Good Practice. DEFRA 1997.
- 4.2.5 In order to inform the assessment each hedgerow was walked and the following details recorded:
- Length, width and height
  - Presence of a bank or a wall
  - Total length of all gaps in the hedgerow
  - Presence of a ditch and the length of the ditch
  - The presence of a parallel hedge within 15m





- Whether the hedgerow is adjacent to a bridleway, footpath, byway or road
- Presence and potential for protected species and species of conservation concern
- Woody species present (listed in Schedule 3 of the Hedgerow Regulations)
- Herbaceous species present, including any woodland species within 1m of the outermost edge (listed in Schedule 2 of the Hedgerow Regulations)

4.2.6 Where a hedgerow is under 200m the surveyor must count the woody species within the central stretch of 30m. Where the hedgerow is over 200m, to calculate the number of woody species the surveyor must count the woody species within the central 30m of each 3<sup>rd</sup> of the hedgerow and divide the aggregate by 3.

4.2.7 The hedgerows were then assessed according to the 8 Criteria in Schedule 1 of the Hedgerow Regulations 1997, to determine whether or not they are classified as 'important' and therefore subject to protection under the Regulations.

4.2.8 A hedgerow can be classified as important for the purposes of the Regulations if:

- They have been in existence for 30 years or more; and
- They satisfy at least one of the criteria set out in Part II of Schedule 1 to the Regulations.

4.2.9 The 8 criteria area detailed in Appendix B.

*Substitutions to the criteria:*

4.2.10 Criteria 6 refers to the Red Data Birds in Britain' Batter LA, Bibby CJ, Clemen P, Elliot GD and Porter RF(Eds.), published in 1990 for the Nature Conservancy Council and the Royal Society for the Protection of Birds (ISBN 0 85661 0569). This document is now outdated. In replacement, the Birds of Conservation Concern: the Red List for Birds (Eaton, A et al, 2015) was used to assess the presence of species of conservation importance.

4.2.11 Commonly referred to as the UK Red List for birds, this is the fourth review of the status of birds in the UK, Channel Islands and Isle of Man, and updates the last assessment in 2009. Using standardised criteria, 244 species with breeding, passage or wintering populations in the UK were assessed by experts from a range of bird NGOs and assigned to the Red, Amber or Green lists of conservation concern. The assessment is based on the most up-to-date evidence available and criteria include conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance.

### 4.3 Survey Limitations

4.3.1 The survey work was undertaken in June 2022. At this time of year the majority of wildlife, including birds and bats are active.

4.3.2 The majority of higher plants are visible in June 2022, but some species are more conspicuous at some times of the year than others, and due to the presence of dense vegetation in some areas, some species may have been missed.



## 5 Findings: Surrounding Designated Sites

- 5.0.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.
- 5.0.2 The protection over European designated sites (or Natura 2000) sites and Ramsar sites require any potential direct and indirect impacts are assessed within at least a 5km radius of the survey site.
- 5.0.3 The protection over UK statutory sites (Sites of Special Scientific Interest and Local Nature Reserves) requires that any potential direct and indirect impacts from a development are assessed within at least a 2km radius of the survey site.
- 5.0.4 Any potential direct or indirect impacts upon non-statutory sites are assessed within 1km of the survey site.

### **Statutory Sites**

- 5.0.5 The protection over UK statutory sites (Sites of Special Scientific Interest) requires that any potential direct and indirect impacts from a development are assessed within at least a 2km radius of the survey site, whilst the protection over European designated sites (or Natura 2000) sites and Ramsar sites require any potential direct and indirect impacts are assessed within at least a 5km radius of the survey site.
- 5.0.6 There are no UK designated sites within 2km and no EU designated sites within 5km.

### **Non-statutory sites**

- 5.0.7 There are eight Local Wildlife Sites, known as Biological Heritage Sites in Lancashire, within 2km of the survey site:
- Braddup Wood South lies approximately 130m to the southeast of the development site.
  - Braddup Wood North lies approximately 190m to the northeast of the development site.
  - Cross Lane Roaside Verges lies approximately 530m to the east of the development site.
  - Moor Piece Wood lies approximately 610m to the northwest of the development site.
  - Rabbit Lane Meadow lies approximately 1.1km to the northwest of the development site.
  - Agden Wood lies approximately 1.4km to the southwest of the development site.
  - Agden Clough lies approximately 1.5km to the southwest of the development site.
  - Mill Brook Wood lies approximately 1.85km to the northwest of the development site.



### Assessment: Non-statutory designated sites.

#### Braddup Woods South

- 5.0.8 Braddup Wood South is an area of Ancient semi-natural woodland composed of sycamore (*Acer pseudoplatanus*), oak (*Quercus* sp.) and ash (*Fraxinus excelsior*) with wych elm (*Ulmus glabra*) and scots pine (*Pinus sylvestris*). The ground flora is species rich.
- 5.0.9 This BHS is connected directly to the survey site by adjacent hedgerows and tree lines. The implications of this will be considered in the subsequent relevant sections of the report including the habitat assessment and the hedgerows assessment.
- 5.0.10 Overall, no direct impacts are considered likely. The development is small in area (0.1ha) and will result in the direct loss of an area of improved grassland only. The nature of the works will result in temporary increase in noise and dust, the latter of which will be controlled and is unlikely to have any significant impact upon surrounding habitat.
- 5.0.11 Indirect impacts as a result of the loss of 5m of hedgerow may occur temporarily, but compensation of the loss of the hedgerow will be made by planting the southern and western boundaries of the wider field, significantly improving the linear structure and connection from east to west between the BHS and the wider area such that the overall impact is likely to be positive.

#### Braddup Woods North

- 5.0.12 Direct and indirect impacts to Braddup Woods North BHS are considered unlikely due to the small footprint of the proposals and the temporary nature of the development works (see above). The enhancements to the site with regard to the hedgerow are likely to only be of benefit to the woodland to the north.

#### Cross Lane Roadside Verges

- 5.0.13 Direct and indirect impacts to Cross Lane Roadside Verges BHS are considered unlikely due to the small footprint of the proposals and the temporary nature of the development works (see above).
- 5.0.14 The loss of 5m of hedgerow is also considered very unlikely to impact the BHS as intrest features, that is, species associated with the Cross Lane Roadside Verges, including green figwort (*Scrophularia umbrosia*), are not present along the hedgerow at the development site.

#### Other Local Wildlife Sites

- 5.0.15 The survey site is considered sufficiently distanced from the other Biological Heritage Sites. Any direct or indirect impacts are unlikely.



#### Non-statutory Site Designations

**Biological Heritage Sites (BHS)** Biological Heritage Sites in Lancashire are identified within the county using a set of published guidelines. Their selection is based on the most important, distinctive and threatened species and habitats within a national, regional and local context. Local Wildlife Sites are locally valuable areas and are often corridors for wildlife forming key components of ecological networks. They are non-statutory designations, but are a material consideration within the planning process.

## 6 Findings: Habitat Survey

### 6.1 Habitat Assessment

#### Data Search

- 6.1.2 The data from LERN do not include any species recorded within the last 10 years that area protected on Schedule 8 of the Wildlife and Countryside Act, 1981. The data do include one species on the Local Biodiversity Action Plan, herb-paris (*Paris quadrifolia*), two species that are nationally scarce; mountain current (*Ribes alpinum*) and welsh poppy (*Meconopsis cambrica*) and three species that are on the list for designated Biological Heritage Sites including herb-paris, green figwort (*Scrophularia umbrosa*) and tutsan (*Hypericum androsaemum*).
- 6.1.3 Herb-paris is a plant of woodland, whilst mountain current can be naturalised on roadsides, but is most associated with limestone woods and rocky hedgerows. Green figwort grows in woodlands and hedgerows in light shade and requires moist soil. Tutsan also favours limestone woodland and hedgerows.
- 6.1.4 None of the above species were recorded within the survey site.

