Fishes and Peggy Hill, Henthorn Road, Clitheroe.

Preliminary Ecological Appraisal Report

Compiled by Ecology Services Ltd.

on behalf of

P Wilson & Company

May 2021

Ref. number:21049Written by:BMChecked:SBApproved:SB



Environmental Consultants

1 Church Row Chambers Longton Preston Lancashire PR4 5PN

tel: 01772 614932 fax: 01772 614930 email: info@ecologyservices.co.uk web: www.ecologyservices.co.uk

Executive Summary

Ecology Services Limited was commissioned by P Wilson & Company in March 2021, to carry out an ecological appraisal on Land at Fishes and Peggy Hill, Henthorn Road, Clitheroe, BB7 3BY, hereinafter referred to as 'the site'. The centre of the site is located by National Grid Reference (NGR) 372767, 439862. The location of the site is shown on Figure 1.

The site is located to the south of the town of Clitheroe, within an agricultural area of mostly grazing pastures. The River Ribble lies directly adjacent to the site to the west and Standen Hey Community Woodland to the east. The site contains a mix of habitats including; improved grassland, species poor hedgerow and scattered scrub, other habitats within the wider landscape include broadleaved woodland, the River Ribble, and a series of scattered trees and hedgerows along field boundaries. The site is proposed for 6 new small holiday lodges, as shown on Figure 2

The desktop study identified one statutory designated site (Hodder River Section Site of Special Scientific Interest (SSSI)) and several non-statutory sites within the surrounding environs and wider landscape.

The evaluation took into consideration habitats and species that are directly and indirectly likely to be impacted by the development.

Generally, the site contains only habitat of low ecological value, with proposed losses of improved grassland and a small section of newly planted hedge and young scattered scrub. No evidence of the sites use by any protected species was found during the survey. Recommendations have been made to minimise any adverse impacts of the development and provide net gain. These include the removal of any potential breeding bird habitat outside the main breeding bird season of March to September inclusive. The creation of a species-rich hedgerow, using native species of a local province, around the site and along the proposed new access road would provide the site with a habitat of principle importance as well as overall net gain.

Contents

Executive Summary		1
1.0	Introduction	3
2.0	Planning Policy and Legislation	4
3.0	Methodology	6
4.0	Results and Evaluation	8
5.0	Impacts and Recommendations	19
6.0	References	24

Tables

Table 1: Desktop Study Results and Record Centres Consulted Table 2: Desktop Study Species Results

Figures

Figure 1: Extended Phase 1 Habitat Survey Map

Figure 2: Proposed Pipeline Route and Work Area

Appendices

Appendix 1: Legislation

Appendix 2: Extended Phase 1 Habitat Survey Target Notes

Appendix 3: Desktop Study Records

1.0 Introduction

- 1.1 Ecology Services Limited was commissioned by P Wilson & Company in March 2021, to carry out an ecological appraisal on Land at Fishes and Peggy Hill, Henthorn Road, Clitheroe, BB7 3BY, hereinafter referred to as 'the site'. The centre of the site is located by National Grid Reference (NGR) 372767, 439862. The location of the site is shown on Figure 1.
- 1.2 The report has been produced to identify the baseline ecological conditions of the site and of wildlife habitat bordering the site and identify any potential constraints to the development proposals. Where habitats and / or species are significantly affected, the report assesses the impacts and makes further recommendations. The site is proposed for 6 new small holiday lodges, as shown on Figure 2. At the time of compiling this report, no landscape scheme has been prepared and only basic biodiversity enhancements are provided. This report shall be updated to ensure that mitigation and enhancement measures are incorporated once the scheme is finalised.

Site Description and Context

- 1.3 The site is located to the south of the town of Clitheroe, within an agricultural area of mostly grazing pastures. The River Ribble lies directly adjacent to the west of the site and Standen Hey Community Woodland approximately 400m to the south east. The site contains a small number of habitats including; improved grassland, species poor hedgerow and scattered scrub. Other habitats within the wider survey area and wider landscape include broadleaved woodland, the River Ribble, and a series of scattered trees and hedgerows along field boundaries.
- 1.4 To conduct an ecological appraisal at the site, the aims of the survey were to:
 - Undertake a desktop study up to 2km from the site including a review of existing maps and aerial photographs of the area up to 250m from the development site;
 - Undertake an extended Phase 1 habitat survey of the development site and up to 30m from the development site; and
 - Identify any further detailed survey requirements.
- 1.5 The site's ecological values will be assessed in context with current UK planning and legislative policy, including:
 - Statutory protected species
 - Species/Habitat of Principal Importance
 - Local Biodiversity Action Plan (BAP) habitat/species
 - Statutory protected sites
 - Non-statutory protected sites or species of conservation concern
- 1.6 The purpose of this report is to state the survey methodology, present the results of the survey, evaluate the findings, assess the impacts and make recommendations concerning the protection of existing ecological features within and bordering the development plot.
- 1.7 Further surveys will be recommended, where required. If further surveys are recommended, then this report should be read in conjunction with any recommended survey reports.

2.0 Planning Policy and Legislation

Planning Policy

- 2.1 The National Planning Policy Framework (NPPF, 2019) places a clear responsibility on Local Planning Authorities (LPA) to contribute to conserving and enhancing the natural and local environment. LPAs should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species (e.g. Species of Principal Importance, Local Biodiversity Action Plan species); and identify and pursue opportunities for securing measurable net gains for biodiversity. The Office of the Deputy Prime Minister (ODPM) Circular 06/2005 provides administrative guidance on the application of the law in relation to planning and nature conservation.
- 2.2 A Local Planning Authority (LPA) has a duty to ensure that protected species and habitats within the UK are a 'material consideration' in the determination of a planning application. Therefore, an LPA is unlikely to determine an application until all relevant information relating to protected species or habitats is submitted to fully inform the application. Relevant information includes adequate surveys and, where required, mitigation strategies, which will need to be submitted to inform a planning application.
- 2.3 Most Local Planning Authorities have a system of sites of local importance for nature conservation which complement the series of internationally and nationally designated wildlife and geological site. These sites are usually afforded protection through the Local Plan.
- 2.4 Biological Heritage Sites (BHS) are Lancashire's non-statutory wildlife sites, which are just below the conservation value of its statutory Sites of Special Scientific Interest. They are very important, however, for their role in contributing to the biological diversity of Lancashire, and their survival and conservation is a key indicator of sustainable development in the county (Lancashire County Council, 1998).
- 2.5 Although the UKBAP has been superseded by the UK Post-2010 Biodiversity Framework and, in England, Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011), many Local Authorities have prepared and operate Local Biodiversity Action Plans (LBAPs). LBAPs not only highlight habitats and species that are of Principal Importance but also habitats and species that are of local importance. LBAPs will be prepared for these habitats and species. Listing of habitat or species in a LBAP does not confer any new statutory or planning policy protection. However, impacts upon species prioritised in LBAPs may be a material consideration in a planning application.

Legislation

Statutory Designated Sites

- 2.6 Certain sites are afforded statutory protection at the European or National Level. European Designated Sites include Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar Sites. Sites of Special Scientific Interest (SSSIs) are afforded national protection. For further details on these designations refer to Appendix 1.
- 2.7 Impact Risk Zones (IRZs) are a mapping tool developed by Natural England to enable developers and Local Planning Authorities (LPAs) to make an initial assessment of the potential risks to Sites of Special Scientific Interest (SSSIs) posed by development proposals. They define zones around each SSSI according to the particular sensitivities of the features for which it is notified and specify the types of development that have the potential to have adverse impacts, which may require consultation with Natural England.

- 2.8 European sites are underpinned by the SSSI designation and their interest features and sensitivities are covered by the SSSI IRZs. Where the notified features of the European site and SSSI are different, the SSSI IRZs have been set so that they reflect both. The SSSI IRZs can therefore be used as part of a Habitats Regulations Assessment (HRA) to help determine whether there are likely to be significant effects from a particular development on the interest features of the European site.
- 2.9 Habitats Regulation Assessment is one of the most powerful tools currently available to control the environmental impacts of development with input from both Natural England (NE) and the Competent or Planning Authority. The assessment tests whether a plan or a project is likely to have a significant negative impact upon European designated sites.
- 2.10 LNRs are statutorily designated sites at the local level, designated by local authorities. The Local Plan for an area will detail any additional protection given to the LNR such as protection against damaging operations and/or protection against development within or adjacent to the LNR. For further information on LNRs refer to Appendix 1.

