

Preliminary Ecological Appraisal

**Pendle Fisheries
A59, Barrow
Lancashire
BB7 9DH**

Provided for:
Mr. J. Hocking
J P Hocking Limited
Rannoch
Holmefield Avenue
Thornton Cleveleys
Lancashire
FY5 2QT

28th May 2021



Providing *ecology* support for *everyone*

www.ecologyservice.co.uk
Chipping | Lancashire | PR3 2GH
T 01995 61492 E info@ecologyservice.co.uk
Registered in England and Wales no. 5329675

Summary

A data search, surveys and a preliminary ecological appraisal were carried out in 2021 to assess the value or likely value of the proposed development site.

The **demonstrable** value of the proposed development site, and therefore its ecological constraints are as follows:

- The presence of Broad Habitats (standing water and boundary/linear features)
- The presence of foraging and commuting bats
- The presence of nesting birds
- The presence of wintering birds

The proposed development area also has **potential** value in relation to:

- Use by common toad, hedgehog and brown hare

In addition, Himalayan balsam has been confirmed within the boundary of the proposed development site.

Management advised and recommended to address the ecological constraints is as follows:

- Undertake pre-works, during works and post-works precautions as regards all known and potential species
- Minimise disturbance to and loss of habitats (includes use and management of artificial lighting during and post development)
- Protect retained waterbodies, trees and existing vegetation
- Adopt measures to control the potential for non-native invasive species to spread onto the proposed development site and surrounding area

Opportunities for ecological enhancement are as follows:

- Restoring/creating waterbodies to maintain and enhance us, particularly by birds and amphibians.
- Using and encouraging the growth of native species of local provenance.

It is the professional judgement of Ecology Services UK Ltd that in the case of the proposed development at the Pendle Fisheries site, a Preliminary Ecological Appraisal provides a sufficient level of detail; this reflects the small-scale nature of the development, the ecological features present and the predicted impacts of the scheme. This judgement is made on the basis that all mitigation and enhancement works, as outlined in section 7 of this report, are adopted.

Report contents

1.	Introduction	4
2.	Objectives and methodology	6
3.	Description of the survey site	14
4.	The results of the surveys	16
5.	Evaluation	24
6.	Limitations of the surveys	28
7.	Advice and recommendations	29
8.	References	38

Appendices

App 1 – Photographs of proposed development area

1 Introduction

1.1 This report has been produced on behalf of J P Hocking Limited as part of the information required for a proposed development on land to the north west of Pendle Fisheries. The proposed development comprises amendments to the current planning permission for the installation of static holiday caravans and associated infrastructure.

1.2 Ecology Services UK Limited was commissioned in March 2021 to carry out a preliminary ecological appraisal and to produce a report.

1.3 It is proposed to seek an amendment to an existing planning permission reference 3/20150426 (16/10/2015)

1.4 The information contained within this report comprises:

- The methodology used for the surveys
- A brief description of the proposed development site
- The results from the surveys
- An evaluation of the ecological aspects of the proposed development site
- Limitations to the surveys
- Advice and recommendations in relation to the survey site and the proposed development

1.5 This report complies with national best practice guidance as outlined in:

Chartered Institute of Ecology and Environmental Management (2017), *Guidelines for Preliminary Ecological Appraisal. Second Edition*. CIEEM, Hampshire

Pat Waring and Janette Gazzard carried out the surveys and prepared the report.

1.6 Pat is a licensed great crested newt surveyor, a licensed bat worker (Class 2 licence), a registered consultant of the Bat Low Impact Class Licence, a Chartered Environmentalist and a full member of the Chartered Institute of Ecology and Environmental Management, with a Bachelor of Science degree in Biology.

Pat has been working as an ecological consultant for over twenty three years, most recently as Director of Ecology Services UK Limited. This work includes provision of expert advice and guidance to bodies such as Statutory Nature Conservation Organisations, Local Planning Authority, National Park Authorities and Lancashire Police Authorities.

Pat has recognised and extensive experience and knowledge of ecological survey, monitoring, condition assessment and impact assessment techniques; these include ecological surveys and assessments.

