



# Preliminary Ecological Appraisal

Proposed dwelling, Higher Road, Longridge, Preston, Lancashire, PR3 2YX

## 2024 Updated Report

### Guidelines

This assessment has been designed to meet:

- Chartered Institute of Ecology and Environmental Management 'Guidelines for Preliminary Ecological Appraisal' (2013);
- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and Development'.
- The Bat Conservation Trust publication *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, J. (Ed) 2023).

### Proportionality

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

This approach is enshrined in Government planning guidance, for example, paragraph 193 of the National Planning Policy Framework for England.

This report is considered proportionate to the scale of development and communicates all relevant information necessary to determine a planning application or support the recommendations for further surveys.

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Client:           Graham Love  
                      Smith & Love Planning Consultants

Report Date: 15.01.2025

## Summary

Carol Edmondson MSc MRSB, undertook a Preliminary Ecological Assessment Survey at the proposed site on 04/06/2021, and further site visit on 20<sup>th</sup> June 2024. The aim of the assessment was to complete an extended Phase 1 Habitat Survey of the survey area (all land that will be impacted by the proposals) and to consider the value and suitability of the land and any structures to be affected by the development for protected wildlife species, including identifying any potential for roosting bats.

The site walkover conducted on 20<sup>th</sup> June 2024, found no change to the status of the site, and therefore this report should be considered as a current & true reflection of the site condition.

**Recommendations - This is work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent.**

Ecological Factor	Recommendations
Designated sites	The site is located within the Forest of Bowland National Landscape. National Landscapes (NL) are designated areas where protection is afforded to protect and manage the areas for visitors and local residents. The proposal will need to satisfy all NL restrictions and requirements for development.
Notable habitats and plants	Any topsoil disturbed should be seeded with a suitable native species seed mix to match the species currently present on site and in the local area.
Bats	No further surveys
Birds	Any tree and scrub removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building/trees and scrub to be removed should be undertaken immediately prior to clearance. All active nests will need to be retained until the young have fledged.
Reptiles	Due to the small area of suitable habitat on site and to minimise the risk of killing or injuring herpetofauna, site clearance works will be carried out under a precautionary method of working. The development area should be kept largely clear of vegetation in order to make it unattractive to herpetofauna. This clearance should be to ground level and be carried out in two stages, the latest stage undertaken at least 2 days prior to topsoil removal or other works to allow any reptiles present to move away. The first cut should be at about 15cm from the ground and the second (between 1 and 3 days later) close to the ground, thereby preventing injury to herpetofauna species during clearance. The vegetation should then be maintained at a very short level (less than 5 cm) even if there are delays in development. Likewise, compost heaps or vegetation, log or rubble piles should be moved by hand prior to commencement of any work. A buffer around the boundaries and herpetofauna fencing to ensure any herpetofauna are restricted from accessing the site during development is recommended.
Amphibians	A precautionary method of working is considered adequate to reduce the small risk of harm or injury to Great Crested Newts (GCN) during development, all clearance of scrub will take place when the GCN are found in their aquatic habitat and not in terrestrial habitat (core breeding season: March-May inclusive). In addition to altering the timing of the works to

	<p>reduce the low risk of harm to GCN, the scrub clearance will be supervised by a licensed ecologist. This will include the clearing of any log piles and refugia that may be used by amphibians and the checking of vegetation for active bird's nests. In addition, all trenches will be backfilled before nightfall, or a ramp will be left to allow newts to easily exit. Any stored materials (that might act as temporary resting places) will be raised off the ground, e.g. on pallets.</p> <p>If a GCN is found during the development all work must immediately cease and a licensed ecologist must be sought.</p>
<p>Other Terrestrial Mammals</p>	<p><b>Badgers</b></p> <p>No further surveys are required.</p> <p>However, the following recommendations are given in order to mitigate against potential harm to badgers during the development works.</p> <p>Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in.</p> <p>Security lighting to be directed away from the undergrowth.</p> <p>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</p> <p><b>Hedgehog</b></p> <p>No further surveys.</p> <p>Vegetation should be thoroughly checked before removal. Should a hedgehog be found, that area of vegetation must be left. If a hedgehog is injured it should be contained immediately, then the British Hedgehog Preservation Society should be contacted immediately and a carer called.</p> <p>Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in.</p>

For full justification of these recommendations, please go straight to section [4.0 Conclusions, Impacts and Recommendations](#). Otherwise, the full report starts below.

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## 1.0 Introduction and Context

### 1.1 Background

Ark Ecology were commissioned to undertake a Preliminary Ecological Appraisal (PEA) and an assessment to determine the suitability of the site for the creation of a species rich wildflower meadow at Higher Road, Longridge, Preston, Lancashire, PR3 2YX. This is an updated version of the Ark Ecology PEA report of July 2021.

### 1.2 Site Context

The site is located at National Grid Reference SD 64198 38972, comprising of an area approximately 4.8ha. The site consists of three meadows on semi-improved grassland, separated by a dry-stone wall and bounded by a hedgerow to the north.