Protected Species

- 2.11 All British bats, great crested newts (*Triturus cristatus*), otter (*Lutra lutra*) and hazel dormouse (*Muscardinus avellanarius*) and the habitat they use for protection and shelter are protected under Conservation of Habitats and Species Regulations 2017 (as amended)¹ and the Wildlife and Countryside Act 1981 (WCA, as amended) (European protected species).
- 2.12 Water vole (*Arvicola amphibious*), crayfish (*Austropotamobius pallipes*), red squirrel (*Sciurus vulgaris*), pine marten (*Martes martes*) and common reptiles receive protection through the Wildlife and Countryside Act 1981 (as amended) (Nationally protected species). Certain plant species are similarly protected at the European or National level.
- 2.13 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). Under the WCA, it is an offence to kill, injure or take any wild bird, to take damage or destroy the nest of any wild bird or to take or destroy the egg of any wild bird. Birds listed on Schedule 1 of the WCA are afforded additional protection and is also an offence to disturb any Schedule 1 listed bird while it is building a nest, is on or near a nest containing young or disturb dependent young of such a bird.
- 2.14 Badgers (*Meles meles*) and their active setts are protected under the Protection of Badgers Act (1992). The Protection of Badgers Act 1992 was designed to protect badgers from baiting and deliberate harm or injury. It also contains restrictions that apply more widely.
- 2.15 Developments with potential to affect protected species will mostly require a licence from Natural England, which permits otherwise illegal actions.
- 2.16 For further information on protected species legislation, refer to Appendix 1.

Invasive Species

2.17 Schedule 9 of The Wildlife and Countryside Act 1981 (as amended) lists invasive non-native plant species that are considered to have a detrimental effect upon native flora wherever they occur. It is therefore an offence to "plant or otherwise cause them to grow in the wild". This includes allowing the species to grow/spread, causing the species to spread or transferring polluted ground material from one area to another. Waste containing these species may be

¹ The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 will continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

Ecology Services Ltd – Preliminary Ecological Appraisal (PEA).

classed as controlled waste under the Environmental Protection Act (Duty of Care) Regulations 1991, which requires all producers, carriers and disposers of waste to follow a code of practice and keep records and must comply with section 34 of the Environmental Protection Act 1990.

- 2.18 Section 23 of the Infrastructure Act 2015 amended the Wildlife and Countryside Act 1981 to introduce a statutory regime of species control agreements and orders. This schedule ensures that, in appropriate circumstances, landowners take action on Schedule 9 invasive species, or permit others to enter the land and carry out those operations, to prevent their establishment and spread.
- 2.19 The EU Invasive Alien Species Regulation (1143/2014) imposes strict restrictions on a list of species known as "Species of Union Concern" and is implemented by the European Commission Implementing Regulation 2016/1141. Under the EU Regulation, it is a requirement for management measures to be put in place for widespread invasive species. The Invasive Alien Species (Enforcement and Permitting) Order 2019 which implements the requirements of the EU Regulation in England and Wales came into effect on 1st October 2019. The European Union (Withdrawal) Act 2018 as amended by the European Union (Withdrawal Agreement) Act 2020 (EUWA) provides for the retention of most EU law, including the above Regulations relating to invasive alien species, as it stands on exit day, by "converting" or "transposing" it into a freestanding body of domestic law.
- 2.20 The Regulation ensures that a landowner must act responsibly and not allow an invasive species to grow or spread outside their land, which could be an offence and/or contrary to the Regulation. Where this cannot be guaranteed the landowner is required to consider safely removing and disposing of any listed plant.

Natural Environment and Rural Communities (NERC) Act 2006

2.21 Section 41 (S41) of the NERC Act 2006 requires the Secretary of State, as respects England, to publish a list of the living organisms and types of habitat which are of Principal Importance for the purpose of conserving biodiversity. Section 40 of the NERC Act 2006 places a duty to conserve biodiversity on every public body. The Local Planning Authority and Natural England will expect account to be taken of these species in the overall layout and landscape strategy for the development.

3.0 Methodology

3.1 This Preliminary Ecological Appraisal has been undertaken in accordance with CIEEM's guidelines (CIEEM, 2017a & b).

Desktop Study

3.2 Ecological data and historic records of protected species and sites was collated from the following sources; listed in Table 1.

Source of information	Information supplied			
Multi-Agency Geographic Information for the Countryside (https://magic.defra.gov.uk/)	To identify nature reserves, Sites of Special Scientific Interest (SSSI), Habitats of Principal Importance, non- statutory protected sites or features of interest within 1km of the site.			

Table 1: Desktop Study Resources and Record Centres Consulted

Natural Environment and Rural Communities (NERC) Act 2006	Review of Habitats/Species of Principal Importance known to occur in the region.
Local Biodiversity Action Plan (LBAP) - Lancashire	Identification of LBAP species and habitats known to occur in the region.
Lancashire Environmental Records Centre (LERN) Local Records Centre	To identify locally protected sites or species of interest within 2km of the site.

- 3.3 The data search with Lancashire Environmental Records Centre (LERN) was undertaken on 30/03/2021. Information provided by Lancashire Environment Record Network has been collated from many sources. LERN is grateful for the assistance given by the organizations and individual naturalists who live and work in, and visit Lancashire. LERN does not hold records from the Lancashire Badger Group and site-specific badger records were not obtained.
- 3.4 The aim of the desktop study was to assist the surveyor undertaking the extended Phase 1 habitat survey by providing background information on the likely habitats and species that occur within the local area.
- 3.5 A review was undertaken using existing maps and aerial photographs of the area (up to 250m of the development site) to identify any features of ecological interest; for example, a pond that may support amphibian species such as great crested newts or common toad (*Bufo bufo*).

Extended Phase 1 Habitat Survey

- 3.6 The extended Phase 1 habitat survey was undertaken of the site and within 30m of the site where access was permitted. Habitats were assessed by using Phase 1 habitat survey techniques, which is a system for environmental audit widely used within the environmental consultancy field.
- 3.7 The extended Phase 1 habitat survey followed Phase 1 habitat survey methodology (JNCC, 2010). This involves walking over the site, mapping and target noting any semi-natural habitats. The survey area includes the footprint of the proposed development and up to 30m from the proposed development site.
- 3.8 A habitat map will be prepared to show the locations and extent of habitats and detailed descriptions of the principal and important plant communities will be provided as Target Notes.
- 3.9 Plant species abundances were recorded within the target notes, using DAFOR ratings, as Dominant, Abundant, Frequent, Occasional or Rare (Rare in the sense of having a very low abundance). Species recorded as locally abundant are abundant only in certain parts of the target noted habitat, rather than being abundant throughout. The ratings have no precise definition and are affected by plant size and season of survey however they have been shown to correlate with more quantitative measures.
- 3.10 The extended Phase 1 habitat survey is a modified approach to the Phase 1 habitat survey, extended for use in environmental assessment (Institute of Environmental Assessment, 1995). The survey recorded any signs of protected species/Species of Principal Importance or other valuable ecological components of the site. Direct observations of the species were noted. Furthermore, sites/habitats with potential to support the species were also noted, even if direct signs of presence were not apparent. Features of note recorded during the survey

are mapped (Figure 1) and marked with target notes; target note descriptions are provided in Appendix 2.

- 3.11 The locations of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) and others were also mapped.
- 3.12 As part of the extended Phase 1 habitat survey, surveyors also recorded any wildlife observed.
- 3.13 Habitats and species identified as present or potentially present are valued with reference to statutory and non-statutory status and inclusion in Local Biodiversity Action Plans or other conservation listings such as red lists.

Timing

3.14 The extended Phase 1 habitat survey was undertaken on the 30th March 2021 which is a sub-optimal time of year to undertake such a survey.

Weather Conditions

3.15 Weather conditions during the survey were reasonable, with no rain or wind affecting survey.

Personnel

3.16 All survey works were carried out by Ecologist Mr. B. Meadows BSc (Hons) ACIEEM.

Limitations

- 3.17 Surveys only provide a snapshot of habitats and species that are there at that time. Further surveys at other times of the year are likely to find additional species.
- 3.18 There was no access within the 30m wider survey area to the north of the site, this area was avoided during the survey due to it forming third party ownership and access not being provided, alternatively, this area was surveyed where possible from within the site.

4.0 Results and Evaluation

Desktop Study

Statutory Designated Sites

- 4.1 The desktop study found one nationally designated site within 2 km of the proposed development site:
 - Hodder River Section Site of Special Scientific Interest (SSSI), located 1.92 km to the west of the site.