Janette is a full member of Chartered Institute of Ecology and Environmental Management, with a Bachelor of Science degree in Environmental Management.

Janette has over seventeen years' experience working in ecology and nature conservation, including roles as a Senior Ecologist for a large multidisciplinary company and as a lead adviser for Natural England throughout the North West of England. She has a range of demonstrable skills including habitat surveys, ecological appraisals, protected species surveys and mitigation, conservation management advice and condition assessments.

Pat and Janette meet the requirements for knowledge, skills and practical experience as outlined in the CIEEM technical guidance series, Competencies for Species Surveys available at:
<http://www.cieem.net/competencies-for-species-survey-csS>

Pat and Janette have previously undertaken ecology surveys at Pendle Fisheries site in 2015 these include; breeding bird surveys, bat activity surveys, amphibian surveys, water vole and otter surveys.

1.6 Advisory note

The information in this letter represents the professional opinion of an ecological consultancy and does not constitute professional legal advice. You may wish to seek professional legal interpretation of the wildlife legislation associated with this area of work.

The information, opinion and advice that Ecology Services UK Ltd has prepared are true, and have been prepared in accordance with the CIEEM Code of Professional Conduct. Ecology Services UK Ltd confirms that the opinions expressed are our true professional bone fide opinions.

Ecology surveys are time-limited; as a rule survey findings can generally be relied on for the season in which surveys took place. However, mobile species such as bats and birds may increase or decrease in numbers and change behaviours over time. Statutory agencies will often accept survey results for 12-18 months, but this varies around the country.

Ecology Services UK Ltd personnel make a professional judgement as to how long the results of our surveys can be relied on, for the purposes of a planning submission or similar. Advice and recommendations as regards currency and its impacts on decision making are included in section 7 of this document.

2 Objectives and methodology

2.1 General background

The brief for this work was to carry out a preliminary ecological appraisal of a proposed development site to the north section of Pendle Fisheries, Barrow, Lancashire.

Information gathering involved a desk-based study and site surveys.

The methodology was designed to address the following objectives.

- To identify designated sites, habitats and protected species present on and adjacent to the proposed development site
- To assess the potential for protected species to occur on the proposed development site
- To enable clear advice to be provided regarding the implications of designated sites, habitats and protected species presence
- To enable clear advice to be provided regarding the potential for occurrence of protected species, such as the need for further surveys

The assessment focussed on a number of aspects which, if present, would help to determine the ecological value of the site and therefore help to identify any potential constraints to the proposed development.

These aspects were as follows:

- Presence of sites and features designated for ecological reasons
- Presence or likely presence of protected species
- Nesting and other significant use by birds
- Presence of important habitats and species (including Biodiversity Action Plan (BAP) broad habitats, as well as Species and Habitats listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006
- Presence of hedges
- Presence of undesirable species

2.2 Desk-based study

2.2.1 Presence of designated sites

Information about statutorily designated sites, ancient woodlands and Local Nature Reserves was accessed from the MAGIC map website (<https://magic.defra.gov.uk/>).

Information about the location of non-statutory wildlife sites was accessed from Lancashire Environment Record Network **LERN**, the local environmental record centre for Lancashire.

2.2.2 Presence or likely presence of protected species and other species of note

Information about the location of protected species was accessed from Lancashire Environment Record Network **LERN**, the local environmental record centre for Lancashire.

Information was also obtained from previous ecology surveys undertaken in 2015 by Ecology Services UK Ltd and Milner Ecology.

2.3 Field-based survey

The following surveys were undertaken in 2021

Survey	Dates	Surveyors
Daytime walkover survey of proposed development site and immediate surroundings	25 th March 2021 13 th April 2021	Pat Waring, Janette Gazzard
Badger surveys	25 th March 2021 27 th April 2021	Pat Waring, Janette Gazzard
Reptiles	25 th March 2021 27 th April 2021	Pat Waring, Janette Gazzard
Amphibian surveys	25 th March 2021 27 th April 2021	Pat Waring, Janette Gazzard
Breeding bird surveys	9 th March 2021 24 th March 2021 9 th April 2021 27 th April 2021	Pat Waring
Bat activity survey	13 th April 2021	Pat Waring, Janette Gazzard
Water vole and otter surveys	25 th March 2021 13 th April 2021 27 th April 2021	Pat Waring, Janette Gazzard
Undesirable plant species	25 th March 2021 13 th April 2021	Pat Waring, Janette Gazzard