#### Survey Site

- 3.1.1 Refer to the Phase 1 Habitat Plan below.
- 3.1.2 The grassland (TN1) supports species typical of improved pasture including perennial rye grass (*Loium perenne*), cock's-foot grass (*Dactylus glomerata*), white clover (*Trifolium repens*), creeping bent-grass (*Agrostis capillaris*) and meadow buttercup (*Ranunculus acris*).
- 3.1.3 The hedgerow (TN2) along the northern boundary is composed mainly of hawthorn (*Crataegus monogyna*), with elder (*Sambucus nigra*), bramble (*Rubus fruticosus* agg.), holly (*Ilex aquifolium*), alder (*Alnus glutinosa*), rowan (*Sorbus aucuparia*), hazel (*Corylus avellana*) and mature oak (*Quercus* sp.). Herbs and grasses along the base of the hedgerow comprise false oat-grass (*Arrhenatherum elatius*), fescue (*Festuca* sp.), fox glove (*Digitalis purpurea*), greater stitchwort





(*Stellaria holostea*), herb Robert (*Geranium robertianum*), common hogweed (*Heracleum sphodylium*), common nettle (*Urtica dioica*), lesser spearwort (*Ranunculus flammula*), broad-leaved dock (*Rumex obtusifolius*) and male fern (*Dryopteris felix-mas*)

- 3.1.4 The species along the fence line to the south (TN3) include bramble and soft rush (*Juncus effusus*), the latter indicative of the wetter conditions of the ditch, which was dry at the time of survey. There are occasional standard oaks and alder trees.



*The hedgerow identified for removal composed of hawthorn and elder*

- 3.1.5 The fence line to the east is marked with hawthorn, bramble (TN4), soft rush and grasses.

### Appraisal

- 3.1.6 No plant species of conservation interest were recorded during the survey.
- 3.1.7 The improved grassland is composed of common and widespread species.
- 3.1.8 The hedgerow along the northern boundary is a habitat of Principal Importance under the NERC Act, 2006 and is considered species rich. The UK Habitat Action Plan for species rich hedgerows defines them as hedges which contain five or more native woody species in a 30m length, or four or more in northern England. The hedgerow on site supports six woody species (as taken from the Hedgerow Regulations 1997); alder, elder, hawthorn, ash, oak and hazel.
- 3.1.9 Hedgerows are very important in providing corridors of semi-natural and structurally and floristically varied habitat.
- 3.1.10 The Hedgerow Regulations Assessment (see Section 8) indicates that the hedgerow is also an Important Hedgerow under the Hedgerow Regulations, 1997.
- 3.1.11 However, the proposals will result in the loss of 5m of hedgerow, resulting in an approximately 9m gap in the existing hedgerow. Removal of the 5m will not result in the loss of any mature trees.
- 3.1.12 The increase from 5-9m gap is considered unlikely to have a significant impact upon the connectivity because most animal species will be able to manage the gap (some, such as dormice, which may not, are not present in this area).
- 3.1.13 The loss of the 5m will also unlikely result in the loss of any flora of particular note.
- 3.1.14 The proposals provide the opportunity to improve linear habitat connections elsewhere on site (See Figure 5).



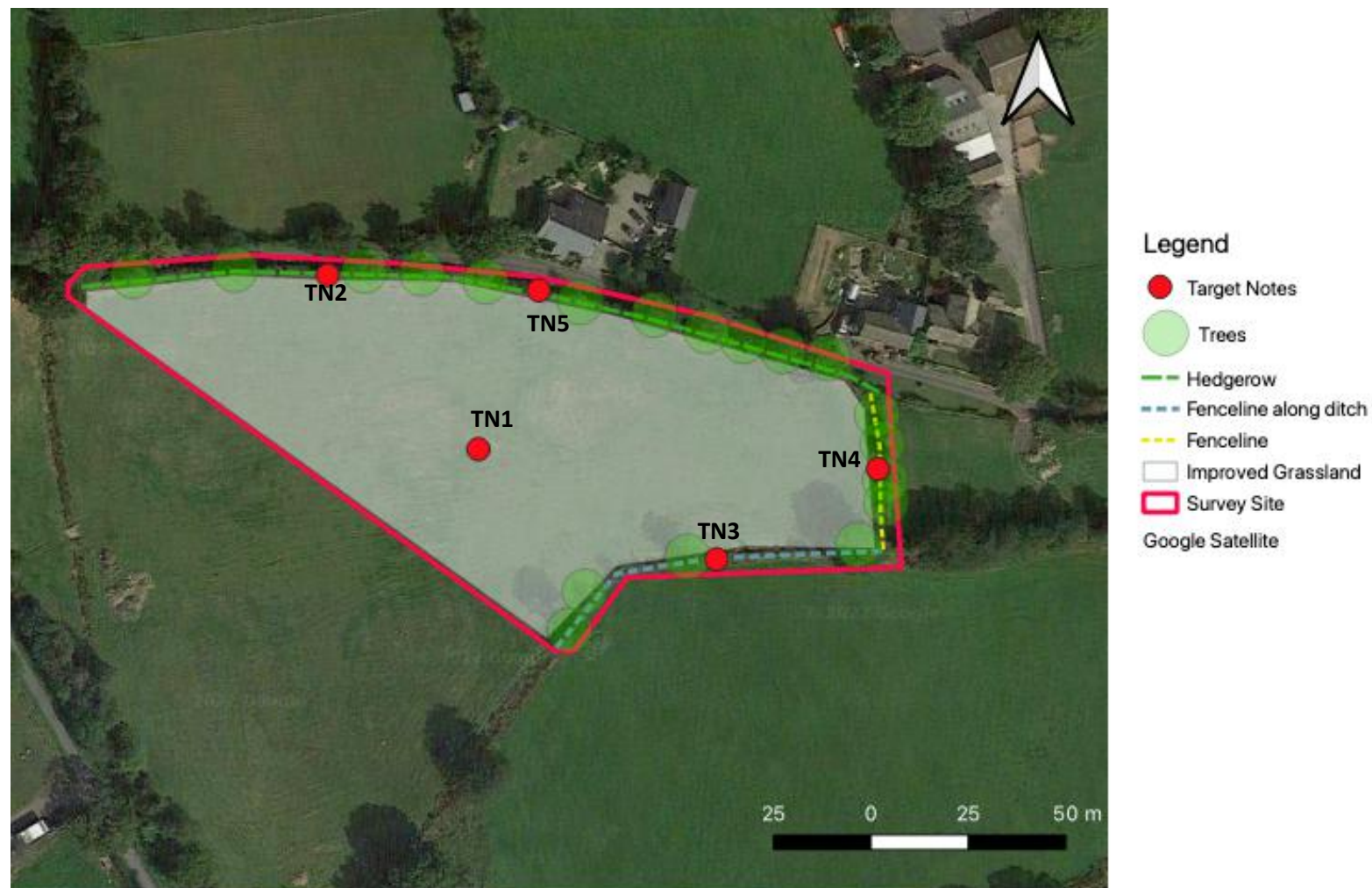
- 3.1.15 Planting of 155m of hedgerow along the southern boundary and reinforcement of 32m of the eastern boundary will create 187m of new hedgerow. The new hedgerow planted will be composed of a variety of species to with an aim to produce a species rich hedgerow over the next 12 years.
- 3.1.16 The above planting and reinforcement will ensure the existing ecological functionality of the linear features are retained and improved.



*The southern boundary identified for hedgerow creation*



Figure 4: Phase 1 Habitat Plan



### Target Notes

TN1 - Improved Grassland

TN2 - Existing Hedgerow

TN3 – Fenceline to the south along a ditch

TN4 – Fenceline to the east

TN5 - Existing entrance



## 7 Findings: Protected Species

### Mammals

#### 7.1 Bats

##### Potential for Bats

- 7.1.1 At a landscape level, the area surrounding the survey site is very good for bats. Refer to Figure 2.
- 7.1.2 Countryside extends in nearly all directions comprising a matrix of pasture land, arable land and woodland divided by tree lines and hedgerows with scattered plots of woodland, waterbodies and streams. The habitat will support a variety of bat species including widespread species such as common and soprano pipistrelle bat (*Pipistrellus pipistrellus* and *Pipistrellus pygmaeus* respectively). Species that favour open habitats such as Leisler's (*Nyctalus leisleri*) and noctule bat (*Nyctalus noctula*) would also be expected. As would species that favour wooded habitat, such as brown long-eared bat (*Plecotus auritus*), Natterer's bat (*Myotis nattereri*), whiskered bat (*Myotis mystacinus*) and Brandt's bat (*Myotis brandtii*).
- 7.1.3 The linear features (hedgerows, tree lines and waterways) provide good habitat links that are likely utilised by commuting bats and will facilitate the movement of bats through the landscape.