Hodder River Section SSSI

4.2 The Hodder River Section was designated a SSSI under the WCA 1981 on the 21st of October 1986. This Hodder River Section is situated 4 km south west of Clitheroe where the River Hodder has cut down through the rock strata. The geological interest of the site may be defined as follows: This locality is important for its exposures of marine Lower Carboniferous rocks. Here are exposed a sequence of turbiditic, ancient sediments of Holkerian to Asbian age, including the Bollandoceras hodderense beds. As well as being the type locality for these beds and the fossil which gives them their name, it is the type locality for a number of other fossil taxa. The rich invertebrate fauna includes trilobites, bivalves, brachipods,

bryozoans, echinoids and cephalopods. Much potential exists for research on the faunas, sedimentology and stratigraphy of this key Dinantian locality.

Natural England Impact Risk Zones (IRZs)

- 4.3 The Hodder River Section SSSI is located c. 2km to the west of the site. The desktop study search found the site to be within a Natural England (NE) SSSI Impact Risk Zone (IRZ) associated with this SSSI and with another unspecified SSSI site.
- 4.4 The Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on European/Ramsar sites.
- 4.5 Local planning authorities (LPAs) have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI. The SSSI IRZs can be used by LPAs to consider whether a proposed development is likely to affect a SSSI and determine whether they will need to consult Natural England to seek advice on the nature of any potential SSSI impacts and how they might be avoided or mitigated.
- 4.6 The SSSI IRZs can be used by developers, consultants and members of the public, who are preparing to submit a planning application. They will help them to consider whether a proposed development is likely to affect a SSSI and choose whether to seek pre-application advice from Natural England. This will allow any potential impacts to be taken into account within the planning application and so minimise the risk of delays at the formal planning stage (Natural England, 2019). The details of the relevant IRZ are provided below.

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England) 1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW? 2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING: **All Planning Applications** Infrastructure Wind & Solar Energy Minerals, Oil & Gas Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. **Rural Non Residential** Residential **Rural Residential Air Pollution** Combustion Waste Composting **Discharges** Water Supply Notes 1 Notes 2 **GUIDANCE - How to use the Impact Risk Zones** /Metadata for magic/SSSI IRZ User Guidance MAGIC.pdf 1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW? 2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING: **All Planning Applications** Infrastructure

Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.

Wind & Solar Energy Minerals, Oil & Gas

Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.

Rural Non Residential Residential Rural Residential Air Pollution Combustion Waste Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting Discharges Water Supply Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more. Notes 1 Notes 2

GUIDANCE - How to use the Impact Risk Zones

/Metadata for magic/SSSI IRZ User Guidance MAGIC.pdf

Non-Statutory Designated Sites

- 4.7 The ecological desktop study identified the following records of non-statutory protected sites within 2km of the proposed development:
 - River Ribble (from London Road Bridge Preston, in West, to County Boundary, in East) BHS, 25m west from the site,
 - Barrow Clough Wood BHS, c. 600m north east from the site,
 - Small Field BHS, c. 1km south west from the site.
 - Hard Hill Common BHS, c. 1km south from the site,
 - Primrose Lodge BHS, c. 1.3km north east from the site.
 - Moyser Wood and Angerham Wood BHS, c. 1.6km west from the site,
 - Holden's Breast Wood BHS, c. 1.6km south west from the site,
 - Barrow Brook Field BHS, c. 1.7km south from the site,
 - Mitton Hall Wood BHS, c. 1.8km south west from the site,
- 4.8 The desktop study found River Ribble (from London Road Bridge Preston, in West, to County Boundary, in East) BHS non-statutory designated site in close proximity to the proposed development site, which is located across the opposing side of Henthorn Road within the 30m wider survey area of the site.
- 4.9 Other Biological Heritage Sites (BHS) are all located c600-1800m from the development site. There will be no direct impacts to these sites as a result of the current development proposals.

Ribble (from London Road Bridge Preston, in West, to County Boundary, in East) (BHS)

4.10 According to the BHS Citation and the BHS Guidelines for Site Selection, this BHS was designated in 1993 for its Rivers and Streams (Ri1), Flowering Plants and Ferns (Ff4), Flowering Plants and Ferns (Ff1), Bryophytes (Br3), Mammals (Ma1a), Birds (Bi2), Molluscs

(Mo1), and Other Invertebrates (In1). Please refer to the BHS Guidelines for Site Selection for details on these categories².

4.11 This BHS is located to the west of the site. Part of this BHS does fall within the 30m wider survey area. The habitats constituting the BHS will not be directly impacted by the development works and indirect impacts are considered unlikely providing appropriate measures are implemented.

Habitats of Principal Importance (NERC)

- 4.12 The desktop study identified the following Habitats of Principal Importance within the proposed development:
 - Hedgerows (native species)

Local Biodiversity Action Plan (LBAP)

- 4.1 No habitats listed within the Lancashire BAP have been located within the site.
- 4.2 The species of local concern which might potentially use the site, based upon information gathered from the sources listed in Table 1 are identified in Table 2 below.

Protected Species/ Species of Principal Importance (S41)/ LBAP Species

4.3 The desktop study identified the following records of protected species/ Species of Principal Importance within the 2km of the development site:

² <u>https://www.lancashire.gov.uk/lern/site-designations/local-sites/biological-heritage-sites/bhs-guidelines-for-site-selection/</u>

Ecology Services Ltd - Preliminary Ecological Appraisal (PEA).

Table 2: Desktop Study Species Results

Common name	Scientific name	Date of record(s)	Distance from site (km)	Legally protected	NERC S41	LBAP	Notes
Common toad	Bufo bufo	2013	1.7	protected	✓	✓	
Palmate newt	Lissotriton helveticus	2018	1		✓	✓	
Smooth newt	Lissotriton vulgaris	2015 - 2018	1 – 1.9	✓	✓	✓	
Common frog	Rana temporaria	1988 - 2018	0.35 - 1.9				6 records
All bat species		1000 2010	0.00 1.0	~	Several species	Several species	01000100
Daubenton's bat	Myotis daubentonii	1998	1.5	✓		✓	
Common pipistrelle	Pipistrellus pipistrellus	1986 - 2018	0.55 – 1.9	✓		✓	10 records
Badger	Meles meles	1999	1.7	✓			
Western European hedgehog	Erinaceus europaeus	2013 - 2020	0.9 - 2		✓	✓	13 records
Brown hare	Lepus europaeus	2007 - 2015	0.8 - 2		✓	✓	17 records
Otter	Lutra lutra	1953 - 2019	1.5 – 1.9	✓	✓	✓	7 records
Black-headed Gull	Chroicocephalus ridibundus	2008	1.4			✓	
Bullfinch	Pyrrhula pyrrhula	1998	1.97			✓	
Common cuckoo	Culculus canorus	1998	1.97		✓	✓	
Dunnock	Prunella modularis	1998 - 2008	0.9 - 1.97		✓	✓	4 records
Eurasian curlew	Numenis arguata	1998 - 2005	0.9 - 1.97		✓	✓	12 records
Grey heron	Ardea cinerea	1989 - 2020	0.45 - 2			✓	9 records
Grey partridge	Perdix perdix	1998 - 2005	0.9 - 1.97		✓	✓	7 records
House sparrow	Passer domesticus	1998 - 2008	0.9 – 1.97		✓	✓	6 records
Kingfisher	Alcedo atthis	1992 - 1999	1.15 – 1.97	Sch1			3 records
Lesser spotted woodpecker	Dendrocopos minor	1998 - 2004	1.15 – 1.97			✓	3 records
Little ringed plover	Charadrius dubius	1999	1.16	Sch1		✓	
Kestrel	Falco tinnunculus	1998 - 1999	1.15 – 1.97			✓	2 records
Northern lapwing	Vanellus vanellus	1998 - 2013	0.9 – 1.97		✓	✓	13 records
Skylark	Alauda arvensis	1998 - 1999	0.9 – 1.97		✓	✓	2 records
Song thrush	Turdus philomelos	1998 - 1999	0.9 – 1.97		✓	✓	3 records
Spotted flycatcher	Muscicapa striata	1998 - 2004	1.97		✓	✓	3 records
Starling	Sturnus vulgaris	1998 - 1999	0.9 – 1.97		✓	✓	3 records
Tree pipit	Anthus trivialis	1998 - 2004	1.97		✓	✓	3 records
Tree sparrow	Passer montanus	2004 - 2005	0.9 – 1.97		✓	✓	5 records
Wood Warbler	Phylloscopus sibilatrix	1998 - 2004	1.97		✓	~	3 records
Yellowhammer	Emberiza citrinella	1998	1.97		✓	✓	
Atlantic salmon	Salmo salar	2000 - 2014	0.5 – 1.99		✓	✓	19 records
Brown/sea trout	Salmo trutta	2000 - 2014	0.5 – 1.99		✓	✓	19 records
European eel	Anguilla anguilla	2008 - 2014	0.5 – 1.99		✓	✓	7 records
Bluebell	Hyacinthoides non-scripta	1964 - 2008	0.67 – 1.97	✓ (partially)	1		24 records

Sch1 – birds afforded additional protection during the breeding season Species of biodiversity significance on the Lancashire Long List have been reviewed but are generally covered under an associated Habitat Action Plan.