Table1 - Survey dates

2.3.1 Presence or likely presence of protected species

The survey area (the proposed development site and close surroundings) were assessed for their potential to support a range of protected species known to occur in the Lancashire area;

- Great crested newts *Triturus cristatus*
- Reptiles
- Water vole *Arvicola terrestris*
- Otter *Lutra Lutra*
- Badger *Meles meles*
- Bats
- Barn owl *Tyto alba* (roosting and nesting)

Great crested newts

A search for great crested newts, their breeding site and sheltering places was made across the survey area, including likely sheltering features such as areas of dense vegetation. This was followed by an assessment of potential sheltering sites and likely availability of feeding resources.

There are 2 existing fishing pools and a large former fishing lake immediately adjacent to the proposed development site. All three waterbodies were visited and assessed for their ability to support breeding great crested newts.

Reptiles

A search for reptiles was made across the survey area, including likely sheltering features such as areas of dense vegetation. This was followed by an assessment of potential sheltering sites and likely availability of feeding resources.

Water voles

The general approach complied with that described in: Strachan, R. Moorhouse, T. and Gelling, M. (2011) *Water Vol Conservation Handbook 3rd Edition*. Wild Cru.

All vegetation and banks within 5 metres of the waterbodies were examined for evidence of use by water voles.

Otters

The waterbodies and surroundings was examined for evidence of use by otters.

During the field survey, the waterbodies and nearby watercourse was subjected to examination for signs of use by otters, including:

Spraints	Holts	Feeding remains
Otter slides	Footprints	Couches

Table 2 – Field signs of otters

The otter survey followed guidance in Chanin, P. (2003).

Badgers

During the field surveys, the survey area was subjected to examination for signs of use by badgers, including:

Latrines (collections of dung pits)	Setts	Hairs
Badger paths, including exit/entry points to the proposed development site	Footprints	Snuffle holes
Scratching posts		

Table 3 – Field signs of badgers

The badger survey complied with guidance in Harris, S. Cresswell, P. Jefferies, D. (1989) *Surveying Badgers. Occasional Publication No.9. The Mammal Society.*

Bats

Daytime surveys

There were no buildings within the proposed development site.

All trees within the survey site were examined. Observations were made from ground level; telescopic 3.8 metre ladders were available but not required. A 1000 lumens Led Lenser X21 torch, close-focussing Zeiss Victory FL 8x42 binoculars and a rigid CA-300 endoscope were available but not required.

Activity surveys

A single bat activity survey was undertaken on 13th April 2021.

The survey started 30 minutes prior to sunset and continued until 90 minutes after sunset.

An Anabat Scout and a Batlogger M bat detector were used with headphones. This enabled heterodyne, frequency division and full spectrum techniques to be employed, to survey for all bat species within detectable limits. Bat echolocation was recorded using both detectors.

Surveyors walked together at a steady pace following a pre-determined route which included listening points. Samples of bat activity were taken at all points where bats were heard around the survey area.

The methods used for bat surveys comply with those outlined in current best practice guidance:

Collins, J. (ed) (2016) *Bat Surveys for Professional Ecologists: Good Practice guidelines (3rd edn)*. Bat Conservation Trust

2.3.2 Nesting and other significant use by birds

The survey site was assessed for its potential to support a range of bird species known to occur in the Lancashire area.

Breeding bird surveys were based on methodology and guidance described in: Gilbert, G., Gibbons, D. and Evans, J. (1998) *Bird Monitoring Methods*. Royal Society for the Protection of Birds, Bedfordshire

The surveys also drew on the guidance in the BTO/JNCC/RSPB Breeding Bird Survey documents, available at:

<http://www.bto.org/volunteer-surveys/bbs>

Four early season breeding bird surveys were undertaken within 3 hours of sunrise. All birds within the proposed development site were recorded on a base map and accompanying record sheet; records included bird species, bird behaviour and numbers of birds. For each breeding bird survey visit, a minimum of two hours of data was collected from the proposed development site.