### 1.3 Scope of the report

This report describes the baseline ecological conditions at the site; evaluates habitats within the survey area in the context of the wider environment; and describes the suitability of those habitats for notable or protected species. It identifies significant ecological impacts as a result of the development proposals; summarises the requirements for further surveys and mitigation measures, to inform subsequent mitigation proposals, achieve planning or other statutory consent, and to comply with wildlife legislation.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development and establishing the baseline conditions for future monitoring. To achieve this, the following steps were taken:

A desk study has been carried out, including:

- The desk study area and field survey area (generally 50m from the site boundary/proposed footprint and including the 'zone of influence' of the scheme) have been identified.
- A desk study has been carried out, including a search on MAGIC website.
- Baseline information on the site and surrounding area has been recorded through an 'Extended Phase 1 Habitat Survey', including a Phase 1 Habitat Survey (JNCC 2010) and recording further details in relation to notable or protected habitats and species
- The ecological features present within the survey area have been evaluated where possible (CIEEM, 2006)
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act [WCA]) have been identified
- Likely impacts on features of value, as a result of the development proposals, have been identified
- Recommendations for further survey and assessment have been made where necessary.

A survey plan is presented in Appendix 1, desk study results are provided in the Appendix 2.

### 1.4 Project Description

This report is prepared in support of a planning application.

The proposed development is described as: Proposed residential dwelling, associated outbuildings and landscaping.

## 2.0 Methodology

### 2.1 Desk Study methodology

Existing biological records data relating to the site and a surrounding 2km radius (the study area) are required to conform to national guidelines and these will need to be requested from LERN at <https://www.lancashire.gov.uk/lern/>. The data search is confidential information that is not suitable for public release.

A review of the following information sources has also been undertaken to inform the assessment:

- Landscape structure using aerial images from Google Earth and OS maps
- Designated sites, habitat and granted EPSL records held on Magic.gov.uk.

### 2.2 Site Survey methodology

The survey was undertaken by Carol Edmondson MSc MRSB (Natural England bat licence number: 2015-12195 CLS-CLS) on 04/06/2021& 20/06/2024.

The methodology for the Phase 1 habitat survey is based on the best practice publication Phase 1 Habitat Survey Methodology (JNCC, 2010). All land parcels are described and mapped according to JNCC Phase 1 habitat classification (see site map in Appendix 1). Where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management.

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species. The likelihood of the presence of protected species is ranked; the habitats on site are evaluated against their likelihood to provide suitable habitat for protected species.

The ecological value of the survey area has been assessed based on the Guidelines for Ecological Impact Assessment (CIEEM, 2006), and the Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring (David Hill, 2005), using geographic frames of reference. The biodiversity value of any identified designated sites, habitat types and associated species assemblages has been considered. The distribution and extent of invasive species listed on Schedule 9 of the Wildlife and Countryside Act (1981) were also noted throughout the survey area.

### 2.3 Breeding birds and other incidental observations

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for barn owls *Tyto alba*.

### 2.4 Suitability Assessment

The likelihood of occurrence of protected species is ranked according to the criteria listed in Table 1. The habitats on site were evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

Table 1: showing criteria considered when assessing the likelihood of occurrence of protected species

Present	Species are confirmed as present from the current survey or historical confirmed records.
High	Habitat and features of high quality for species/species assemblage. Species known to be present in wider landscape (desk study records). Good quality surrounding habitat and good connectivity.
Medium	Habitat and features of moderate quality. The site in combination with surrounding land provides all habitat/ecological conditions required by the species/assemblage. Within known national distribution of species and local records in desk study area. Limiting factors to suitability, including small area of suitable habitat, some severance/poor connectivity with wider landscape, poor to moderate habitat suitability in local area.
Low	Habitats within the survey area poor quality. Few or no records from data search. Despite above, presence cannot be discounted as within national range, all required features/conditions present on site and in surrounding landscape. Limiting factors could include isolation, poor quality landscape, or disturbance.
Negligible	Very limited poor quality habitats and features. No local records from desk study; site on edge of, or outside, national range. Surrounding habitats considered unlikely to support species/species assemblage.

## 2.5 Limitations - evaluation of the methodology

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

There were no specific limitations to the survey.

## 3.0 Results and Evaluation

### 3.1 Desk Study Results

A summary of desk study results are provided below; full details are included in Appendix 2.

### 3.2 Designated sites

The site is located within the Forest of Bowland National Landscape. National Landscapes are designated areas where protection is afforded to protect and manage the areas for visitors and local residents.

The proposal will need to satisfy all NL restrictions and requirements for development.

The site is also within a priority area for breeding birds (GB).

The location and extent are illustrated in Appendix 2.

### 3.3 Landscape

The site is in a rural area, located between Longridge and Ribchester in Lancashire. The wider landscape is dominated by large areas of semi improved and improved grassland, rough grazing and pasture. The immediate landscape to the north is dominated by rush pasture with streams and ditches cutting through, which is ideal habitat for ground nesting birds. There are wooded cloughs, areas of scrub, and tree studded hedgerows around the area, which could be used for foraging and refugia by mammals and amphibians or reptiles. One large area of mixed woodland is located adjacent to the north, together with Cowley Brook Clough to the west could be an important local habitat for bats and other species. The scattered irrigation ditches and hedgerows around the area will provide insect foraging for bats. The overall site provides habitat for pollinators, small mammals, ground nesting birds, and foraging for badgers, bats and birds.