Invasive Species

- 4.4 The ecological desktop study identified the following invasive species within 1km of the proposed development:
 - Indian (Himalayan) balsam (*Impatiens glandulifera*)
 - Japanese knotweed (*Fallopia japonica*)
- 4.5 Based on information gathered from the sources listed in Table 1 and the surveyor's knowledge, the following protected species were taken into account when the site assessment was carried out:
 - Amphibians
 - Badger
 - Bats (all species)
 - Birds (all species)
 - Otter

Extended Phase 1 Habitat Survey

- 4.6 An extended Phase 1 habitat survey of the site was undertaken during March 2021. Descriptions of the principal habitats are provided below and are illustrated on Figure 1. In brief the site contained the following habitats.
- 4.7 The footprint of the development site, which also includes all habitats affected by the development works, consists of:
 - Scrub (dense/continuous or scattered)
 - Improved grassland
 - Boundaries (hedgerows/fencing and walls)
- 4.8 The wider survey area, which includes habitats within 30m of the development site and features of ecological interest located up to 250m from the development site, contains:
 - Woodland broadleaved (semi-natural)
 - Scrub (dense/continuous and scattered)
 - Improved grassland
 - Neutral semi-improved (species-poor) grassland
 - Tall ruderal
 - Running water
 - Boundaries (hedgerows/fencing and walls)
- 4.9 Descriptions of the principal habitats types that are to be impacted by the development found within the extended Phase 1 habitat survey are reviewed within the following sections. This also covers the potential for protected species and species of conservation concern to be supported by the habitats present. Features of ecological interest located within the wider survey area that may be affected by the development works are also described. Features separated from the site that are unaffected by the development have been omitted.
- 4.10 Target notes have been provided for all semi-natural habitats that are deemed either ecologically important or have the potential to support protected species/Species of Principal Importance; see Appendix 1: Extended Phase 1 Habitat Survey Target Notes.

Ecology Services Ltd – Preliminary Ecological Appraisal (PEA).

Woodland Broadleaved Semi-Natural

- 4.11 Semi-natural broadleaved woodland is present at two locations within the 30m wider survey area. The main and larger area is located to the north of the site, within inaccessible land and has been surveyed from site where possible therefore a thorough survey of this woodland was not undertaken. The second area is to the west of the site along the bank of the River Ribble and was surveyed from the top of the bank. Evidence of ash die back was present within these woodlands.
- 4.12 The survey found the northern woodland to be dominated by mature birch sp. (*Betula sp.*) trees, other tree species include; common ash (*Fraxinus excelsior*), willow sp. (*salix sp.*). The shrub layer contains elder (*Sambucus nigra*), hazel (*Coryllus avellana*), common hawthorn (*Crataegus monogyna*) and bramble (*Rubus fruticosus*). Ground flora species include; lords-and-ladies (*Arum maculatum*), common ivy (*Hedera helix*) and common nettle (*Urtica dioica*).
- 4.13 The survey found the western woodland to be dominated by semi-mature sycamore (*Acer pseudoplatanus*) trees. The shrub layer contains frequent; elder (*Sambucus nigra*) and common hawthorn (*Crataegus monogyna*), occasional; common ash (*Fraxinus excelsior*) and bramble (*Rubus fruticosus*). Ground flora species include; abundant common ivy (*Hedera helix*), abundant dog's mercury (*Mercurialis perennis*), frequent lords-and-ladies (*Arum maculatum*) and occasional common nettle (*Urtica dioica*).
- 4.14 Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 identifies six types of woodland as Habitats of Principal Importance. Included amongst these are lowland mixed deciduous woodland, upland oak woodland, upland mixed ash-woods and wet woodland. All four of these woodlands occur in Lancashire, but are often in intimate mixes with each other and other woodland types.
- 4.15 Woodlands existing since before 1600AD that mainly comprise native species are classified as Ancient Semi-Natural Woodlands (ASNW). ASNW is important in conservation terms because of their richness of flora and fauna communities that have developed over centuries. The NPPF (2019) states that development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.
- 4.16 Both woodlands that fall within the 30m wider survey area are listed as a Habitat of Principal Importance (lowland mixed deciduous woodland), also qualifies as a Lancashire BAP habitat (broadleaved and mixed woodland). The woodlands are therefore considered to be of value at a local level. The woodlands are not expected to be affected by the proposals. The woodland close to the site to the north has a sufficient buffer in the form of a track over compacted ground which exists between the site and the western woodland is separated from the site by Henthorn Road. There are therefore no implications regarding these woodlands and the current proposals for the site and therefore, no further recommendations are made and 'woodland' is excluded from further appraisal.

Scrub Dense/Continuous and Scattered

- 4.17 The site contains scrub, recorded species include abundant common hawthorn (*Crataegus monogyna*), locally frequent bramble (*Rubus fruticosus*), locally frequent goat willow (*Salix caprea*), occasional elder (*Sambucus nigra*) and occasional common ash (*Fraxinus excelsior*).
- 4.18 Scrub is relatively common habitat throughout the local vicinity and is found at several locations within the wider survey area.

4.19 Scrub was both scattered and dense throughout the site and the wider survey area and is a typical habitat locally that has developed on un-managed land.

Poor Semi-improved Grassland

4.20 Semi-improved, species poor grasslands found within the 30m wider survey area contain frequent perennial rye-grass (*Lolium perenne*) and cock's foot (*Dactylis glomerata*). Locally frequent species, likely to be associated with the adjacent broad-leaved woodland, include; common ivy (*Hedera helix*), dog's mercury (*Mercurialis perennis*), lords-and-ladies (*Arum maculatum*) and common nettle (*Urtica dioica*). Occasional species include; creeping bent (*Agrostis stolonifera*), common bent (*Agrostis capillaris*), creeping buttercup (*Ranunculus repens*), broadleaved dock (*Rumex obtusifolius*), curled dock (*Rumex crispus*), herb Robert (*Geranium robertianum*), cow parsley (*Anthriscus sylvestris*) and rough meadow grass (*Poa trivialis*), and rare cleavers (*Galium aparine*).

Improved Grassland

- 4.21 Improved grazed pasture constitutes the largest area of the site and the 30m wider survey area. Species list typically contained dominant perennial rye-grass, frequent annual meadow-grass (*Poa annua*), cock's-foot (*Dactylis glomerata*), creeping bent (*Agrostis stolonifera*), common bent (*Agrostis capillaris*), lesser celandine (*Ficaria verna*), and dandelion agg. (*Taraxacum officinale*). Occasional species include; broadleaved dock (*Rumex obtusifolius*) red fescue (*Festuca rubra*), creeping buttercup (*Ranunculus repens*). Rare species include; cleavers (*Galium aparine*), lords-and-ladies (*Arum maculatum*), common nettle (*Urtica dioica*), cow parsley (*Anthriscus sylvestris*), rough meadow grass (*Poa trivialis*), square stalked willowherb (*Epilobium tetragonum*), ribwort plantain (*Plantago lanceolata*), ragwort (*Jacobaea vulgaris*), thistle spp. (*Cirsium spp.*), dog's mercury (*Mercurialis perennis*), and curled dock (*Rumex crispus*).
- 4.22 By their very nature, very few of the improved and poor semi-improved (species poor) grasslands have any noteworthy plant diversity.

Tall Ruderal

- 4.23 Small area of tall ruderal was located within the 30m wider survey area that was inaccessible. The tall ruderal was located along the north side of the boundary wall and species included willow-herb sp. (*Chamerion sp.*).
- 4.24 Habitats such as tall ruderal are scattered throughout the wider survey area. Although the areas of tall ruderal are small in size, they add to the diversity of habitat types within the survey area. However, tall ruderal won't be affected by the proposals and no further recommendations are made and 'tall ruderal' is excluded from further appraisal.