The surveyor used the following equipment to aid with observations:

- Swarovski EL 8.5x42 binoculars

At the start and end of each survey, a range of environmental readings, including temperature, cloud cover and wind speed, were taken using visual observation and a Kestrel 4000 NV Weather Meter.

Determination of breeding status

The breeding status of birds encountered within the proposed development site were classified in three categories; confirmed, probable and possible breeders

The survey evidence required to allow the assignment of these categories is explained below:

Confirmed breeding:

Distraction display or injury feigning;
Used nests or eggshells found (occupied or laid within the survey period);
Recently fledged young or downy young;
Adults entering or leaving a nest site in circumstances indicating occupied nest or an adult sitting on nest;
Adults carrying food for young or faecal sacs;
Nest containing eggs;
Nest with young seen or heard.

Probable breeding:

Pairs observed in suitable nesting habitat in breeding season;
Permanent territory presumed through registration or territorial behaviour (song etc.) on at least two different days, a week apart, at the same place;
Display and courtship;
Visiting probable nest site;
Agitated behaviour or anxiety calls from adults;
Building nest or excavating nest hole.

Possible breeding:

Species observed in breeding season in possible nesting habitat.
Singing male(s) present or breeding calls heard in breeding season.

The proposed development area was also assessed for its potential to support wintering bird species.

2.3.3 Presence of important habitats and species (including Biodiversity Action Plan (BAP) broad habitats, as well as Species and Habitats listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006)

A habitat survey was carried out, whereby the vegetation and habitats of the whole site and immediate surroundings were surveyed on foot.

Habitats were described in terms of plant species composition and categorised in terms of:

- Phase 1 Habitats (using descriptions in the Phase 1 Habitat Survey Handbook)
- UK Habitat Classification
- Biodiversity Action Plan broad habitats
- Habitats which are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006

Scientific names follow Stace (4th Edition 2019).

Species

The survey site was assessed for its potential to support a range of species which are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (other than those listed in 2.3.1 above) known to occur in the Lancashire area including;

- Hedgehog *Erinaceus europaeus*
- Brown Hare *Lepus europaeus*
- Common toad *Bufo bufo*

Hedgehog

The general approach complied with that described in:

Creswell, W, J et al (Eds) (2012) *UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation*. The Mammal Society.

A search for hedgehogs, droppings and footprints was made across the proposed development area, followed by an assessment of potential nesting sites and likely availability of feeding resources, including macro invertebrates.

Brown hare

The general approach complied with that described in:

Creswell, W, J et al (Eds) (2012) *UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation*. The Mammal Society.

A search for brown hares was made across the proposed development area followed by an assessment of potential sheltering sites and likely availability of feeding resources.

Common toad

The general approach complied with that described in:

Sewell, D. et al (2013) *Survey Protocols for the British Herpetofauna*. Amphibian and Reptile Conservation.

A search for common toads was made across the survey site including standing waterbodies and likely sheltering features. This was followed by an assessment of potential sheltering sites and likely availability of feeding resources.

2.3.4 Presence of hedges

Surveys for hedgerows were carried out as part of the habitat survey as described above.

2.3.5 Presence of undesirable species

Surveys for undesirable species and species included in Section 9 of the Wildlife and Countryside Act (Variation of Schedule 9 Order 2010) were carried out as part of the habitat survey as described above.

2.4 Evaluation

The following list was used as the basis for evaluation of the site aspects listed in section 2.1.

- International
- National
- Regional
- County/Metropolitan
- District/Borough
- Parish/Neighbourhood
- Negligible

Where the level of value of an aspect was unclear, a judgement was made; where this approach was adopted, a rationale is presented with the judgement of value.