Priority habitats within 2km (~ areas closest to the site) (see appendix 2):

- Deciduous Woodland ~0m west
- Ancient replanted woodland~990m east
- Upland Heathland ~170m northeast
- Good quality semi-improved grassland ~600m south

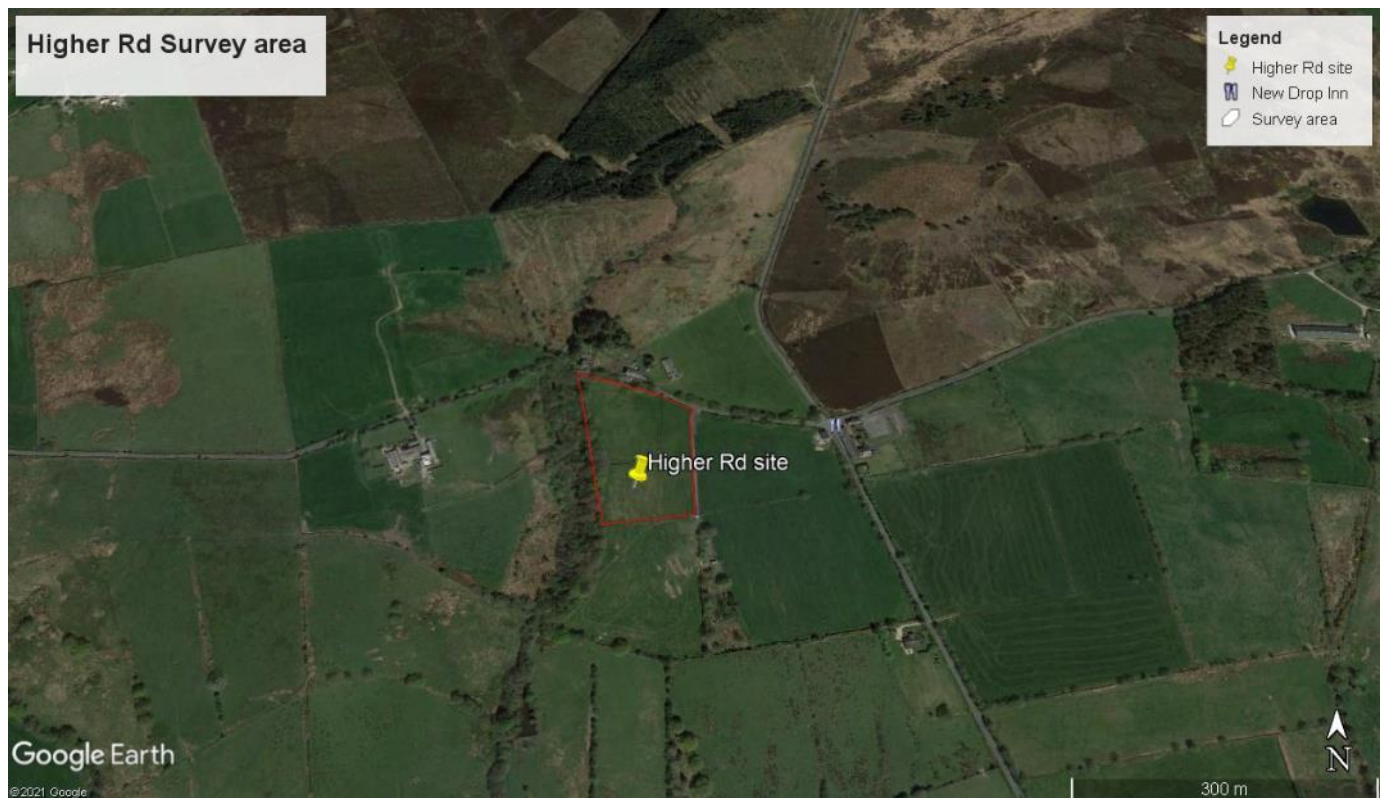


Figure 1: Aerial photo of site, showing landscape structure

### 3.4 Historical records

LERN will provide biological records data for a 2km radius of the site. These can be provided on request.

A search of the magic database for granted European Protected Species Mitigation Licences (EPSMLs) within a 2km radius found no licenced sites.

A search of the Magic database for Priority bird species within a 500m radius found four results and details are provided in Table 2 below.

Table 2: Designated priority bird habitat within 500m of the site:

Designated areas for priority bird species in the survey area.	Details
Grassland Assemblage Farmland Birds	3 species present
Lapwing	<i>Vanellus vanellus</i>
Snipe	<i>Gallinago gallinago</i>
Curlew	<i>Numenius arquata</i>
Important Bird Areas (GB)	Site and 500m survey area

### 3.5 Field Survey Results

The site of the proposed development is an area of semi-improved grassland that has been historically grazed and cut for hay/haylage, and good quality semi-improved grassland with an area of scrub encroachment. There is a natural spring within the croft with native trees forming the west and north boundaries. There are no buildings currently on the site.



The environmental variables recorded at the time of the survey are shown in Table 3.

Table 3: Environmental variables during the survey

Date: 04/06/21		20/06/2024	
Temperature	20° C	Temperature	18° C
Cloud Cover	10%	Cloud Cover	30%
Wind	1.1km/h	Wind	2 - 5km/h
Rain	0	Rain	0

### 3.6 Site Feature descriptions and photos

For the purposes of this report only, the site has been divided into 3 sections as marked on the map at App.1.with two target notes also described.