Running Water

- 4.25 The River Ribble is located within the 30m wider survey area, located on the opposing side of Henthorn road from the site. The eastern bank (site side) has steep vegetated banks approximately 5m high. Bank habitats consisted of broadleaved woodland and scrub. The western bank is directly adjacent to an agricultural field and is shallow, approximately 2m high. Both banks are composed of earth and some erosion was evident along the western bank with the addition of some stone sediment. The river depth is unknown but considered to be at least 2m deep, with evidence of fluctuations in depth. There was a strong southerly current and no aquatic vegetation was observed at the time of the survey. No evidence of water vole or otter was found.
- 4.26 Rivers, along with streams and drainage ditches can be ecological hotspots that form part of a network of corridors throughout the wider survey area.

- 4.27 The botanical value of the river appears to be low but it provides valuable diversity of habitats within the wider survey area. These habitats can provide suitable habitat for a range of wildlife including invertebrates, breeding birds, amphibians and mammals, including otters, water voles and foraging bats.
- 4.28 Certain Rivers are a Habitat of Principal Importance and rivers and streams are a Lancashire BAP habitat.

Hedgerows

- 4.29 The site/ wider survey area contains two hedgerows, both of which are species poor. The hedgerow located within the site is the field boundary between two grazing pastures, at target note TN1. This is a newly planted hedgerow (likely planted within the last couple of years) approximately 1m high (up to 2m in some places). The hedgerow has not fully established and is very open to the elements with multiple gaps and does not provide good habitat for breeding birds. Species comprises entirely of common hawthorn (*Crataegus monogyna*).
- 4.30 The hedgerow located within the 30m wider survey area to the west of the site is located between broadleaved woodland and a small area of species poor semi-improved grassland which is directly adjacent to Henthorn road. The hedge is considered to be mature as it is fully established, approximately 1m high and managed. Species include abundant common hawthorn (*Crataegus monogyna*) and elder (*Sambucus nigra*) and occassional gooseberry (*Ribes sp.*). Associated ground flora species include; frequent cleavers (*Galium aparine*), common nettle (*Urtica dioica*), ivy (*Hedera helix*) and occasional lords-and-ladies (*Arum maculatum*).
- 4.31 Hedgerows that are over 20m in length and are composed of at least 80% of one or more UK native species are classed as a Habitat of Principal Importance for their conservation value within the landscape. The hedgerow located within the wider survey area and the development site are considered to be a Habitat of Principal Importance.
- 4.32 Certain hedgerows are protected under the Hedgerow Regulations 1997. The hedgerows located in the wider survey area and the development site are species-poor (fewer than four woody species per 30m) and therefore are not considered to fall under the Hedgerow Regulations 1997.

Fences/Walls

- 4.33 Several fences are located around the site and within the wider survey area, mostly associated with field boundaries to restrict the movement of livestock. Fences do not provide any noteworthy habitat within the wider landscape and therefore, no further recommendations are made.
- 4.34 One stone wall exists along the northern boundary of the site. The wall is approximately 1.5m high and intact. Some cracks exist within the wall which may provide low quality habitat for breeding birds; however, the wall is mostly mortared along its length and not thought to provide any suitable habitat for bats and only low suitability for breeding birds. Therefore, no further recommendations are made and 'walls' are excluded from further appraisal.

Protected and Notable Plant Species

4.35 No plant species fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) were found on the site. No nationally rare/scarce/Lancashire key plant species were recorded on the site.

Invasive Plant Species

4.36 No invasive species were recorded during the survey and therefore are excluded from further appraisal.

Amphibians

- 4.37 The desktop study found 1 record of amphibians within 1km of the development site. One common frog (*Rana temporaria*) located approximately 350m east of the site. The desktop study also identified common toad (*Bufo bufo*), palmate newt (*Lissotriton helveticus*), smooth newt (*Lissotriton vulgaris*) between 1 and 2km from the site.
- 4.38 The development site only contained habitats of lower value to amphibians which included; improved grasslands and a newly planted hedgerow. The site did not contain any waterbodies suitable for amphibian breeding.
- 4.39 There are no ponds or suitable water-bodies present either within the site or within 250m of the site. There are therefore no implications regarding amphibians and the proposals for the site and therefore, no further recommendations are made and 'amphibians' are excluded from further appraisal.
- 4.40 Great crested newts and the habitat they use for protection and shelter are protected under Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended).
- 4.41 Common toad and great crested newt are Species of Principal Importance listed under the NERC Act 2006. Common toad, common frog and great crested newt are Lancashire BAP species.

Badger

- 4.42 The desktop study found one historic (1999) record of badger (*Meles meles*) within 2km of the development site, located approximately 1.7km north of the site.
- 4.43 No signs of badger were recorded within the site or within 30m of the site. Due to no access, the woodland with the 30m wider survey area to the north of the site could not be fully surveyed for evidence of badger. However, no mammal burrows were observed within this woodland when surveyed from site. No mammal burrows were observed within the site; however, the development site contains habitats that could be used by badger.
- 4.44 Badgers and their setts are protected under the Protection of Badgers Act (1992). Sett interference includes: disturbing badgers whilst they are occupying a sett, as well as destroying a sett or obstructing it.

Bats

- 4.45 The desktop study found two records of bats within 1km of the development site. Two roosting common pipistrelle (*Pipistrellus pipistrellus*) bats located approximately 550m north east of the site. A further eight common pipistrelle bat records were located between 1 to 2km from the site in addition to a single historic (1998) record of a Daubenton's bat (*Myotis daubentonii*) approximately 1.5km from the site.
- 4.46 The development site contains no suitable features that may provide suitable bat roost habitat. Foraging habitats take the form of scrub and hedgerows, which are present within the site.

Ecology Services Ltd – Preliminary Ecological Appraisal (PEA).

- 4.47 The wider survey area contains woodland that is considered to be suitable for roosting bats. Linear features within the wider landscape such as hedgerows and associated waterbodies (including running and standing water) are likely to be those associated with greatest bat activity. Habitats within the local area are considered ideal for foraging bats and it is highly likely that bats are present in the survey area.
- 4.48 All British bats and their roosts are afforded protection under the 1981 Wildlife and Countryside Act (as amended) and are listed under Annex IV of the Habitats Directive as in need of protection. Certain species of bat are Species of Principal Importance under the NERC Act 2006, including noctule bat (*Nyctalus noctula*), soprano pipistrelle bat (*Pipistrellus pygmaeus*) and brown long-eared bat (*Plecotus auritus*). Brandt's bat, Daubenton's bat, whiskered bat, Natterer's bat, noctule bat, common pipistrelle and brown long-eared bat are Lancashire BAP species. Serotine and barbastelle are considered vulnerable and Leisler's and Nathusius' pipistrelle, near threatened in Britain and England in the Red List for Britain's Terrestrial Mammals (Mathews and Harrower, 2020).

Birds

- 4.49 The desktop study found no records of Schedule 1 species within 1km of the development site. The desktop study found records of Schedule 1 species: peregrine (*Falco peregrinus*), kingfisher (*Alcedo atthis*), and little ringed plover (*Charadrius dubius*) between 1-2km from the site. No suitable breeding habitat is located within the site for any of these species.
- 4.50 The development site provides a limited range of habitats suitable for birds such as scrub, grazing pasture and a stone wall. All of these habitats within the site are considered to be of low suitability for birds, however some scattered scrub within the site which is considerably more mature than the rest may provide suitable habitat to support breeding birds.
- 4.51 The wider survey area provides a range of habitats suitable for birds such as woodland, scrub, and hedgerows. These habitats will not be directly affected by the proposed development.
- 4.52 The Wildlife and Countryside Act (WCA) 1981 (as amended), states that all wild birds are protected at all times against killing or injury. Under the WCA, it is an offence to kill, injure or take any wild bird, to take damage or destroy the nest of any wild bird, or to take or destroy the egg of any wild bird.
- 4.53 Schedule 1 birds are afforded additional protection against disturbance during the breeding bird season at or near the nest. Whilst it is considered unlikely that a Schedule 1 bird species would breed within the site, options to avoid disturbance for Schedule 1 species will need implementing if a Schedule 1 species is found to be present on site during the breeding bird season.