The following documents were also used to form judgements about value:

- CIEEM (2019) Guidelines for Ecological Impact Assessment in the UK and Ireland
- Schedules and Annexes of UK and European wildlife legislation (e.g. Wildlife and Countryside Act (WCA) (1981) (as amended) and The Conservation (Natural Habitats, &c.) Regulations 1994
- International conventions on wildlife (e.g. Bern Convention, Bonn convention)
- UK Biodiversity Action Plan
- Local Biodiversity Action Plan
- Taxa-specific conservation lists (e.g. RSPB List of Species of Conservation Concern)

3 Description of the survey site

The central point of the proposed development site is SD 74275 38422.

The proposed development site is approximately 2 hectares in size and lies within a former fishery, known as Pendle Fisheries. The majority of the proposed development site has been recently cleared and reprofiled as part of existing permissions. There is a limited range of habitats including bare ground, two rectangular fishing pools, planted and self-seeded boundary trees and shrubs. These habitats are described in Section 4.5 below.

The proposed development site lies immediately adjacent to the A59 bypass and is subject to disturbance from traffic noise, and vibrations as well as artificial lighting from street lighting and vehicles travelling at night.

The wider surroundings are dominated by agricultural fields, managed hedgerows, scattered trees, occasional field ponds and wet ditches. Close to the upland areas of Pendle Hill to the east and the village of Barrow to the south west.



Map 1 - 1:25 000 map of site and context - location shown by black arrow



Image 1 - Aerial view of indicative proposed development site (indicative boundary marked by white lines)

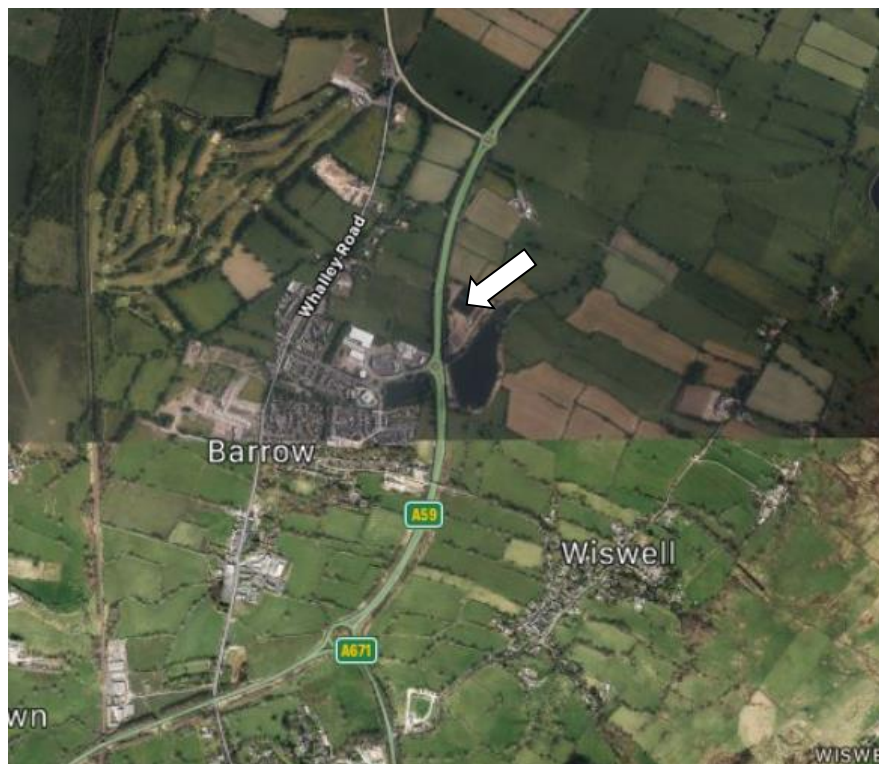


Image 2 - Aerial view of indicative proposed development site (marked with white arrow), showing wider context.

4 The results of the surveys

4.1 Desk-based survey

4.1.1 Presence of sites and features designated for ecological reasons

There are no statutory sites located within the proposed development site.

A proposed Biological Heritage Site (BHS), Barrow Lodge (a large waterbody) lies in close proximity, to the south west of the proposed development site on the opposite side of the A59 bypass.

4.1.2 Presence of protected species and other species of note

The LERN data search shows that the following protected species have been recorded within 2 Km of the proposed development site.