<p><b>Section 1</b></p> <p>This area has two main habitats:          An area of tall ruderal herbs running along the length of the wall running south from the entrance.          The majority of this section is semi-improved grassland.          UK Hab g3c Other Neutral Grassland (moderate condition)</p> <p>Species listed at Table 4.</p>	
<p><b>Section 2</b></p> <p>Good quality semi-improved grassland.</p> <p>This section has a greater diversity of species, and subject to soil sampling would be suitable for restoration to a species-rich wildflower meadow under the biodiversity enhancement plan.</p> <p>The sward here was shorter and more open.</p> <p>UK Hab g3c Other Neutral Grassland (moderate condition)</p>	

Section 3: Croft  
Semi-improved grassland

This section is much wetter, with areas of rush in addition to grassland species. T1 is located in this area.

UK Hab g3c Other Neutral Grassland (moderate condition)



Target Note 1

Natural spring arising in S3  
Marked at high vis in photo.

Note roe deer doe to left of image.



Target Note 2

In S2 the western 90m slopes away to the woodland edge and is bounded by native deciduous and evergreen trees. There is some natural regeneration of scrub in this area, which would naturally lend itself to expansion of the native woodland under the biodiversity enhancement scheme.



Hedgerow:

The site is bounded to the north with a native species hedgerow, with some native standard trees.

This could be expanded on the southern site with mixed hedgerow species which provide winter berries for foraging birds, and increase the nesting area for breeding birds. Expanding the width of a hedgerow also increases the habitat for small mammals such as brown hares and hedgehogs.



Table 4: Flora Species lists

<b>Species list</b>		
Map ref: Section 1; Habitat: Tall Ruderal Herbs		
<b><u>Dominant:</u></b>	<b><u>Frequent:</u></b>	<b><u>Occasional</u></b>
Meadow Foxtail <i>Alopecurus pratensis</i>	Cleavers <i>Galium aparine</i>	Cocksfoot grass <i>Dactylis glomerata</i>
Stinging Nettle <i>Urtica dioica</i>	Cow Parsley <i>Anthriscus sylvestris</i>	
<b><u>Abundant:</u></b>	<b><u>Frequent</u></b>	<b><u>Occasional:</u></b>
Meadow Foxtail	Rough meadow grass <i>Poa trivialis</i>	False Oat Grass <i>Arrhenatherum elatius</i>
Yorkshire Fog <i>Holcus lanatus</i>	Perennial rye grass <i>Lolium perenne</i>	Cocksfoot grass
	Creeping buttercup <i>Ranunculus repens</i>	Sticky mouse-ear <i>Cerastium glomeratum</i>
	Common sorrel <i>Rumex acetosa</i>	Thyme-leaved speedwell <i>Veronica serpyllifolia</i>
	Common daisy <i>Bellis perennis</i>	Cuckoo flower <i>Cardamine pratensis</i>
		Common mouse ear <i>Cerastium fontanum</i>
		Dandelion <i>Taraxacum spp.</i>
		Wavy bitter cress <i>Cardamine flexuosa</i>
		Broad leaf dock <i>Rumex obtusifolius</i>
<b>Section 2 Habitat: Semi-improved Grassland</b>		
<i>As Section 1 with also:</i>		
Sweet vernal grass (Dominant grass sp.) <i>Anthoxanthum odoratum</i>	Annual meadow grass <i>Poa annua</i>	Soft rush <i>Juncus effusus</i>
White clover <i>Trifolium repens</i>	Common bent <i>Agrostis capillaris</i>	Marsh thistle <i>Cirsium palustre</i>
	Meadow fescue	
Absent: cocksfoot grass		
Section 2 target note 2 additional species:	Germander speedwell <i>Veronica chamaedris</i>	English bluebell Bracken <i>Pteridium aquilinum</i> Hawthorn <i>Crataegus monogyna</i>
<b>Section 3 (Croft) Habitat: Semi-improved Damp Grassland</b>		
<b><u>Abundant:</u></b>	<b><u>Frequent</u></b>	<b><u>Occasional:</u></b>
Meadow foxtail	Broadleaf dock	Cuckoo flower
Yorkshire fog	Common daisy	Common mouse ear
	Creeping buttercup	Sweet vernal grass
	Soft rush	

## 4.0 Conclusions, Impacts and Recommendations

### 4.1 Informative guidelines

The habitats on site were evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat. The likelihood of occupancy of protected species is ranked according to the criteria listed in Table 1.

Where this report supports a planning application, the ecological interest of the study area (including the survey area) and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity. It will be clearly stated where a preliminary value can be given and where further information is required.

Appropriate justification for this assessment is provided in Section 2.4, 3.5 and Table 1 of this report.

### 4.2 Evaluation

Taking the desk-based assessment and site survey results into account, the following value for wildlife has been placed on the site:

Table 4: Evaluation of site

Ecological Factor	Survey assessment conclusions (with justification)	Foreseen impacts	Recommendations
Notable habitats and plants	There are no ancient woodlands within the zone of influence of the proposed works. Semi-improved grassland is present on site.	No impacts. The good quality semi-improved grassland present on site will not be impacted by the development	Any top soil disturbed should be seeded with a suitable native species seed mix to match the species currently present on site and in the local area.
Invasive / Non-native species	No invasive and non-native species recorded on site.	N/A	No further surveys.
Bats	Bats The trees on the west and northern boundaries could have roosting potential for bats, but will not be affected by the proposed location for the new buildings.	No impacts	No further surveys.