Otter

- 4.54 The desktop study found seven records of otter (*Lutra lutra*) within 2km of the development site, located between approximately 1.5-1.9km of the site.
- 4.55 There are habitats located within the wider survey area that are considered suitable to support foraging otter and may provide holt habitats.
- 4.56 The site offers no laying up areas or holt potential for otter, but is fully accessible to otter. The woodland to the north may provide suitable habitat for both laying up and holts to be present but land access prevented a thorough search of this area. It was not possible to walk the woodland on the River Ribble bank edge due to health and safety reasons and the bank

was observed from a safe distance. No overhanging trees were visible that would provide otters with either a temporary refuge or holt potential. At no point during the survey were spraints, flattened vegetation or mammal pathways leading to the woodland areas or the River Ribble Bank edge observed.

4.57 Otters are protected under the Wildlife and Countryside Act 1981 (as amended) and Annex IV of the EC Habitats Directive which has been transposed into national legislation by means of the Conservation of Habitats and Species Regulations 2017 (as amended). Otters are one of the Species of Principal Importance listed under the Natural Environment and Rural Communities (NERC) Act 2006 and a Lancashire BAP species.

Invertebrates

- 4.58 The desktop study identified 1 record of White-letter Hairstreak butterfly (*Satyrium w-album*) approximately 100m north of the site dated 2010. This species of butterfly is protected under Schedule 5 of WCA 1981 and a Species of Principal Importance listed under the Natural Environment and Rural Communities (NERC) Act 2006 and additionally a Lancashire BAP species. This particular species breeds on species of Elm (*Ulmus spp.*) But often feeds at ground level on flower nectar.³ Habitats within the site and the immediate wider survey area are thought to be unsuitable for this species, and the presence of this species within the wider landscape is considered to be unaffected by the proposed development.
- 4.59 Habitats within the development site and wider survey area of value to invertebrates include: woodland, scrub, hedgerows and running water. The proposals are only likely to affect a small section of young hedgerow and scrub both of low ecological value, which is thought not to provide any additional value within the local area for invertebrates. It is considered that the proposals will not directly affect any of the invertebrate populations using the woodland or the River Ribble located within the 30m wider survey area. There are therefore no implications regarding invertebrates and the current proposals for the site.

5.0 Impacts and Recommendations

- 5.1 The National Planning Policy Framework (NPPF) (2019) states that if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused. Development whose 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. This section, therefore, makes recommendations to avoid ecological impacts, mitigate and/or compensate unavoidable impacts and provide ecological enhancement.
- 5.2 S.40 of the NERC Act 2006 sets out the duty for public authorities to conserve biodiversity in England. Habitats and Species of Principal Importance for the conservation of biodiversity are identified by the Secretary of State in consultation with NE, under S.41 of the NERC Act for England. The Local Planning Authority and Government Conservation Organisations (e.g. Natural England and the Environment Agency) will expect account to be taken of these habitats and species in the overall layout and landscape strategy for the development.

Ecology Services Ltd - Preliminary Ecological Appraisal (PEA).

³ More information on the White-letter Hairstreak can be found here: <u>https://butterfly-conservation.org/butterflies/white-letter-hairstreak</u>

Designated Sites Impacts and Recommendations

- 5.3 Two Biological Heritage Sites are located within 1km of the development site, one of which is located within the 30m wider survey area. however, there will be no direct impacts to these sites as a result of the development proposals. Measures to prevent any indirect impacts such as pollution via water run-off into the River Ribble will need to be implemented in full.
- 5.4 There is only one statutory designated sites within 2km of the site, the Hodder River Section SSSI is located 1.92km from the site. In addition to this SSSI site, the site falls within Natural England's Impact Risk Zone for another unspecified SSSI site.
- 5.5 In order to assess the impacts of the development upon this statutory designated site, Natural England's Impact Risk Zones (IRZs) have been reviewed to assess whether consultation is required. The Site Check Report generated using the Multi-Agency Geographic Information for the Countryside (https://magic.defra.gov.uk/), detailed the following consultation requirements for the site location:
 - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
 - Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.
 - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
 - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.
 - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more.
- 5.6 Taking into consideration the scale of the development works and the above points, no consultation with Natural England regarding likely effects on the SSSI is required.

Habitats Impacts and Recommendations

- 5.7 The survey found the site to contain a Habitat of Principal Importance, a hedgerow.
- 5.8 Habitats within the development site and the wider survey area are considered suitable to support European and Statutory Protected Species, Species of Principal Importance and Local BAP species.
- 5.9 The following sections briefly considers each habitat that is impacted by, or adjacent to the site that may be impacted by the proposed development and provides advice upon each habitat of ecological value and the species it is considered suitable to support.

Scrub Dense/Continuous and Scattered

- 5.10 It is recommended that scrub is retained where possible. However, such small losses at site level are considered negligible.
- 5.11 Any works within scrub habitat may need to take into account protected and priority species prior to works. Please refer to the relevant species section prior to works.

Poor Semi-improved and Improved Grassland

5.12 The majority of the habitat to be lost on site is improved grassland and is of low ecological value. This habitat does not require any particular conservation measures, although retention

is recommended where possible. There is scope within the proposals to enhance any grassland to be retained by reducing management frequency in low traffic areas and overseeding those areas with a grassland meadow mix appropriate to the local area. This will increase the diversity of habitats on the site and ensure there is a net gain of biodiversity.

5.13 Any works within grassland habitat may need to take into account protected and priority species prior to works. Please refer to the relevant species section prior to works.

Running Water

- 5.14 The watercourse and associated riparian habitats are of high ecological value at a landscape level providing a wildlife corridor and may provide suitable habitats for water vole, otter, breeding birds, foraging bats and invertebrates.
- 5.15 The Client is advised that works in and adjacent to watercourses may need to take account of the Environment Agency North West Region Land Drainage Byelaws 1981 and the Salmon and Freshwater Fisheries Act 1975.
- 5.16 Under the terms of the Environmental Permitting (England and Wales) Regulations 2016 (as amended), the prior written consent of the Environment Agency is required for any proposed works or structures, in, under, over or within 8 metres of the top of the bank of a main river. An assessment should be carried out to determine whether the proposed access road would lie within 8 metres of the top of the bank of the River Ribble and written consent should be sought accordingly.

Hedgerows

- 5.17 Native hedgerows over 20m qualify as a Habitat of Principal Importance. It is recommended that the hedgerows within the site are retained and protected during construction.
- 5.18 Where the hedgerow removal is unavoidable, compensatory hedgerow planting should be undertaken within the site of a minimum equivalent length and species diversity using native stock of local provenance. The creation of species-rich hedgerows around and between the proposed holiday lodges, to offset any hedgerow loss and also provide ecological enhancement is advised. There is also opportunity to enhance existing hedgerows by planting trees and increasing species diversity.
- 5.19 Any works near to retained hedgerows should be carried out with adequate provision for root protection.
- 5.20 Works in or affecting hedgerows may need to take into account protected and priority species prior to works. Please refer to the relevant species section prior to works.

Species Impacts and Recommendations

- 5.21 An assessment of the potential for the site to support protected species or species of conservation interest was undertaken as part of the extended Phase 1 habitat survey. This was undertaken in order to scope the potential for protected species being present to advise the Client on potential further survey and mitigation requirements.
- 5.22 The following sections provide impacts and recommendations upon species that the development has the potential to affect. Species reviewed in Section 4 that are not affected by the proposals have been omitted.

Badger

- 5.23 The development proposals include impacts to improved grassland, scattered scrub, and a young hedgerow. These habitats provide suitable sett, foraging and commuting habitats for badger.
- 5.24 A guideline distance of 30m from any active sett provides an indication of the potential for disturbance to badgers. No badger setts were found within the proposed development site or the surrounding 30m boundary and no badger pathways or any other signs were observed throughout the survey area where access was available. Due to the access restrictions, the woodland along the River Ribble and to the north of the site was not completely searched for evidence of badger and could only be surveyed from a distance.
- 5.245.25 There is a stone wall and a compacted vehicular access track located between the woodland to the north and the site. There is also a tarmac road between the site and the woodland adjacent to the River Ribble. It is considered unlikely that any setts present in the woodland areas would have tunnels that run beneath the road or the compacted track, although this cannot be fully ruled out. However, because no evidence of badger was observed in either woodland where they could be viewed and that no desktop study records exist locally, it is likely that badgers are absent from the site and a precautionary approach can be considered.
- 5.255.26 As best practice the contractors must be mindful of the potential for badgers at all times. It is recommended that a toolbox talk in relation to badger is provided to the principal contractor and the use of standard best practice mitigation measures in relation to badgers and development as detailed below:
 - no pits/trenches to be left overnight without means of escape such as a sloped end to the trench/rough plank.
 - No works to be undertaken during the hours between dusk and dawn,
 - Commuting opportunities to be maintained at all times overnight.
 - No overnight lighting to be used;
 - No wet concrete to be left uncovered overnight; and
 - A tidy work area to be maintained and equipment to be stored suitably overnight, including ensuring that hazardous substances are secured.
- 5.27 As best practice any development must be mindful of the potential for badgers at all times. If a badger/s is/are or a badger sett/s is/are identified or suspected during the works then all works must cease and the ecologist notified for advice.