Species	Records and dates	Location
Great crested newts	31 records in 2011 1 record in 2009 Records in 1988	Whalley area Approximately 1.5 Km SW
Palmate newts	15 records 2011	Whalley area Approximately 1.5 Km SW
Smooth newts	10 records 2011	Whalley area Approximately 1.5 Km SW
Water vole	4 records 1977	Barrow Lodge within 100m of proposed development site
Badger	1 record 2013 1 record 2014	Approximately 1.8 km SW
Bats	4 bat roosts	The closest is approximately 700 metres SW

Table 3 – Protected species recorded with 2km of the proposed development site

4.2 Field-based surveys

4.2.1 Presence or likely presence of protected species

Great crested newts (including other amphibians)

- There are no records within 1.5 km of the proposed development site.
- No amphibian species were found during the survey.
- Surveys in 2015 found palmate newt within ponds located within the proposed development site but these features have since be infilled and are therefore no longer present.

- The two fishing pools within the proposed development site and large fishing lake immediately adjacent are regarded as unsuitable to support breeding great crested newts due to the presence of fish, regular management and use by waterfowl. No further surveys of these waterbodies are required at the current time.
- There are limited sheltering places and refugia suitable for use by amphibians due to extensive bare ground. Potential sheltering places are therefore restricted to narrow margins of vegetation associated with boundary features and fishing pool margins.
- There is no evidence to suggest that great crested newts may be present in the proposed development site or its immediate surroundings.
- Based on the information available, there is **no reasonable likelihood** of great crested newts occurring on the proposed development site at any time of year.
- Based on the information available, there is **a reasonable likelihood** of other amphibian species e.g. palmate newt occurring on the proposed development site at any time of year.

Reptiles

- No reptiles were found during the surveys and there are no reptile records within 2 km of the proposed development site.
- The proposed development site offers very low potential for use by breeding sheltering and foraging reptiles.
- Based on the information available, there is **no reasonable likelihood** of reptiles occurring on the proposed development site at any time of year.

Water voles

- There are 4 historical records of water vole (1977) on Barrow Lodge within 150 metres of the proposed development site.
- No water voles or signs of water voles were found during the surveys.
- The proposed development site and its immediate surroundings offer low potential for use by water voles.
- Based on the information available, there is **no reasonable likelihood** of water voles occurring on the proposed development site.

- Based on the information available, there is **a reasonable likelihood** of water voles occurring in the close and wider surroundings at any time of year.

Otters

- There are no records of otters and no otters or signs of otters were found during the surveys.
- The proposed development site and its immediate surroundings offer low potential for use by otters.
- Based on the information available, there is **no reasonable likelihood** of otters occurring on the proposed development site.
- Based on the information available, there is **a reasonable likelihood** of otters occurring in the close and wider surroundings at any time of year.

Badgers

- No badgers or signs of badgers were found during the surveys
- The proposed development site and its immediate surroundings offer low potential for use by badgers.
- The close and wider surroundings of the proposed development area offer at least moderate potential for use by badgers, based on its accessibility and the opportunities for foraging and sett excavation. The closest known record for badgers is approximately 1.8 Km south west of the proposed development site.
- Based on the information available and current the condition of the proposed development site, there **is no reasonable likelihood** of badgers occurring on the proposed development site.

Bats

- There are no suitable features for roosting bats found within any of the trees within the proposed development site.
- Based on the information available, there is **no reasonable likelihood** of roosting bats occurring on the proposed development site.
- Common pipistrelle, soprano pipistrelle and Noctule bat species were all recorded during the evening activity survey. These species were observed feeding over the fishing pools and adjacent lake in large numbers for an extended period of time. These species were also

recorded as foraging over the waterbodies during activity surveys in 2015.

- The proposed development site, immediate and wider surroundings offer high foraging opportunities for bats.
- Based on the information available, there is **a reasonable likelihood** of foraging and commuting bats occurring on the proposed development site immediate and wider surroundings at any time during their active season (April to October).

4.2.2 Nesting and other significant use by birds

Barn owls

- No barn owls or signs of barn owls were found during the surveys.
- There are no records of barn owls and there are no buildings or trees suitable for use by breeding barn owls within the proposed development site
- Based on the information available, there **is a reasonable likelihood** of barn owls foraging within the close and wider surroundings.