##### Data Search

- 7.1.4 Data from LERN include records of a four bat species within 2km of the survey site; common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), natterer's bat (*Myotis nattereri*) and Daubenton's bat (*Myotis daubentoniid*).
- 7.1.5 It is likely that the species richness will be higher than that recorded and that it is lack of survey effort, rather than absence of species that is indicated by the data.
- 7.1.6 There are no records of bat roosts within 500m of the survey site.





### *The Conservation Status of Bats in the Area*

7.1.7 The conservation status of bats in the area is shown in Table 1.

**Table 1:** *The Conservation Status of Bats in the area at a Local, County and Regional Level*

| <b>Species</b>                 | <b>Local</b>  | <b>County</b>  | <b>Regional</b>   |
|--------------------------------|---|--|---|
| <i>Common pipistrelle</i>      | <i>Likely to be common in the area. There are records of this species in the area (10km).</i>                                 | <i>Common and widespread<br/>Frequently recorded.</i>  | <i>Common and widespread<br/>Frequently recorded across the Northwest</i>           |
| <i>Soprano pipistrelle</i>     | <i>Likely to be present due to the presence of riparian habitat.</i>  | <i>Widespread. Frequently recorded.</i>  | <i>Common and widespread<br/>Frequently recorded across the Northwest</i>           |
| <i>Nathusius's pipistrelle</i> | <i>Likely to be rare in the area.</i>   | <i>Infrequently recorded, but this may be due to low survey effort. Not yet recorded breeding in the county.</i> | <i>Rare across the northwest. A migratory species.</i>                              |
| <i>Brown long-eared bat</i>    | <i>Likely to be in the area. There is a recent record of this species within 10km of the site.</i>                            | <i>Common and widespread<br/>Frequently recorded.</i>  | <i>Common and widespread<br/>Frequently recorded across the Northwest.</i>          |
| <i>Natterer's bat</i>          | <i>Likely to be in the area, although this species favours woodland habitat, which is infrequent in the landscape.</i>        | <i>Scattered distribution in the county.</i>   | <i>Widespread and scattered across the Northwest.</i>                               |
| <i>Noctule</i>                 | <i>Present</i>  | <i>Widespread and frequently recorded.</i>   | <i>Common and widespread. Frequently recorded in the Northwest.</i>                 |
| <i>Whiskered bat</i>           | <i>Present but likely rare</i>  | <i>Present</i>   | <i>Widespread.</i>  |
| <i>Brandt's bat</i>            | <i>Rare / absent</i>  | <i>Present</i>   | <i>Widespread.</i>  |
| <i>Alcathoe's bat</i>          | <i>Unknown</i>  | <i>Unknown</i>   | <i>Widespread. Likely under-recorded.</i>   |
| <i>Daubenton's</i>             | <i>Presence is likely due to the riparian habitat present.</i>  | <i>Widespread, frequently recorded near water.</i>   | <i>Widespread</i>   |
| <i>Serotine</i>                | <i>Rare / absent</i>  | <i>Unknown</i>   | <i>Restricted to south and southwest Britain, rarely recorded in the northwest.</i> |
| <i>Leislars</i>                | <i>Rare</i>   | <i>Unknown</i>   | <i>Rare, but widespread in Britain. Present in the northwest.</i>                   |
| <i>Barbastelle</i>             | <i>Unlikely to be present in the area. This species is a woodland-specialist and there is a lack of this habitat present.</i> | <i>Unknown</i>   | <i>Present south of a line from North Wales to the Wash.</i>                        |



### Preliminary Roost Assessment

- 7.1.8 There are no structures on site and no mature trees have been identified for removal.
- 7.1.9 The proposals are very unlikely to have any negative impact upon roosting bats.
- 7.1.10 **However, if works are required to the trees, further investigation of the potential roost features will be necessary. Measures for avoidance of indirect impacts due to lighting and noise are proposed.**

### *Habitat for foraging and commuting bats.*

#### Improved grassland (pasture)

- 7.1.11 The improved grassland on site is likely to provide good foraging habitat for bats as it is grazed by horses and the dung will attract numerous native invertebrates.
- 7.1.12 The loss of a small area of this habitat is considered unlikely to be of significance to foraging bats as pasture to the east and south will be retained.

#### Hedgerow

- 7.1.13 The hedgerow and fenced boundaries of the site are likely to support commuting bats while the horse-grazed pasture is likely to support foraging bats also.
- 7.1.14 The majority of the hedgerow will be retained and so the impact on commuting bats along the northern boundary is likely to be minimal.
- 7.1.15 **Measures to minimise the indirect impact of lighting during the construction and operational phase of the project is proposed.**
- 7.1.16 **The reinforcement and planting of hedgerow along the east and southern boundaries is likely to improve the opportunities for foraging and commuting bats long-term.**



## 7.2 Badger

### Data Search

- 7.2.1 Data from LERN include three records of badger (*Meles meles*) within 2km of the site, but no records within 1km.

### Survey and Assessment

- 7.2.2 The surrounding landscape, comprising pasture and arable land with tree lines and woodland has high potential for badger, which are likely to be present in the area.
- 7.2.3 No evidence of the presence of badger, including latrines, pathways or setts were found on site, nor within adjacent woodland. Evidence around the site boundaries (latrines, pathways or hair in fencing) would be expected if badger were regularly using the site and present in the locality.
- 7.2.4 **The proposals are very unlikely to impact badger or their populations.**
- 7.2.5 However, it is possible that badger may travel through the site from time to time, and it is recommended that a pre-check of the site for evidence of badger is undertaken prior to the commencement of works in case this species moves onto the site.
- 7.2.6 **Measures to be undertaken during work to prevent harm to badgers that may travel through the site are recommended.**

## 7.3 Brown Hare

### Data Search

- 7.3.1 Data from LERN includes records of brown hare (*Lepus europaeus*) within 2km of the survey site with the closest record within 400m

### Survey and Assessment

- 7.3.2 The survey site, comprising grazed grassland does not provide ideal habitat for brown hare, which like tussocky grassland that provides cover.
- 7.3.3 Although hare may well be present in the area, the likelihood that the survey site is important for this species is considered to be very low. Rough grassland further afield is likely to be of more value.
- 7.3.4 **The proposals are considered very unlikely to have any negative impact upon this species and no further survey work for brown hare is considered necessary.**



## 7.4 Hedgehog

### Data Search

- 7.4.1 Data from LERN includes records of hedgehog (*Erinaceus europaeus*) within 2km of the survey site.

### Survey and Assessment

- 7.4.2 Hedgehog are a Species of Principal Importance under the NERC Act, 2006 (also known as UK BAP species).
- 7.4.3 The habitat within and surrounding the survey site, comprising grassland and woodland is ideal for hedgehog, which are likely to be present in the area.
- 7.4.4 **The proposals will result in the loss of a small area of grassland, which is unlikely to have any significant impact upon this species, but precautionary mitigation during works is recommended to reduce the harm to hedgehog to negligible.**

## 7.5 Reptiles

### Data Search

- 7.5.1 The data from LERN do not include any records of reptiles within 2km of the survey site.

### Survey and Assessment

- 7.5.2 The records for reptiles in the northwest are generally low. Reptiles are of very low distribution and found at low density even in ideal habitats such as rough grassland with scrub.
- 7.5.3 The majority of the habitat within the survey site, comprising tightly grazed grassland, is sub-optimal for reptiles, but the surrounding hedgerows and woodland provide opportunity for cover and hibernacula.
- 7.5.4 The grassland is unlikely to provide habitat for a high density of reptiles, but it is possible that these species are present in the site boundaries.
- 7.5.5 **The proposals will result in the loss of a small area of grassland to accommodate the stables and sand school. This is unlikely to be of significance to the viability of reptile populations in the area, but avoidance mitigation to prevent harm to individual animals is recommended.**



## 7.6 Amphibians

### Great crested newt

#### Data Search

- 7.6.1 The data from LERN do not include any records of great crested newts within 2km of the survey site.