Bats

5.265.27 The development proposals include impacts to improved grassland, scattered scrub, and a young hedgerow. These habitats only provide low quality foraging and commuting habitats for bats.

5.275.28 The wider survey area contains habitats that are considered ideal for bat species including roosting and foraging habitats, such as the broad-leaved woodland and the River Ribble. Therefore, it is highly likely that bats are present within the survey area and features such as hedgerows should be retained where possible. Enhancements in the form of species rich hedgerows are proposed to be planted around the development which will mitigate any loss of habitat and provide overall net gain.

Ecology Services Ltd – Preliminary Ecological Appraisal (PEA).

Birds

- 5.285.29 The development proposals include impacts to scattered scrub, which may be used by breeding birds.
- 5.295.30 If works are to be undertaken during the breeding bird season, which runs from March to August/September inclusive, then an assessment by an ecologist for breeding birds should be undertaken prior to works. If breeding birds are found, it is likely that works will have to be delayed until breeding has ceased. Ideally, all affected breeding bird habitat should be cleared outside of breeding bird season. It is good practice to replace any breeding bird habitat lost to development. All replacement should be made on a minimum like for like basis. This could be achieved with the creation of species-rich hedgerows around and between the proposed holiday lodges.
- 5.305.31 Areas of scattered scrub are to be cleared as per the development proposals, some of which may provide suitable breeding bird habitat. Ideally, all affected breeding bird habitat should be cleared outside of breeding bird season, which runs from March to September inclusive.
- 5.315.32 Options to avoid disturbance for Schedule 1 species will need implementing if a Schedule 1 species is found to be present on site.

Otter

- 5.325.33 Due to the local proximity of the River Ribble to the site, considerations should be made regarding the possible presence of otter within the site. Only habitats suitable to support commuting otter are present within the site and there is connectivity to habitats that might provide otter with suitable breeding habitat. Habitats within the wider survey area, namely the woodland directly north of the site, may be suitable for otter holts. However, due to the access restrictions, this woodland which is less than 10m to the north of the site was not completely searched for evidence of otter and could only be surveyed from a distance from within the site. It is thought that should an otter be using this woodland that it is unlikely to be affected by the proposals.
- 5.335.34 As best practice the contractors must be mindful of the potential for badgers at all times. It is recommended that a toolbox talk in relation to otter is provided to the principal contractors and the use of standard best practice mitigation measures in relation to otter and development as detailed below:
 - No pits/trenches to be left overnight without means of escape,
 - No floodlighting of the watercourse,
 - No works to be undertaken during the hours between dusk and dawn,
 - Commuting opportunities to be maintained at all times overnight.
- 5.34<u>5.35</u> If at any time an otter is seen or suspected, all works must cease and either Natural England or the acting Ecologist should be contacted for advice.

Other Recommendations Habitat Compensation

5.355.36 Additional compensation towards habitat losses at the site, particularly the loss of poor semi-improved grassland includes the following:

- The creation of species-rich hedgerow on the southern boundary of the proposed access road, using native species of local provenance, aiming to create a Habitat of Principal Importance and Local BAP Habitat and overall biodiversity net gain.
- Increase links between the plots by planting up the green areas around the proposed holiday lodges with native or wildlife friendly berry/nectar rich shrubs.

Working Close to Water

- 5.365.37 The proposed development site is in close proximity to the River Ribble and it is therefore important that suitable pollution prevention measures are implemented, prior to any works.
- 5.375.38 All pollution prevention guidance, known as PPGs, previously maintained by the Environment Agency have been withdrawn from use, however, this guidance still provides useful information on pollution prevention when working within or near the water bodies, dependent on the development proposed.

Wildlife Friendly Landscape Proposals

5.385.39 It is recommended that any planting schemes within the development should adhere to the local planning policy and use native species of local provenance. There is scope to enhance existing ecological features but all loss should be replaced on a minimum like for like basis. Planting schemes should aim to meet Local BAP targets.

Enhancement Recommendations

- 5.395.40 In line with national planning policy new developments should ensure that there is a minimum of no net loss of biodiversity at a site and result in an overall biodiversity gain.
- 5.40<u>5.41</u> Further possible recommendations to ensure that there is an overall biodiversity gain are as follows:
 - The enhancement of existing hedgerows by planting trees and increasing species diversity.
 - The planting of Elm species (Ulmus spp.) scattered throughout the newly created hedgerow may encourage local species such as the White-letter Hairstreak butterfly (Satyrium w-album) to use the site.

6.0 References

Anon (1995). Biodiversity: The UK Action Plan. HMSO, London.

Anon (1999). Wild about the North West – a biodiversity audit of North West England. Regional Biodiversity Steering Group.

Biodiversity Reporting and Information Group (BRIG) (2008, updated 2011). UK Biodiversity Action Plan Priority Habitat Descriptions.

Booy, O. and Wade, M. (2007). Giant Hogweed Management in the United Kingdom. RPS Group Plc.

British Standards Institute (BSI) (2012). BS 5837:2012 Trees in relation to design, demolition and construction.

CIEEM (2017a). Guidelines for Preliminary Ecological Appraisal.

CIEEM (2017b). Guidelines for Ecological Report Writing.

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition, The Bat Conservation Trust, London.

Dean, M, Strachan, R., Gow, D. and Andrews, R. (2016) The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series) (2016). Eds Fiona Mathews and Paul Chanin. The Mammal Society.

DEFRA (2006). Local Sites - Guidance on their Identification, Selection and Management.

DEFRA (2011). Biodiversity 2020: A strategy for England's wildlife and ecosystem services.

Edwards, C (2006). Forestry Commission Practice Guide Managing and controlling invasive rhododendron. Forestry Commission: Edinburgh.

English Nature (2001). Great Crested Newt Mitigation Guidelines (August 2001 version). English Nature, Peterborough.

Environment Agency (2006). North West conservation access and recreation report 2005/6. Environment Agency, Warrington, 75 pp.

Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* 108, 708–746.

Gurnell J., Lurz P., McDonald, R. and Pepper, H. (2009). Practical techniques for surveying and monitoring squirrels. The Forestry Commission.

Institute of Environmental Assessment (1995) 'Guidelines for Baseline Ecological Assessment

Joint Nature Conservation Committee (Revised reprint 2010). Handbook for Phase 1 habitat survey, A technique for environmental audit. JNCC, Peterborough.

Joint Nature Conservation Committee (2001-2006). List of Species/Habitats of Principal Importance.

Joint Nature Conservation Committee (JNCC) and DEFRA (on behalf of the Four Countries' Biodiversity Group) (2012). UK Post-2010 Biodiversity Framework. July 2012. Available from: http://jncc.defra.gov.uk/pdf/UK_Post2010_Bio-Fwork.pdf

Lancashire County Council and Lancashire Wildlife Trust (1998). Biological Heritage Sites – Guidelines for Selection.

Mathews F, and Harrower C. (2020). IUCN – compliant Red List for Britain's Terrestrial Mammals. Assessment by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough.

Ministry of Housing, Communities & Local Government (February 2019). National Planning Policy Framework. Online - available from:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_d ata/file/779771/NPPF_Feb_2019_print.pdf. [Accessed February 2019].

Nature Conservation Council (1989). Guidelines for selection of biological SSSI. Nature Conservancy Council, Peterborough.

ODPM (2005). Government Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System. Online - available from; https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_d ata/file/7692/147570.pdf [Accessed April 2021].

Partnership for Biodiversity in Planning (2019). Biodiversity Data Search Guidance for Ecological Consultants.

Preston, D., Pearman, D.A. and Dines, T.D. (2002). New Atlas of the British and Irish Flora. Oxford University Press.

Ratcliffe, D.A. (1977). A Nature Conservation Review.

The European Union (Withdrawal) Act 2018 (as amended)

Wembridge, D., White, I., Al-Fulaij, N., Marnham, E. and Langton, S. (2019). The State of Britain's Dormice 2019.