Birds	Birds could use the vegetation on site for nesting.	Active nests could be destroyed during vegetation removal.	Any tree and scrub removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building/trees and scrub to be removed should be undertaken immediately prior to clearance. All active nests will need to be retained until the young have fledged.
Reptiles	The site provides a small area of reptile habitat along the boundaries and within the dry stone walls.	The proposed development could result in the loss of habitat for common reptiles. Any reptiles present during the works could be injured or killed.	Due to the small area of suitable habitat on site and to minimise the risk of killing or injuring herpetofauna, site clearance works will be carried out under a precautionary method of working. The development area should be kept largely clear of vegetation in order to make it unattractive to herpetofauna. This clearance should be to ground level and be carried out in two stages, the latest stage undertaken at least 2 days prior to topsoil removal or other works to allow any reptiles present to move away. The first cut should be at about 15cm from the ground and the second (between 1 and 3 days later) close to the ground, thereby preventing injury to herpetofauna species during clearance. The vegetation should then be maintained at a very short level (less than 5 cm) even if there are delays in development. Likewise, compost heaps or vegetation, log or rubble piles should be moved by hand prior to commencement of any work. A buffer around the boundaries and herpetofauna fencing to ensure any herpetofauna are restricted from accessing the site during development is recommended.
Amphibians	The site contains suitable terrestrial habitat for amphibian foraging, commuting, and refuge.	No further surveys required.	A precautionary method of working is considered adequate to reduce the small risk of harm or injury to Great Crested Newts (GCN) during development, all clearance of scrub will take place when the GCN are found in their aquatic habitat and not in terrestrial habitat (core breeding season: March-May inclusive). In addition to altering the timing of the works to reduce the low risk of harm to GCN, the scrub clearance will be supervised by a licensed ecologist. This will include the clearing of any log piles and refugia that may be used by amphibians and the checking of vegetation for active bird's nests. In addition, all trenches will be backfilled before nightfall, or a ramp will be left to allow newts to easily exit. Any stored

			<p>materials (that might act as temporary resting places) will be raised off the ground, e.g. on pallets.</p> <p>If a GCN is found during the development all work must immediately cease and a licensed ecologist must be sought.</p>
Badgers	<p>Suitable foraging habitat for badgers found on site including evidence of badgers on site. Brown hare, and roe deer noted at time of survey.</p>	<p>Some foraging habitat will be lost.</p> <p>No impacts on any badger setts however precautionary approach to work should be implemented</p>	<p>Badgers</p> <p>No further surveys are required.</p> <p><b>However</b>, the following recommendations are given in order to mitigate against potential harm to badgers during the development works.</p> <p>Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in.</p> <p>Security lighting to be directed away from the undergrowth.</p> <p>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</p>
Hedgehog	<p>Hedgehog</p> <p>Suitable foraging habitat for hedgehogs is present on site.</p> <p>Without the BRD it is unknown whether they are present in the area</p>	<p>Hedgehog</p> <p>A precautionary method of working should be undertaken.</p>	<p>Hedgehog</p> <p>No further surveys.</p> <p>Vegetation should be thoroughly checked before removal. Should a hedgehog be found, that area of vegetation must be left.</p> <p>If a hedgehog is injured it should be contained immediately, then the British Hedgehog Preservation Society should be contacted immediately and a carer called.</p> <p>Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in.</p>

**Biodiversity Enhancement**

The Local Planning Authority has a duty to ask for enhancements under the NPPF and circular 06/2005: Biodiversity and Geological Conservation. Para.99.