#### Survey and Assessment

- 7.6.2 Great crested newt (*Triturus cristatus*), which have the highest protection of all amphibians under UK and EU law, favour still water bodies, such as ponds with good vegetation. They breed in ponds, but spend much of the year terrestrially, within habitat such as rough grassland and woodland, which provides good foraging and hibernacula. Great crested newts are known to travel, usually, within a 250m radius of breeding ponds, but can travel up to 500m.
- 7.6.3 There is one waterbody within 250m of the site, situated 140m to the south. This waterbody is isolated from others within 500m. The closest other waterbodies are situated 425m and 400m to the east, beyond Bashall Brook. The brook is likely to provide a barrier to the movement of great crested newts, which dislike flowing water. Additionally, the waterbody 425m away has been previously surveyed and 'absence' records are present and available on MAGIC map (Defra 2022).
- 7.6.4 The terrestrial habitat within the survey area is sub-optimal for great crested newts which prefer tussocky grassland to heavily grazed pasture, although these amphibians would hunt and commute through the grassland in wet weather.
- 7.6.5 Overall, given the lack of waterbodies within close proximity, the lack of records within 500m of the site, and the low suitability of the habitat, the likelihood of presence of great crested newts is considered to be very low-negligible.
- 7.6.6 However, measures undertaken to avoid harm to reptiles will act favourably for amphibians also, reducing any unlikely negative impact to negligible. No further survey work or specific avoidance mitigation is recommended.

### Common Toad

#### Data Search

- 7.1.1 Data from LERN include records of common toad within the survey site.

#### Survey and Assessment

- 7.1.2 Common toad are a Species of Principal Importance under the NERC Act, 2006 (also known as UK BAP species).
- 7.1.3 The grazed grassland, hedgerows and nearby woodland provide very good habitat for foraging and sheltering toads. Common toad are a mobile species and will regularly travel long distances





to reach breeding ponds. They may travel across the site regularly.

- 7.1.4 **The proposals for the site are not expected to impact upon populations of this species., but precautionary measures are proposed during works to avoid unnecessary harm to individual common toad.**

## 7.2 Nesting Birds

### Data Search

- 7.2.1 Data from LERN includes records of 77 bird species within 2km of the survey site, including six species on Schedule 1 of the Wildlife and Countryside act; barn owl (*Tyto alba*), fieldfare (*Turdus pilaris*), redwing (*Turdus illacus*), brambling (*Fringilla montifringilla*), corncrake (*Crex crex*) and kingfisher (*Alcedo atthis*).
- 7.2.2 These species are unlikely to nest on site either because they are winter visitors as in the case of redwing, brambling and fieldfare, or the habitat is unsuitable, such as for corncrake and kingfisher. Barn owl may nest close to the site and forage over the fields. Similarly redwing, brambling and fieldfare may foraging on the land over winter.
- 7.2.3 Other species previously recorded include species on Section 41 of the NERC Act, 2006, including house sparrow (*Passer domesticus*), tree sparrow (*Passer montanus*), wood warbler (*Phylloscopus sibilatrix*) and tree pipit (*Anthus trivialis*). These species may nest in the shrubs and trees and hedgerow around the site and close to the site.

### Survey and Assessment

- 7.2.4 Six bird species were recorded on site during the survey: dunnock, song thrush (*Turdus philomelos*), chiffchaff (*Phylloscopus collybita*), wood pigeon (*Columba palumbus*) and magpie (*Pica pica*). Song thrush is on Section 41 of the NERC Act (2006) and on the Amber list of Birds of Conservation Concern (BoCC).
- 7.2.5 Birds will nest in the hedgerow, shrubs and trees around the site boundaries in the spring and summer months, this includes species listed on the red and amber list of BoCC. Only a small section of the hedgerow will be directly impacted by the works, however, and this is considered unlikely to be of significance to breeding birds given the high quality of the surrounding habitat.
- 7.2.6 **However, precautionary measures of work must be undertaken during hedgerow removal to avoid harm and disturbance to nesting birds.**
- 7.2.7 The proposals provide the opportunity to enhance the site for nesting birds through the planting or additional hedgerow and installation of bird boxes, including a barn owl box, which is considered likely to be of benefit to the local bird population long-term.
- 7.2.8 The loss of a small area of improved grassland is considered unlikely to be of significance to foraging barn owl, redwing or fieldfare given the high quality and extent of surrounding habitat.



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**\*Birds of Conservation Concern (BoCC):** These lists indicate the population status of birds in the UK, Channel Islands and the Isle of Man.

- BoCC Red list: Includes species globally threatened, a historical population decline in the UK, a severe 9at least 50% decline in the UK breeding population over the last 25 years or long-term period. A severe (at least 50%) contraction of the UK breeding range over the last 25 years or the longer term.
- Amber list: Includes species with unfavourable conservation status in Europe, a historical population decline, moderate (25-50%) decline in the UK breeding population over the last 25 years, moderate (25-50%) contraction in UK breeding or non-breeding range, rare breeders (1-300 breeding pairs in UK), rare non breeders, localised rare breeders or non-breeders, internationally important breeders or non-breeders.

### 7.3 Invertebrates

#### Data Search

- 7.3.1 Data from LERN includes numerous records of butterflies and moths within 2km of the survey site, the majority of which are Species of Principle Importance under the NERC Act, 2006.

#### Survey and Assessment

- 7.3.2 The majority of the survey site, comprising improved grazed grassland has very limited suitability for invertebrates. The boundary hedgerow has potential to support a more diverse array of species, but the majority of the hedgerow will be retained. No invertebrates that are rare and/or protected are expected on site and the proposals resulting in the loss of a small area of improved grassland and 5m of hedgerow are considered unlikely to impact upon populations of invertebrates in the locality.
- 7.3.3 **For this reason, no further survey or mitigation is recommended.**
- 7.3.4 The proposals provide the opportunity to enhance the site for invertebrates thought the planting of additional species rich hedgerow.

### 7.4 Other protected species and habitats.

- 7.4.1 Other protected species, including red squirrel (*Sciurus vulgaris*), water vole (*Arvicola amphibius*) and otter (*Lutra lutra*) are not expected on or near the site as there is no suitable habitat or they are not known present in the locality (red squirrel).



## 8 Hedgerow Regulations Assessment

- 8.0.1 There is one hedgerow on site, along the northern boundary. This hedgerow is approximately 330m in length, calculated as continuous with hedgerow to the east and west.
- 8.0.2 The hedgerow is composed of native species. Hawthorn is dominant, with occasional holly, elder, ash, hazel, oak and bramble.
- 8.0.3 The base of the hedgerow is composed of species including false oat-grass, fescue species, greater stitchwort, herb Robert, common hogweed, common nettle, ivy, male fern and foxglove.
- 8.0.4 There are two access gates within the calculated length that runs from the T junction to the west to the woodland to the east.

### 8.1 Historic and Archaeological Criteria

#### Criteria 1

- 8.1.1 The hedgerow does not mark the boundary, or part-boundary of a historic township or parish.
- 8.1.2 For the purposes of this assessment, 'historic' means existing before 1850. It is not possible to determine presence before this date, and maps from 1882 do not show a distinct hedgerow. For this reason, the hedgerow is not assumed to qualify under Criteria 1.

#### Criteria 2 and 3

- 8.1.3 The hedgerow does not incorporate archaeological features, nor do they appear to be part of any known archaeological features.

#### Criteria 4 and 5

- 8.1.4 The hedgerow does not appear to mark the boundary of any pre-1600AD estate or manor, and are not part of a field system pre-dating the Enclosure Acts, or any other part of a key landscape characteristic. The hedgerow is not clear on maps pre-1850.

**Table 1: Historic Criteria 1-5**

| Criteria | Yes/No |
|----------|--------|
| 1        | No     |
| 2        | No     |
| 3        | No     |
| 4        | No     |
| 5        | No     |



## 8.2 Wildlife and Landscape Criteria

### Criteria 6

- 8.2.1 The hedgerow is unlikely to support species of bird listed on Schedule 1 of the Wildlife and Countryside Act, 1981, although it is likely to support a range of nesting passerine bird species,.
- 8.2.2 No species 'protected' in accordance with the requirements of Criteria 6 were recorded on site at the time of survey, but the hedgerow may support species on the Red and Amber list of Birds of Conservation Concern including house sparrow (*Passer domesticus*) and dunnoek (*Prunella modularis*)
- 8.2.3 For this reason, the hedgerow does qualify as Important under Criteria 6.

### Criteria 7

- 8.2.4 The hedgerow includes 6 woody species within the listed within Schedule 3 of the regulation. However, the hedgerow only supports two of the additional criteria, that gaps do not exceed 10% of the length of the hedgerow and standard trees equate to one every 50m. As no third criteria is met the hedgerow does not qualify as important under Criteria 7.