Figure 1: Extended Phase 1 Habitat Survey Map

Figure 2: Proposed site plan

Appendix 1: Legislation

Statutory Designated Sites Special Area of Conservation (SAC)

Special Areas of Conservation are designated under Regulation 12 the Conservation of Habitats and Species Regulations 2017 (as amended). Special Areas of Conservation are sites of national importance which contribute significantly to the maintenance, or restoration, at favourable conservation status in their natural range of the 189 natural habitat types listed in Annex I to the Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive) or the 788 species listed in Annex II to that Directive and to the maintenance of biological diversity within the Atlantic biogeographic region. The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds). The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

Special Protection Areas (SPA)

Special Protection Areas are classified under the Conservation of Habitats and Species Regulations 2017 (as amended). SPAs are those sites across the United Kingdom's territory which are most suitable in number and size for (a) the conservation of the species listed in Annex 1 to Directive 2009/147/EC on the conservation of wild birds (the Birds Directive) which naturally occur in that territory, and (b) the conservation of regularly occurring migratory species of birds not listed in Annex 1 which naturally occur in that territory. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

Ramsar Sites

The Convention on Wetlands was formed in Ramsar, Iran in 1971 and is now termed the Ramsar Convention. The Ramsar Convention came into action in 1975. It is an international government treaty whereby all countries, that are members, have a commitment to maintain the ecological value of their designated Wetlands of International Importance. It is the only global treaty that deals with a specific ecosystem (wetlands).

The Ramsar Convention provides a framework for the international cooperation and national action for the use of and conservation of wetland habitats and their associated resources.

Site of Special Scientific Interest (SSSI)

Sites of Special Scientific Interest are designated under The Wildlife and Countryside Act (WCA) 1981 (as amended). The WCA 1981 (as amended) is the domestic implementation of the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention).

Local Nature Reserves (LNR)

Local Nature Reserve (LNR) is a statutory designation under Section 21 of the National Parks and Access to the Countryside Act 1949 and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006 (NERC). LNRs are local sites that have been designated by the local authorities. To qualify for LNR status the site must be of importance for any of the following reasons; wildlife, geology, education or public enjoyment. The Local Plan for an area will detail any additional protection given to the LNR such as protection against damaging operations and/or protection against development within or adjacent to the LNR. LNRs are statutorily designated sites at the local level. There is no national legal protection specifically for LNRs.

European Protected Species

European protected species (EPS) and their habitat are afforded strict protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).

Taken together, this legislation makes it an offence to:

- Deliberately (intentionally) kill, injure or take an EPS;
- Possess or control any live or dead specimen or anything derived from an EPS;
- Deliberately (intentionally) or recklessly damage, destroy or obstruct access to a breeding site or any structure or place used for shelter or protection by an EPS; or
- Deliberately (intentionally) or recklessly disturb an EPS while it is occupying a structure or place which it uses for that purpose.
- Sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative).

The above legislation applies to all life stages, including eggs, juveniles and adults.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 will continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

Nationally Protected Species

In England and Wales nationally protected species are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). The Wildlife and Countryside Act 1981, together with amending legislation, lists the following as offences:

- intentionally capture, kill a listed species;
- damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care);
- disturb them in a place of shelter or protection (on purpose or by not taking enough care); and
- possess, sell, control or transport live or dead listed species or parts of them.

The Office of the Deputy Prime Minister (ODPM) Circular 06/2005, states that the presence of a protected species (European or National) is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.

Badgers and their active setts are protected under the Protection of Badgers Act (1992). The Protection of Badgers Act 1992 was designed to protect badgers from baiting and deliberate harm or injury. It also contains restrictions that apply more widely.

Under this legislation it is an offence to:

- Wilfully kill, injure or take, or attempt to kill, injure or take a badger.
- Cruelly ill-treat a badger, dig for badgers, use badger tongs, use a firearm other than the type specified under the exceptions within the Act.
- Intentionally or recklessly damage, destroy or obstruct access to any part of a sett.
- Disturb a badger whilst it is occupying a sett.
- causing a dog to enter a sett,
- Sell or offer for sale or possess a live badger,
- Have possession or control of a live badger.
- Mark a badger or attach any ring, tag, or other marking device to a badger.

Developments with potential to disturb, destroy or obstruct an active badger sett will require a badger development licence from Natural England/ Natural Resources Wales, which permits otherwise illegal actions.

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). Under the WCA, it is an offence to kill, injure or take any wild bird, to take damage or destroy the nest of any wild bird or to take or destroy the egg of any wild bird. A special penalty is levied to any of the above offences being committed in conjunction with a bird listed on Schedule 1 of the WCA. It is also an offence if a person disturbs any bird listed on Schedule 1 while it is building a nest, is on or near a nest containing young or disturbs dependent young of such a bird.

The Countryside and Rights of Way Act 2000 has made it an offence to intentionally or recklessly disturb Schedule 1 species as above and also an offence to intentionally or recklessly take, damage or destroy the nest of any wild bird or its eggs or dependent young.

Invasive Species

Schedule 9 of The Wildlife and Countryside Act 1981 (as amended) lists invasive non-native plant species that are considered to have a detrimental effect upon native flora wherever they occur. It is therefore an offence to "plant or otherwise cause them to grow in the wild". This includes allowing the species to grow/spread, causing the species to spread or transferring polluted ground material from one area to another. Waste containing these species may be classed as controlled waste under the Environmental Protection Act (Duty of Care) Regulations 1991, which requires all producers, carriers and disposers of waste to follow a code of practice and keep records and must comply with section 34 of the Environmental Protection Act 1990.

Section 23 of the Infrastructure Act 2015 amended the Wildlife and Countryside Act 1981 by inserting a new Schedule 9A to introduce a statutory regime of species control agreements and orders. This schedule ensures that, in appropriate circumstances, landowners take action on Schedule 9 invasive species, or permit others to enter the land and carry out those operations, to prevent their establishment and spread.

Under Section 23 of the Infrastructure Act 2015, the environmental authority has powers to make a species control order to require an owner to take action against an invasive non-native species. The environmental authorities with the powers to make species control agreements or orders in England are the Secretary of State, Natural England, the Environment Agency and the Forestry Commission and in Wales, the Welsh Ministers and Natural Wales.

The EU Invasive Alien Species Regulation (1143/2014) imposes strict restrictions on a list of species known as "species of Union concern" and is implemented by the European Commission Implementing Regulation 2016/1141, which came into force on 3 August 2016. A further 12 species were added to the list on the 13th July 2017 and came into force on 2nd August 2017. This list is drawn up by the European Commission and managed with Member States using risk assessments and scientific evidence.

Under the EU Regulation, it is a requirement for management measures to be put in place for widespread invasive species. The Invasive Alien Species (Enforcement and Permitting) Order 2019 came into effect on 1st October 2019.

The Regulation ensures that a landowner must act responsibly and not allow an invasive species to grow or spread outside their land, which could be an offence and/or contrary to the Regulation. Where this cannot be guaranteed the landowner is required to consider safely removing and disposing of any listed plant.

Ecology Services Ltd – Preliminary Ecological Appraisal (PEA).

Appendix 2: Extended Phase 1 Habitat Survey Target Notes

TN1 – Species-poor hedgerow

A hedgerow located within the site functioning as the field boundary between two grazing pastures of which the site crosses. The hedgerow is a newly planted (likely planted within the last couple of years) generally 1m high but as high as 2m in some places. The hedgerow has not fully established itself yet, and therefore is very open to the elements with multiple gaps, it therefore currently does not provide much suitable habitat for breeding birds. Species comprises entirely of common hawthorn. A barbwire fence runs parallel on either side of the hedgerow. The proposals indicate a small section of the hedgerow is to be removed at the northern end to connect the two grazing pasture with a new road.

TN2 – River Ribble

The River Ribble is located within the 30m wider survey area, located on the other side of Henthorn road from the site. The eastern bank (site side) has steep vegetated banks approximately 5m high. Bank habitats consisted of broadleaved woodland and scrub. The western bank is directly adjacent to an agricultural filed and is shallow, approximately 2m high. Both banks are composed of earth and some erosion was evident along the western bank with the addition of some stone sediment. The river depth is unknown but considered to be at least 2m deep, with evidence of fluctuations in depth. There was a strong southerly current and no aquatic vegetation was observed at the time of the survey. No evidence of water vole or otter was found.

Appendix 3: Desktop Study Records

© Lancashire Environment Record Network 2021

Appendix 4: Photographs