<p>Habitats</p>	<p>A wildflower meadow area and further native hedge and tree planting will be incorporated into the biodiversity enhancement plan for the site. Such areas offer habitat for invertebrates which in turn feed the local bird and bat population. A wildflower area requires much less maintenance than a lawned area, and enhances the visual aspect of a landscaping scheme. Advice on sourcing seed and maintenance is available at <a href="http://www.magnificentmeadows.org.uk/assets/pdfs/Mini-meadow.pdf">http://www.magnificentmeadows.org.uk/assets/pdfs/Mini-meadow.pdf</a></p> <p>Any landscape planting should include native pollinator friendly species. Guidance can be found at: <a href="https://www.bumblebeeconservation.org/wp-content/uploads/2017/06/Buzzing-Communities-%E2%80%93-English-Proof-6_web_interactive-compressed_WEBSITE-VIEW.pdf">https://www.bumblebeeconservation.org/wp-content/uploads/2017/06/Buzzing-Communities-%E2%80%93-English-Proof-6_web_interactive-compressed_WEBSITE-VIEW.pdf</a></p> <p>Tree species for proposed landscaping will be a mix of native species which offer habitat for insects and autumn foraging for birds, and reflect the surrounding landscape. Suggested examples include:</p> <table border="0" data-bbox="363 907 901 1137"> <tr> <td>Common Oak</td> <td>Quercus robur</td> </tr> <tr> <td>Rowan</td> <td>Sorbus aucuparia</td> </tr> <tr> <td>Bird Cherry</td> <td>Prunus padus</td> </tr> <tr> <td>Silver Birch</td> <td>Betula pendula</td> </tr> <tr> <td>Willow spp.</td> <td>Salix spp.</td> </tr> <tr> <td>Alder</td> <td>Alnus glutinosa</td> </tr> </table> <p>Any introduced boundary hedgerows will include a mix of native species eg:</p> <table border="0" data-bbox="363 1249 933 1480"> <tr> <td>Hawthorn</td> <td>Craetagus montana</td> </tr> <tr> <td>Hazel</td> <td>Corylus avellana</td> </tr> <tr> <td>Blackthorn</td> <td>Prunus spinosa</td> </tr> <tr> <td>Dog rose</td> <td>Rosa canina agg.</td> </tr> <tr> <td>Rowan</td> <td>Sorbus aucuparia</td> </tr> <tr> <td>Holly</td> <td>Ilex aquifolium</td> </tr> </table> <p>Yew <i>Taxus baccata</i> offers an excellent evergreen alternative to non-native hedging species.</p> <p>Proposed meadow restoration should be carried out with the Forest of Bowland Hay Time Project guidance.</p>	Common Oak	Quercus robur	Rowan	Sorbus aucuparia	Bird Cherry	Prunus padus	Silver Birch	Betula pendula	Willow spp.	Salix spp.	Alder	Alnus glutinosa	Hawthorn	Craetagus montana	Hazel	Corylus avellana	Blackthorn	Prunus spinosa	Dog rose	Rosa canina agg.	Rowan	Sorbus aucuparia	Holly	Ilex aquifolium
Common Oak	Quercus robur																								
Rowan	Sorbus aucuparia																								
Bird Cherry	Prunus padus																								
Silver Birch	Betula pendula																								
Willow spp.	Salix spp.																								
Alder	Alnus glutinosa																								
Hawthorn	Craetagus montana																								
Hazel	Corylus avellana																								
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Dog rose	Rosa canina agg.																								
Rowan	Sorbus aucuparia																								
Holly	Ilex aquifolium																								
<p>Bats</p>	<p>The installation of a minimum of four bat boxes on mature trees around the site boundaries and new buildings will provide additional roosting habitat for bats e.g. 2F Schwegler Bat Box 1FF Schwegler Bat Box 2FN Schwegler Bat Box 1FR Schwegler Bat Tube / Habibat Bat Box inserted into the fabric of the new building during construction. Greenwoods ecohabitat bat boxes (local supplier)</p>																								

	<p>Bat boxes should be positioned 3-5m above ground level facing in a south/south-westerly direction with a clear flight path to and from the entrance.</p> <p>Bat tubes should be positioned high on the building, close to the eaves, away from windows and other artificial light sources.</p>
Birds	<p>Bird nesting boxes will be included in the building plans to add to the available nesting opportunities in the local area. For example:</p> <p style="padding-left: 40px;">Schwegler No 17 swift nest box Schwegler 1SP Sparrow Terrace Schwegler 1B nest boxes Schwegler 2H Robin Boxes</p> <p>Nest boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.</p>
Reptiles & amphibians	<p>Waste materials created during the development e.g. log piles, brash, rocks etc. Can be used to create hibernacula and refugia for common reptiles. These should be positioned on the site boundaries below the existing hedgerow which will be retained.</p>
Badgers and terrestrial mammals	<p>The biodiversity enhancement plan for the areas not developed will increase the overall habitat value of the site area e.g. widening the hedgerow, planting more trees and creating a species rich hay meadow.</p>