Breeding birds

Full breeding bird results can be found in advice letter by Ecology Services UK Ltd dated 30th April 2021 *Re: Proposed development at Pendle View Fisheries, A59 Barrow, BB7 9DH (Application number 3/2017/0775)*

- Coot and Canada goose were observed sitting on nests within the proposed development site during the survey.
- A mute swan was observed nest building on the adjacent lake and a range other waterbird, farmland and small bird species including tufted duck, mallard, grey wagtail, blue tit, barn swallow and wren were observed in suitable nesting habitat, displaying and or calling.
- Based on the information available, there **is a reasonable likelihood** of nesting birds occurring in boundary trees, hedgerows and the fishing lake margins within the proposed development site.
- Based on the information available, there **is a reasonable likelihood** of nesting birds occurring within the wider Pendle Fisheries site and the adjacent farm fields.

Wintering birds

There are two waterbodies within the proposed development site and a large lake immediately adjacent. These waterbodies support regular use by an assemblage of overwintering bird species; these include mallard, tufted duck, mute swan, great crested grebe, moorhen and coot.

The hedgerow, trees and scrub edge, along the boundary with the A59, is likely to support overwintering thrushes including redwing and fieldfare.

In addition, the Pendle Fisheries site lies adjacent to an extensive farmed area characterised by open grassland, with hedgerow and wire fence boundaries. This type of landscape is utilised by a range of bird species during the winter months. Although no specific surveys were commissioned or undertaken, the most significant species are likely to be overwintering thrushes including redwing and fieldfare, as well as species such as raven.

4.2.4 Presence of important habitats and species (including Biodiversity Action Plan (BAP) broad habitats, as well as Species and Habitats listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006)

Species

No Species of Principal Importance (S41 NERC Act 2006) were observed within the proposed development area.

Brown hare

- The proposed development site offers low potential for use by brown hares at any time of year.
- The close and wider surroundings are judged to have high potential for use by brown hares, based on the availability of habitats, and the availability of feeding resources.

Hedgehog

- The proposed development site offers low potential for use by hedgehogs. Limited sheltering places and refugia suitable for use by hedgehogs are restricted to margins of vegetation associated with boundary features and fishing pool margins.
- The close and wider surroundings are judged to have at least moderate potential for use by hedgehogs, based on the availability of habitats, and the availability of feeding resources.
- Based on the information available, there **is a reasonable likelihood** of hedgehog occurring on the proposed development site at any time

of year.

Common toad

- The proposed development site offers at low potential for use by common toads. Breeding, sheltering places and refugia suitable for use by common toad are restricted to margins of vegetation associated with boundary features and the fishing pools.
- The close and wider surroundings are judged to have at least moderate potential for use by Common toad, based on the availability of habitats, and the availability of feeding resources.
- Based on the information available, there **is a reasonable likelihood** of common toad occurring on the proposed development site at any time of year.

Habitats

Images showing location and extent of habitats are included in the appendices.

Bare ground

The majority of the proposed development site has been recently cleared and re-profiled, comprising compacted bare ground and a gravel car parking area. Seven waterbodies (former fishery pools) have been infilled as part of consented site preparation works for the installation of static caravans and associated infrastructure.

Biodiversity broad habitat – *Best regarded as inland rock*

Habitats which are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 – *None*

Phase 1 Habitats: *Bare ground*

UK Habitat Classification – *Best regarded as u1b6 other developed land*

Waterbodies

Two rectangular fishing lakes have been retained and are currently managed as fishing pools. There is limited marginal vegetation, comprising reed canary- grass, reed sweet-grass *Glyceria maxima*, hard rush *Juncus inflexus*, tufted hair-grass *Deshampsia cespitosa*, purple loosestrife, *Lythrum salicaria* and floating sweet-grass *Glyceria fluitans*.

Biodiversity broad habitat – *Best regarded as standing open water*

Habitats which are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 – *None*

Phase 1 Habitats: *Standing water, eutrophic*

UK Habitat Classification – *Best regarded as r1a eutrophic standing water*

Hedges

There is a planted hedgerow along the western boundary, predominately hawthorn.