### Criteria 8

- 8.2.5 The hedgerow does lie adjacent to a road used as a public path, or a byway open to all traffic. The hedgerow contains six woody species. However, the hedgerow does not meet two other criteria to qualify under Criteria 8.

**Table 2: Wildlife and Landscape Criteria 6-8**

| Criteria | Yes/No |
|----------|--------|
| 6        | Yes    |
| 7        | No     |
| 8        | No     |

## 8.3 Conclusion and Recommendations

- 8.3.1 The hedgerow does qualifies as an Important Hedgerow under the Hedgerow Act, 1997 because it may support endangered bird species.
- 8.3.2 As part of the wider environment, the hedgerow retains a level of importance within the site to support resident bird, mammal and invertebrate species and to facilitate the migration, dispersal of wildlife through the area. The hedgerow is a Habitat of Principle Importance under the NERC Act, 2006.



- 8.3.3 The proposals will result in the removal of 5m of existing hedgerow, widening the existing entrance to approximately 9m. However, the proposals will ensure planting of 155m of hedgerow along the southern boundary and reinforcement of 32m of the eastern boundary, creating 187m of hedgerow. The new hedgerow planted will be composed of a variety of species to with an aim to produce a species rich hedgerow over the next 12 years.
- 8.3.4 The above planting and reinforcement will ensure the existing ecological functionality of the hedgerow is retained and over time, improved.

**Figure 5: Proposed Hedgerow Planting**







## 9 Conclusion

- 9.0.1 The land at Kitchens, Bashall Eaves supports improved grassland and hedgerow.
- 9.0.2 The hedgerow along the northern boundary is a habitat of principal importance and qualifies as an important hedgerow under the NERC Act, 2006.
- 9.0.3 The proposals to widen the existing entrance are considered unlikely to impact the existing functionality of the hedgerow given that is already an access drive. There is adequate scope to compensate for the loss of hedgerow through the planting of additional linear habitat features on site. This will ensure connection with the nearby Biological Heritage Site is maintained.
- 9.0.4 Bats are likely to utilise the hedgerow for foraging and commuting and the pasture for foraging.
- 9.0.5 Avoidance mitigation is recommended to minimise the disturbance of foraging and commuting bats as a result of lighting.
- 9.0.6 There is potential for the site to support low numbers of reptile and common toad and suitable avoidance measures are proposed to minimise the risk of harm to these species.
- 9.0.7 There is a risk that badger and otter may cross the site from time to time and that hedgehog is present, and avoidance mitigation to prevent harm to this species is proposed.
- 9.0.8 Birds are likely to nest on site in the spring and summer months and mitigation to avoid disturbance to nesting birds is also proposed. Barn owl have been recorded on site and provision of nesting opportunities for this Schedule 1 species is recommended.



## 10 Recommendations

### 10.1 Hedgerow

10.1.1 The hedgerow along the northern boundary of the site is a Habitat of Principle Importance under the NERC Act, 2006 and an Important Hedgerow, and has intrinsic value to wildlife.

- Removal of the 5m of hedgerow should be undertaken by hand and with care, gradually cutting down the vegetation and taking account of recommendations for nesting birds (see below).
- Measures to protect the retained hedgerow from accidental damage should be implemented during works. It is recommended that heras fencing is used to protect the areas, ensuring the protection includes the root protection zones.

### 10.2 Bats

10.2.1 Bats are likely to forage and commute along the southern and western boundary in the spring and summer months.

10.2.2 In order to minimise the impact of lighting on commuting and foraging bats, the following is recommended:

- Lighting during the construction and operational phase will be directed to avoid the hedgerow and site boundaries which will be planted with new hedgerow.
- Baffles will be used to avoid spillage of light into the sky and into areas toward the site boundaries.
- Lighting installed during the operational phase will be High or Low Pressure Sodium or LED. These forms of lighting have a lower UV output, which reduces the attraction of insects. Outside lighting should be on a timer to minimise light pollution.

### 10.3 Badger

10.3.1 Badger are likely to be present within the locality and must be considered during works.

10.3.2 It is therefore recommended that during works:

- Large holes or ditches should be covered overnight to prevent mammals falling into them. If this is not possible, then a plank or similar should be left in the hole to allow badgers and other wildlife to climb out.



## 10.4 Reptiles and Amphibians

10.4.1 There is potential for reptiles to be present in the surrounding area. In order to reduce the risk of harm to individual reptiles and amphibians during works, the following is recommended:

- Materials on site are stored on pallets to prevent reptiles and amphibians hiding in them.
- No machinery or materials are stored within 5m of the boundaries.
- Care should be taken when clearing vegetation. If any wildlife is found, for example common toad, they can be moved to a safe place away from the area of works where there is vegetative cover.

## 10.5 Hedgehog

10.5.1 There is potential for hedgehog to be present on site upon occasion. In order to reduce the risk of harm to these species during works, the following is recommended:

- Any works to remove vegetation is undertaken by hand with care, whilst checking for wildlife. This is especially important around the site boundaries and when vegetation within the hedgerow is removed for access.
- If hedgehog are found during works, they can be picked up and moved to a safe place away from the area of works where there is vegetative cover.

## 10.6 Nesting Birds

10.6.1 Birds may nest in the trees and shrubs on site in the spring and summer months. In order to prevent disturbance and/or harm to nesting birds, if vegetation works are necessary, it is recommended that:

- Any vegetation works (these are expected to be restricted to the hedgerow) are undertaken in the winter months (October – February).
- If heavy machinery is required on site in the bird breeding season (breeding season: March – September), this must be stored as far away from boundary trees and shrubs as possible, to minimise the risk of disturbance.
- If this is not possible, a suitably qualified ecologist should check the vegetation on site to determine the presence / absence of nesting birds prior to the start of any works.
- If birds are found actively nesting on site, the nest and surrounding vegetation (5m) must be left undisturbed until the young have fledged.



## 10.7 Biodiversity and Enhancement

10.7.1 The existing biodiversity and ecological functionality of the site for wildlife will be retained and significantly enhanced as part of the proposals.

### Hedgerow

10.7.2 The benefits of retaining, enhancing and planting hedgerows across the site include:

- Their function as a barrier.
- Acting as a screen and acting as a filter for noise and air pollution.
- Providing valuable habitat for wildlife and connectivity between different areas. Native species producing berries will provide dense protective cover and food sources for passerine birds.
- Improving wellbeing by providing structural green space.

10.7.3 In order to maintain and improve this functionality:

- 5m of the hedgerow along the northern boundary will be removed; the majority will be maintained. Supplementary planting to the existing shrubs along the eastern boundary will take place and a hedgerow will be planted along the southern boundary as depicted in Figure 5 creating 187m of new hedgerow. Planting should comprise native species of local provenance including predominantly hawthorn (*Crataegus monogyna*) (70%), elder (*Sambucus nigra*), hazel (*Corylus avellana*), small-leaved lime (*Tilia cordata*), rowan (*Prunus aucuparia*), guelder rose (*Viburnum opulus*), holly (*Ilex aquifolium*) and honeysuckle (*Lonicera periclymenum*) to meet criteria for a species rich hedgerow.

### Breeding Birds and Roosting Bats

10.7.4 In addition to creation of habitats, additional enhancement for nesting birds and roosting bats can be achieved through provision of bird nest boxes and bat boxes.

#### Provision of Bird and Bat Boxes

10.7.5 Bird and bat boxes will increase the capacity of the site to support these species groups.

10.10.10 Schwegler bat boxes 1FF could be installed on boundary trees, or Bark boxes would be also appropriate to install on a couple of the mature trees on the northern and southern boundary. These could be a mixture of three types shown below (available from Bark Boxes [www.barkboxes.co.uk](http://www.barkboxes.co.uk)).



Schwegler 1FF bat box



10.10.11 Alternatively, bat boxes could be attached to or integrated into new buildings, for example the Ibstock Enclosed Bat Box 'C' or the Habibat Bat Box for rendering.

10.10.12 The bat boxes should be installed as high on the new structure and can be positioned at any orientation except for north.

10.10.13 Note that these are recommendations only, there are numerous options for integrated or external bird and bat boxes available at NHBS.com.

10.10.14 Single Schwegler bird boxes 1MR could be installed on mature trees or on structures in the site. Ideally the bird boxes will be at 3-4m and below the bat boxes. Installing bird and bat boxes on the same trees minimises the risk of competition. The bird boxes should be placed on the east or west side of the trees.