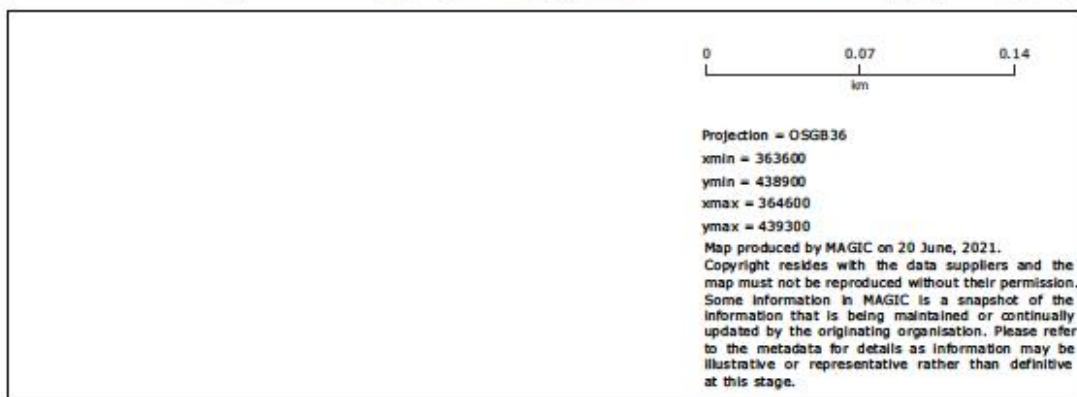
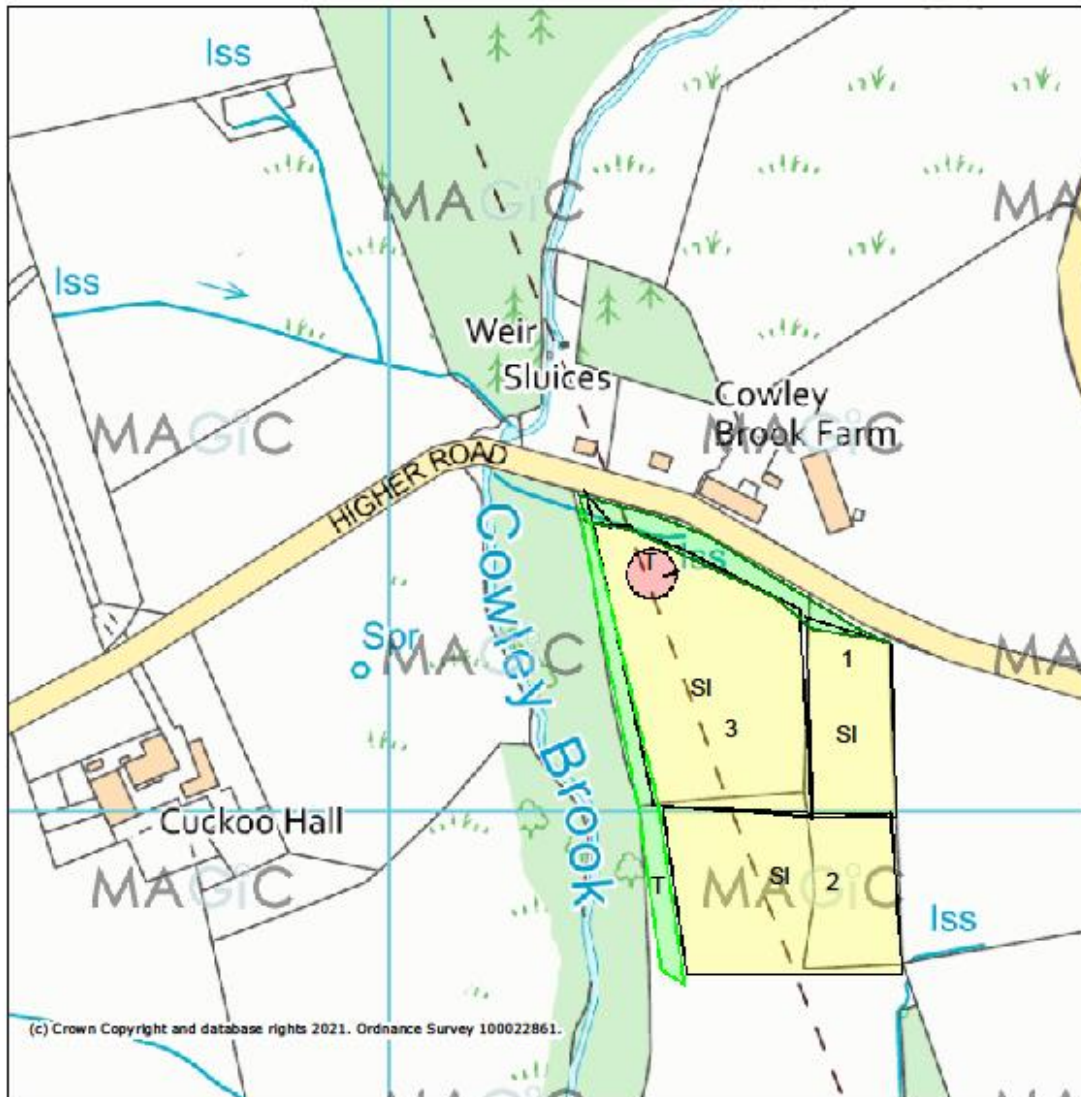
A full Biodiversity Enhancement Strategy and meadow management plan will be provided prior to commencement of works.