*Ibstock Enclosed Bat Box 'C'*



*Schwegler 1MR Bird Nest Box*



*Habibat Bat Box*



*Tree sparrow/pied fly catcher bird bark box*



*Large twin crevice bark bat box*



*Kent type twin crevice bark bat*





- 10.10.17 Given that barn owl are known to be present in the area, it would be of benefit if a barn owl box were included in the scheme. These can be installed on poles such as telegraph poles at the site boundaries close to trees, but with flight access.



*Barn owl box*



*Barn owl box installed on telegraph pole*

#### Barn Owl Box Specification

- 10.10.18 Barn owl boxes can be purchased or constructed by hand. The boxes should be erected on poles within a minimum diameter of 150mm (for example telegraph poles) at a height of approximately 4.5m and NOT less than 4m above ground.
- 10.10.19 The nest boxes must have a floor area of at least 600mm x 600mm. The entrance hole must be 100mm x 130mm and the depth of the internal floor to the entrance hole not less than 540mm. The external platform should be at least 0.125m<sup>2</sup>.
- 10.10.20 Wood used should be softwood ply and FSC approved. The top of the box should be covered with heavy duty roofing felt and all joints of the roof and box sealed to prevent water ingress.



## 11 References

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## • APPENDIX A: Wildlife Legislation and Planning Policy

### 1.0 UK AND EU LEGISLATION

#### KEY LEGISLATION

- In the UK, the following legislation relates to wildlife and habitats:
- Wildlife and Countryside Act 1981 (as amended)
  - The Countryside and Rights of Way Act (CROW), 2000
  - The Badger Act 1992
  - The Natural Environment and Rural Communities Act (NERC, 2006)
  - Conservation of Habitats and Species Regulations 2017 (as amended).
  - The Hedgerow Regulations (1997)

#### 1.1 WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

- 1.1.1 The Wildlife and Countryside Act 1981 consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain (NB Council Directive 79/409/EEC has now been replaced by Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version)).

##### BIRDS

- 1.1.2 The Act makes it an offence (with exception to species listed in Schedule 2) 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 (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006), or
- take or destroy an egg of any wild bird.

##### Schedule 1 birds

- 1.1.3 Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young, for example Barn Owl and Red Kite.

##### Areas of Special Protection for Birds

- 1.1.4 The Secretary of State may also designate Areas of Special Protection (subject to exceptions) to provide further protection to birds.

##### Other offences

- 1.1.5 The Act also prohibits certain methods of killing, injuring, or taking birds, restricts the sale and possession of captive bred birds, and sets standards for keeping birds in captivity.

#### OTHER ANIMALS

- 1.1.6 The Act makes it an offence (subject to exceptions) to intentionally ([or recklessly] - only under the Nature Conservation (Scotland) Act 2004) kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring, or taking wild animals.

- 1.1.7 For animals listed in Schedule 5 of the act, it is an offence under:

- Section 9(1) to kill, injure or take the animal by any method
- Section 9(2) to possess or control a dead or live animal (or part or derivative).
- Section 9(4)(a) to cause damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection.
- Section 9(4)(b) to disturb any animal on the schedule occupying such as structure or place.
- Section 9(4)(c) to obstruct access to any structure or place which any such animal uses for shelter or protection.
- Section 9(5)(a) to sell, offer or expose for sale, possess or transport for the purpose of sale, any live or dead wild animal, or part or derivative of an animal included in Schedule 5.
- Section 9(5)(b) to publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.



Species that receive FULL PROTECTION under the act:

- All UK bats
- Otter
- Water vole
- Dormouse
- Red squirrel
- Wildcat
- Reptiles – Smooth snake and sand lizard
- Amphibians – Great crested newt, Natterjack toad, Pool frog
- Invertebrates – some including, but not restricted to Swallowtail butterfly, Marsh fritillary butterfly, Large copper butterfly, Heath fritillary butterfly, Large blue butterfly, Barberry carpet moth, Rainbow leaf beetle, Violet click beetle, Medicinal leech.

Species that protected from intentional KILLING, INJURY and SALE only:

- Reptiles – widespread species; Common lizard, Slow-worm, Grass snake and Adder.

Species protected from TAKING and SALE only:

- Atlantic stream (white-clawed) crayfish

Species protected from SALE only:

- Common toad
- Common frog
- Palmate newt
- Smooth newt
- Invertebrates – Some including 18 butterflies such as Chalk hill blue butterfly, Adonis blue butterfly, Large tortoiseshell butterfly.

Vascular Plants, Bryophytes, Lichens and Fungi (PLANTS)

1.1.8 For any vascular plant, bryophyte, lichen or fungi listed in Schedule 8 of the Act, it makes it an offence under:

- Section 13(1)(a) to Intentionally pick, uproot or destroy plants in Schedule 8.
- Section 13(1)(b) to undertake unauthorised intentional uprooting of any wild plant not included in Schedule 8.
- Section 13(2)(a) to sell, offer for sale, possess or transport for the purpose of sale any plant (live or dead, part or derivatives) on Schedule 8.
- Section 13(2)(b) to publish or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

1.1.9 Species with protection under Schedule 8 include, but are not restricted to:

1.1.10 Bluebell, Wood calamint, Rock cinquefoil, Early spider orchid, Spring gentian, Stinking goosefoot, Small hare's-ear, Alpine copper moss (*Mielichhoferia mielichoferi*), Goblin lights lichen (*Catolechia wahlenbergii*).

Non-Native Species

1.1.11 Species listed in Schedule 9 of the Act are non-native species, which the establishment of in the wild may be detrimental to native wildlife. Species listed in Schedule 9 include Japanese knotweed, Himalayan Balsam and Giant hogweed.

1.1.12 For species listed in Schedule 9 of the act it is an offence:

- Under Section 14(1) if any person releases or allows to escape into the wild any animal which—

(a) is of a kind which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state; or

(b) is included in Part I of Schedule 9,

- Under Section 14ZA (1) to sell, offers or exposes for sale, or has in his possession or transports for the purposes of sale an animal or plant to which this section 14 applies, or anything from which such an animal or plant can be reproduced or propagated.
- Under Section 14ZA (2) to publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell an animal or plant to which this section applies, or anything from which such an animal or plant can be reproduced or propagated.



1.1.13 Section 14ZB gives the Secretary of State the power to issue codes of practice, or approve a code of practice issued by others, relating to non-native animal and plant species. It is intended that the codes will be used to provide recommendations, advice and information on how to stop the damage caused by non-native animals and plants.

## 1.2 SITES OF SPECIAL SCIENTIFIC INTEREST (SSSIs) AND OTHER PROTECTED AREAS

1.2.1 Sections 28 to 33 of Part 2 of the Wildlife and Countryside Act detail the law regarding SSSIs. Sections 34 to 53 deal with other protected areas within Great Britain.

- The Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) – these sites are identified for their flora, fauna, geological or physiographical features – by the country conservation bodies in England (Natural England) and Wales (Natural Resources Wales).
- The Act also contains measures for the protection and management of SSSIs.
- The Act provides for the making of Limestone Pavement Orders, which prohibit the disturbance and removal of limestone from such designated areas
- The Act provides means for the designation of Marine Nature Reserves.
- The Act prohibits the undertaking of agricultural or forestry operations on land within National Parks which has been either moor or heath for 20 years, without consent from the relevant planning authority.

## 1.3 THE COUNTRYSIDE AND RIGHTS OF WAY (CROW) ACT 2000

1.3.1 The Countryside and Rights of Way Act 2000 strengthened the Wildlife and Countryside Act 1981 in the following ways:

### Schedule 12

1.3.2 Schedule 12 of the Act amends the species provisions of the Wildlife and Countryside Act 1981 and strengthens the legal protection of species by:

- Providing provisions to make certain offences 'arrestable'
- Changing the term 'intentional' to 'reckless' with regard to disturbance offences, such that ignorance of the law is no longer a defence.
- Conferring greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and;
- Enabling heavier penalties on conviction of wildlife offences.

### Schedule 9

1.3.3 Schedule 9 of the Act amends SSSI provisions of the Wildlife and Countryside Act 1981, including provision to change SSSIs and providing increased powers for their protection and management, placement of a duty on public bodies to further the conservation and enhancement of SSSIs and increases in penalties on convictions where the provisions are breached.