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### Appendix 1: Survey Plan

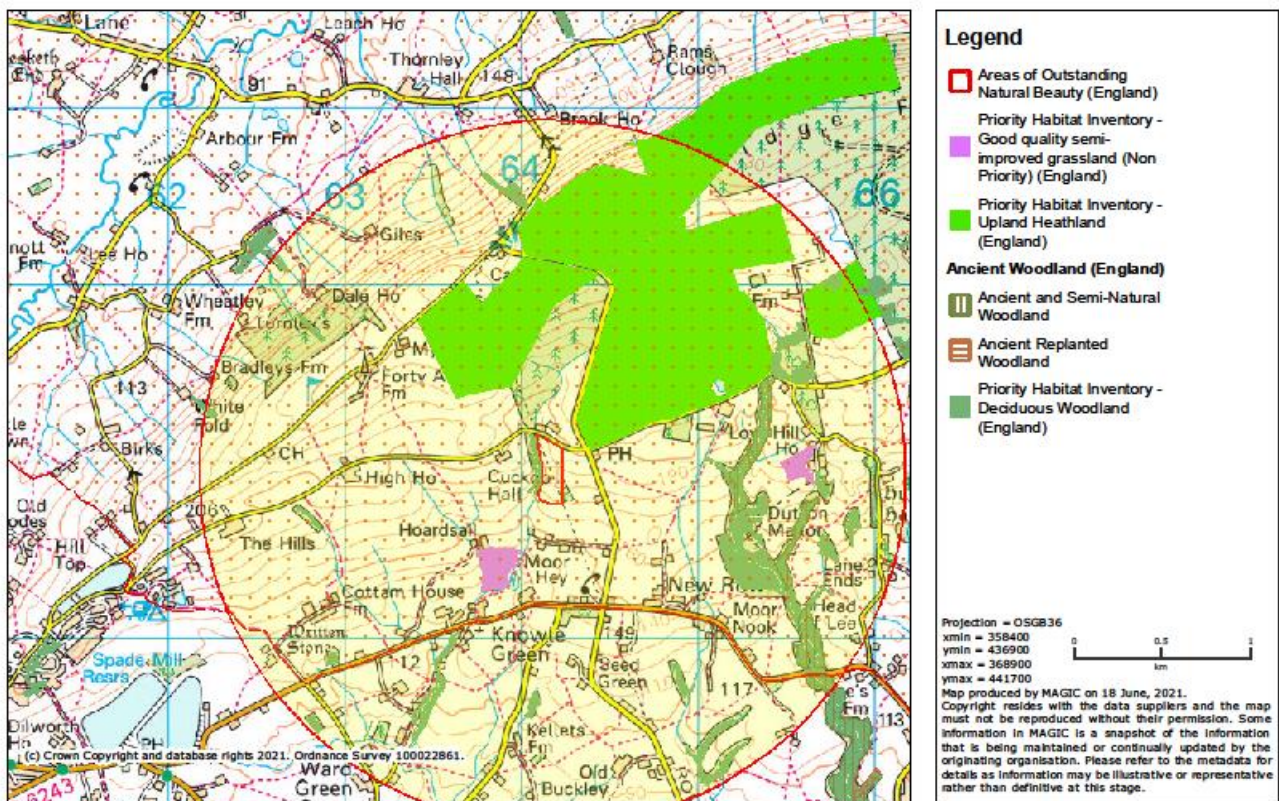
## MAGiC Phase 1 Map Higher Rd site



## Appendix 2: Desk Study Information

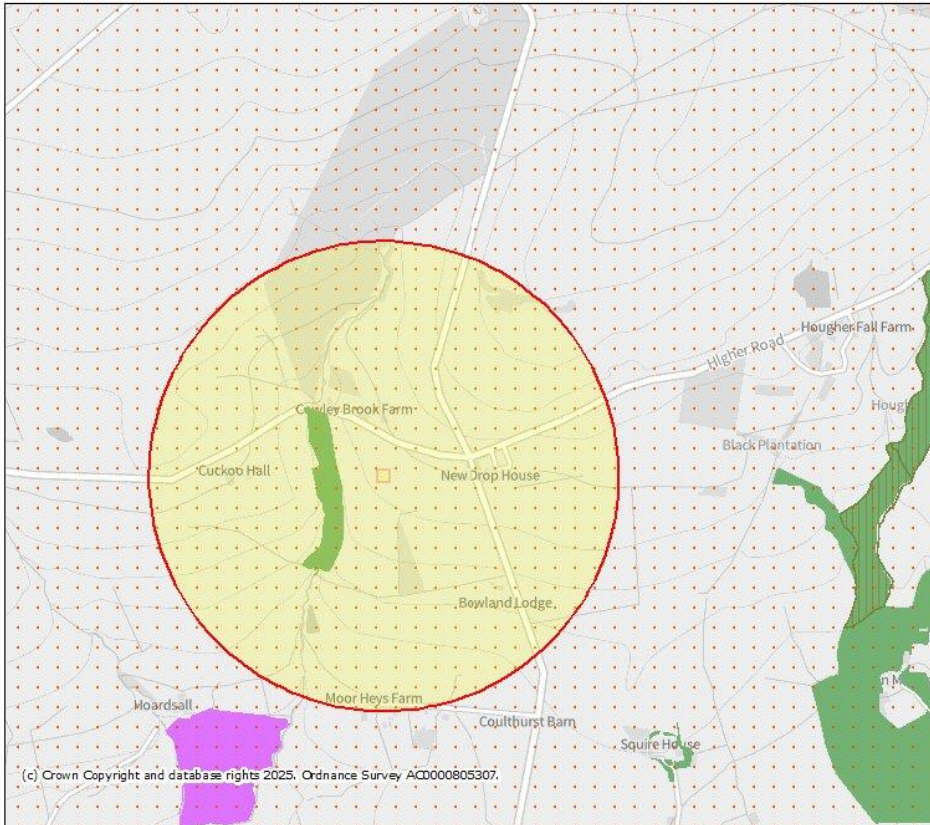
Full historical records can be provided on request.

### MAGiC Designated habitats within 2km survey area





### 500m buffer Higher Rd, Longridge



**Legend**

- Areas of Outstanding Natural Beauty (England)
- Priority Habitat Inventory - Good quality semi-improved grassland (Non Priority) (England)
- Ancient Woodland (England)**
  - Ancient and Semi-Natural Woodland
  - Ancient Replanted Woodland
  - Priority Habitat Inventory - Deciduous Woodland (England)

Projection = OSGB36  
xmin = 362400  
ymin = 438200  
xmax = 366400  
ymax = 440100

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