## 1.4 THE BADGER ACT 1992

1.4.1 Under the Badger Act 1992, it is an offence to:

- Section 1 – Take, injure or kill a badger, or attempt to do so
- Section 2 – Cruelly ill-treat a badger, inclusive of digging for a badger
- Section 3 – Interfere with a badger sett. A person is guilty of an offence if, except as permitted by or under this Act, he interferes with a badger sett by doing any of the following things—
  - (a)damaging a badger sett or any part of it;
  - (b)destroying a badger sett;
  - (c)obstructing access to, or any entrance of, a badger sett;
  - (d)causing a dog to enter a badger sett; or
  - (e)disturbing a badger when it is occupying a badger sett,
- Section 4 – To sell or possess a live badger.
- Section 5 – To mark or ring a badger unless under licence to do so.

## 1.5 THE HEDGEROWS REGULATIONS, 1997



1.5.1 The Hedgerows Regulations, 1997 ensure the protection from damage or destruction of 'important' hedgerows. Criteria within the regulations determine the importance.

#### 1.6 THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017 (as amended)

1.6.1 In addition to the Wildlife and Countryside Act 1984, certain species have additional protection under European Law.

1.6.2 The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regs) consolidate the amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in England and Wales. The Regulations transpose the Council Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora (EC Habitats Directive) into UK law.

1.6.3 The Habitats Regulations 2010 provide protection for 'European Protected Species' and protection and designation for 'European Protected Sites'.

##### Schedule 2: European Protected Species of Animals

- All UK bats
- Dormice
- Otter
- Large blue butterfly
- Wild cat
- Sand lizard
- Smooth snake
- Great crested newt
- Natterjack toad
- Fishers estuarine moth
- Lesser whirlpool ram's horn snail
- Sturgeon
- Marine turtles
- All dolphins, porpoises and whales.

1.6.4 For species listed in Schedule 2, Under Part 3 Regulation 41(1) it is an offence to

- (a) deliberately capture, injure or kill any wild animal of a European protected species,
- (b) deliberately disturb a wild animal of any such species,
- (c) deliberately take or destroy the eggs of such an animal, or
- (d) damage or destroy a breeding site or resting place of such an animal,

1.6.5 Under Part 3 Regulation 41 (2) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—

- (a) to impair their ability—
  - (i) to survive, to breed or reproduce, or to rear or nurture their young, or
  - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- (b) to affect significantly the local distribution or abundance of the species to which they belong.

Under Part 3 Regulation 41.(3) It is an offence for any person—

- (a) to be in possession of, or to control,
- (b) to transport,
- (c) to sell or exchange, or
- (d) to offer for sale or exchange any animal in Schedule 2.

##### Schedule 5: European Protected Species of Plants

- Shore dock
- Killarney Fern
- Early Gentian
- Lady's-slipper
- Creeping marshwort
- Slender naiad
- Fen orchid
- Floating-leaved water plantain
- Yellow-marsh saxifrage.

1.6.6 For species listed in Schedule 2, Under Part 3 Regulation 45(1) It is an offence deliberately to pick, collect, cut, uproot or destroy a wild plant of a European protected species.

1.6.7 Under Part 3 Regulation 45(1) (2) It is an offence for any person

- (a) to be in possession of, or to control,





- (b) to transport,
- (c) to sell or exchange, or
- (d) to offer for sale or exchange any plant in Schedule 5

#### European Designated Sites

1.6.8 These include:

- Special Protection Areas – SPAs are classified in accordance with Article 4 of the EC Birds Directive for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species
- Special Areas of Conservation – SACs are classified in accordance with Article 3 of the EC Habitats Directive. SACs are designated to establish a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended).

1.6.9 Natura 2000 is the name of the European Union-wide network of nature conservation sites established under the EC Habitats and Birds Directives. This network will comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Marine Natura 2000 sites contribute to our ecologically coherent network of marine protected areas.

### 1.7 NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

#### Planning Authorities: A Duty to Conserve Biodiversity

1.7.1 Under this legislation, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site *before* they make a decision on the planning permission.

1.7.2 Part 2, Section 40 confers on the planning authorities a duty to conserve biodiversity and states:

*"Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of biodiversity"*

#### Species of Principal Importance

1.7.3 Part 3, Section 41 requires the Secretary of State to "publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of **principal importance** for the purpose of conserving biodiversity".

1.7.4 This requirement lead to production of a list of species and habitats of Principal Importance, which should be a material consideration during the planning process.

### 1.8 DESIGNATED SITES OF CONSERVATION INTEREST

1.8.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.

#### Statutory Sites

1.8.2 Statutory sites can be designated under UK legislation (the Wildlife and Countryside Act 1981), European Law (the Habitats Regulations 2010) or International law (Ramsar Convention).

1.8.3 The designated sites are referred to under the relevant legislation above.

1.8.4 UK designated sites include Sites of Special Scientific Interest (SSSIs).

1.8.5 European designated sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

1.8.6 Ramsar sites are wetlands of international importance designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971.

1.8.7 Local Nature Reserves (LNRs): Under the National Parks and Access to the Countryside Act 1949 LNRs may be declared by local authorities after consultation with the relevant statutory nature conservation agency. LNRs are declared and managed for nature conservation, and provide opportunities for research and education, or simply enjoying and having contact with nature.

1.8.8 National Nature Reserves (NNRs): are declared by the statutory country conservation agencies under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981.

#### Non-Statutory Sites

1.8.9 Local authorities for any given area may designate certain areas as being of local conservation interest. The criteria for inclusion, and the level of protection provided, if any, may vary between areas. Most individual counties have a similar scheme, although they do vary.



- 1.8.10 These sites, which may be given various titles such as 'Listed Wildlife Sites' (LWS), 'Local Nature Conservation Sites' (LNCS), 'Sites of Importance for Nature Conservation' (SINCs), 'Biological Heritage Sites' (BHS) or 'Sites of Nature Conservation Importance' (SNCIs), together with statutory designations, are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined.

## 2.0 Plans and Policies

In the UK, the following plans and policies relate to wildlife and habitats:

- o National Planning Policy Framework (NPPF, 2021)
- o The Natural Environment White Paper 'The Natural Choice: Securing the Value of Nature'
- o Biodiversity – The UK Action Plan (1994, and subsequent revisions)
- o Local Biodiversity Action Plans where applicable
- o Neighbourhood plans where applicable

### NATIONAL PLANNING POLICY FRAMEWORK

- 2.1.1 In March 2012 the Government introduced the National Planning Policy Framework (NPPF). This was revised in 2021

#### Chapter 15: Conserving and Enhancing the Natural Environment

Chapter 15, Para 174 of NPPF states: "The planning system should contribute to and enhance the natural and local environment by:

- b) **protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils....**
- e) **minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures".**

Para 175 states: "Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."

Para 179 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

- c) **"Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and**
- d) **Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."**

Para 180 states that "when determining planning applications, local authorities should apply the following principles:

- b) **if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"**
- c) **Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;**
- d) **Development result in the loss of deterioration of irreplaceable habitats (such as ancient woodland or ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensatory strategy exists; and**
- e) **Development whos primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.**

Para 182 states "the presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined."

## 2.2 ODPM CIRCULAR 06/2005: BIODIVERSITY AND GEOLOGICAL CONSERVATION

- 2.2.1 This document, to be read in conjunction with NPPF provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It makes it clear that it is the intention of the government that local authorities and developers consider protected species at the earliest possible stage in the planning process. Any planning application that is likely to



affect protected species should come with details of the surveys which have been undertaken and should include, if necessary, recommendations for mitigation. Applications which do not include sufficient data should be rejected.

## 2.3 The Natural Environment White paper

- 2.3.1 The Natural Environment White Paper 'The Natural Choice: Securing the Value of Nature' states that 'We want to create a resilient and coherent ecological network at national and local levels across England... To make this happen the government will put in place a clear institutional framework to support nature restoration. This means: establishing Local Nature Partnerships... Creating new Nature Improvement Areas (NIAs) and strengthening support through the planning system.'

### Biodiversity Offsetting

- 2.3.2 Biodiversity offsetting is described in the Natural Environment White Paper as 'conservation activities designed to deliver biodiversity benefits in compensation for losses in a measurable way. Good developments incorporate biodiversity considerations in their design but are still likely to result in some biodiversity loss. One way to compensate for this loss is by offsetting: the developer secures compensatory habitats elsewhere.'
- 2.3.3 The level of biodiversity offsetting required could be determined by means of assessments undertaken in accordance with the Department for Environment, Food and Rural Affairs (DEFRA) metric contained in Biodiversity Offsetting Pilots published in March 2012 as applied in the Defra offsetting pilot projects. Biodiversity offsetting could be delivered by developers in partnership with various partners including conservation organisations, local landowners and the borough council.

## 2.4 Biodiversity Action Plan (Local or UK)

### UK Biodiversity Action Plan

- 2.4.1 Biodiversity: The UK Action Plan outlines how the UK plans to address biodiversity conservation in response to the Rio Convention on Biological Diversity (1992). In 2004 a UK Biodiversity Steering Group was formed and discussions resulted in the publication of 'Biodiversity: the UK Steering Group Report – meeting the Rio challenge', which established a framework and criteria for identifying species and habitats of conservation concern. From this list, action plans for 391 species and 45 broad habitat types were prepared. In 2007, the UK List of Priority Species and Habitats was reviewed and the revised list identifies 1149 species and 65 habitats requiring conservation action.
- 2.4.2 These species are now listed in Section 41 of the NERC Act, 2006 and referred to as Habitats and Species of Principal Importance (HPI or SPI).
- 2.4.3 Outcome 3 of the Government's Biodiversity 2020 strategy (DEFRA, 2011) contains an ambition to ensure that "By 2020, we will see an overall improvement in the status of our wildlife and will have prevented further human-induced extinctions of known threatened species". Protecting and enhancing England's Species and Habitats of Principal Importance is key to delivering this outcome.

### Local Biodiversity Action Plans

- 2.4.4 Local Biodiversity Action Plans (LBAPs) are a means for delivering UK Biodiversity Action Plan targets at a local level. LBAPs were launched in 1997 by a partnership of conservation groups, government agencies and local authorities. They set out a framework for nature conservation in the specified area. This framework includes priority species and habitats and sets targets to maintain and enhance their conservation status.

## 2.5 Other Species Lists of Species of Conservation Concern

- 2.5.1 Species lists of Species of Conservation Concern also considered within this assessment are as follows:



- Birds of Conservation Concern: Based on an assessment of the conservation status of British birds. Following an assessment of data on population and trends against established criteria, there are red, amber and green lists of BoCC. The latest review was BOCC 4 (Eaton et al, 2015)

Red Data Book Species: In 1999 the Species Status Assessment project (JNCC) assigned conservation status to the UK flora and fauna using the internationally approved IUCN Red Data Book criteria and categories. The reviews were published in a series of data sheets and assigned a conservation status to each species.



## • Appendix B: Criteria Hedgerow Regulations Assessment

The criteria area as detailed in Appendix 1 of the Habitats Regulations 1997:

### Archaeology and History

**1:** The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township; and for this purpose 'historic' means existing before 1850.

**2:** The hedgerow incorporates an archaeological feature, which is:

- a) included in the schedule of monuments compiled by the Secretary of State under Section 1 (schedule of monuments) of the Ancient Monuments and Archaeological Areas Act 1979; or b) recorded at the relevant date in a Sites and Monuments Record.

**3:** The hedgerow:

- a) is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and
- b) is associated with any monument or feature on that site.

**4:** The hedgerow:

- a) marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a Sites and Monuments Record or in a document held at that date at a Record Office; or
- b) is visibly related to any building or feature or such an estate or manor.

**5:** The hedgerow:

- a) is recorded in a document held at the relevant date at a Record Office and an integral part of a field system pre-dating the Enclosure Acts; or
- b) is part of, or visibly related to, any building or other feature associated with such a system, and that system:
  - i) is substantially complete; or
  - ii) is a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Town and Country Planning Act, for the purposes of development control within the authority's area, as a key landscape characteristic.

### Wildlife and Landscape

**6:** The hedgerow:

- a) contains species:
  - i) listed in Part I (protection at all times) of Schedule 1 (birds which are protected by special penalties), Schedule 5 (animals which are protected) or Schedule 8 (plants which are protected) to the Wildlife and Countryside Act 1981; or



- ii) categorised as a declining breeder (category 3) in 'Red Data Birds in Britain' Batter LA, Bibby CJ, Clemet P, Elliot GD and Porter RF(Eds.), published in 1990 for the Nature Conservancy Council and the Royal Society for the Protection of Birds (ISBN 0 85661 0569); or
- iii) categorised as 'endangered', 'extinct', 'rare' or 'vulnerable' in Britain in a document mentioned either in:  
The British Red Data Books on Vascular Plants, Insects, Invertebrates other than insects, and Stoneworts.

**7 (part):** The hedgerow includes:

- a) at least 7 woody species listed in Schedule 3 to the Regulations; or
- b) at least 6 woody species, and have associated with it at least 3 of the features specified:
  - a bank or wall which supports the hedgerow along at least one half of its length;
  - gaps which in aggregate do not exceed 10% of the length of the hedgerow
  - where the length of the hedgerow does not exceed 50m at least one standard tree (diameter at least 20cm and 1.3m height)
  - where the length of the hedgerow exceeds 50m, but does not exceed 100m, at least 2 standard trees;
  - where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount to at least one for each 50m
  - at least 3 ground flora woodland species (Schedule 2 list) within 1meter
  - a ditch along at least one half of the length of the hedgerow.
  - Connections scoring 4 or more points, where a connection to another hedgerow counts and one, and where a connection to a woodland, in which the majority of the trees are broadleaved trees, or a pond counts as two
  - A parallel hedge within 15m
- c) at least 6 woody species, including either a black-poplar tree, a large-leaved lime, a small-leaved lime or a wild service-tree; or
- d) at least 5 woody species, and has associated with it at least four of the features specified above.

**8 (part):** The hedgerow:

- a) is adjacent to a bridleway or footpath, a road used as a public path, or a byway open to all traffic; and
- b) includes at least 4 woody species and has associated with it at least 2 of the features specified below:
  - a bank or wall which supports the hedgerow along at least one half of its length;
  - gaps which in aggregate do not exceed 10% of the length of the hedgerow
  - where the length of the hedgerow does not exceed 50m at least one standard tree (diameter at least 20cm and 1.3m height)
  - where the length of the hedgerow exceeds 50m, but does not exceed 100m, at least 2 standard trees;
  - where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount to at least one for each 50m
  - at least 3 ground flora woodland species (Schedule 2 list) within 1meter
  - a ditch along at least one half of the length of the hedgerow.

**Woody Species listed in Schedule 3 of the Hedgerow Regulations**

Alder, crab apple, ash, aspen, beech, downy birch, silver birch, black-poplar, blackthorn, box, broom, buckthorn, alder buckthorn, butcher's broom, bird cherry, wild cherry, wild cotoneaster, downy currant, mountain currant, dogwood, elder, elm, gooseberry, gorse, dwarf gorse, western gorse, guelder rose, hawthorn, midland hawthorn, hazel, holly, hornbeam, common juniper, large-leaved





lime, small-leaved lime, field maple, mezereon, pedunculate oak, sessile oak, osier, Plymouth pear, wild pear, grey poplar, white poplar, wild privet, rose, rowan, sea-buckthorn, wild service-tree, spindle, spurge-laurel, walnut, wayfaring-tree, whitebeam, willow, yew.

#### **Woodland plant species listed in Schedule 2 of the Hedgerow Regulations**

Barren strawberry, bluebell, broad buckler fern, broad-leaved helleborine, bugle, common cow-wheat, common dog violet, common polypody, dog's mercury, early dog violet, early purple orchid, enchanter's nightshade, giant fescue, goldilocks buttercup, great bell-flower, greater wood-rush, hairy brome, hairy woodrush, hard fern, hard shield fern, hart's tongue, heath bedstraw, herb paris, herb-robert, lady fern, lords-and-ladies, male fern, moschatel, narrow buckler-fern, nettle-leaved bell-flower, oxslip, pignut, primrose, ramsons, sanicle, scaly male-fern, small cow-wheat, soft shield fern, sweet violet, toothwort, tormentil, wild strawberry, wood anemone, wood avens/herb bennet, wood false-brome, wood horsetail, wood meadow-grass, wood melick, wood millet, wood sage, wood sedge, wood sorrel, wood speedwell, wood spurge, woodruff, yellow archangel, yellow pimpernel.