There is a sparse, unmanaged hedgerow and a wire fence along the northern boundary comprising hawthorn *Crataegus monogyna*, elder *Sambucus nigra* and holly *Ilex aquifolium*.

Biodiversity broad habitat – *Best regarded as boundary and linear features*

Habitats which are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 – *None*

Phase 1 Habitats: *Intact, species poor and defunct species poor*

UK Habitat Classification – *Best regarded as h2b other hedgerows*

Trees and mixed communities

There is a strip of land between the reprofiled bare soil and the western boundary hedge, comprising a continuous belt of planted, self-seeded trees and scrub with areas of open semi-improved grassland, tall herb and dumped, dredged material from waterbodies that has re-vegetated.

Frequent tree species include blackthorn *Prunus spinosa*, cherry *Prunus species*, hawthorn, holly, silver birch *Betula pendula*, field maple *Acer campestre*. Grassland and tall herb communities and comprise field bindweed *Convolvulus arvensis*, rosebay willowherb *Chamerion angustifolium*, hogweed *Heracleum sphondylium*, broad leaved dock *Rumex obtusifolius*, meadow sweet *Filipendula ulmaria*, butterbur *Petasites hybridus*, opposite leaved golden saxifrage *Chrysosplenium oppositifolium*, coltsfoot *Tussilago farfara*, nettle *Urtica dioica*, cleavers *Galium aparine*, creeping thistle *Cirsium arvense*, angelica *Angelica sylvestris*, tufted hair grass, hard rush and ivy *Hedera helix*. Areas of re-vegetated dredged material are dominated by reed canary grass *Phalaris arundinacea*.

Scattered silver birch, ash *Fraxinus excelsior* and lime *Tilia x europaea* trees are also present on the upper margins of the retained fishing pools within a narrow margin of neutral grassland.

Himalayan balsam *Impatiens glandulifera* is also locally abundant within this area.

Biodiversity broad habitat – *Best regarded as boundary and linear features*

Habitats which are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 – *None*

Phase 1 Habitats: *Dense continuous scrub, semi-improved grassland, tall ruderal,*

UK Habitat Classification – *Best regarded as w1g6 line of trees and g3c other neutral grassland*

Broad habitat	UK BAP Broad Habitats	Lancashire BAP	Habitat of Principal Importance (Section 41 NERC Act 2006)
Inland rock	<i>Y</i>	<i>N</i>	<i>N</i>
Standing open water	<i>Y</i>	<i>N</i>	<i>N</i>
Boundary and linear features	<i>Y</i>	<i>N</i>	<i>N</i>

Table 5 - Habitat categories

4.3 Presence of hedges

There is an intact planted hawthorn hedgerow along the western boundary of the proposed development site and a defunct species poor hedgerow on the northern boundary, as described in 4.2.4 above.

4.4 Presence of undesirable species

Himalayan balsam is locally abundant within the mixed communities habitat along the western boundary.

Himalayan balsam is a non-native plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

5 Evaluation

5.1 Presence of sites and features designated for ecological reasons

Value
The proposed development site has no value for designated sites
Rationale
The proposed development site does not form a part of, or contribute to the value of a designated site.

5.2 Protected species

Value
The proposed development site has no current, demonstrable value for the following species: • Great crested newts • Reptiles • Badger • Bats (roosting) • Water vole • Otter • Barn owl
Rationale
There is no evidence of current presence of these species, and available information suggests that there is no reasonable likelihood of occurrence by these species within the proposed development site, However, water voles, otters, badger and barn owls could be present within the close and wider surroundings. Reasonable likelihood is determined by a number of factors, including presence of species in the wider landscape, as well as habitats and features within and adjacent to the proposed development site that are suitable to support these species.

Value
The proposed development site has high value for foraging and commuting bats during their active season (April to October).
Rationale
There is a reasonable likelihood of bat species using the proposed development site for foraging and commuting; this includes common pipistrelle, soprano pipistrelle and noctule bat species. The three bat species have been recorded within the Pendle Fisheries site in previous surveys undertaken in 2015 and 2021. The airspace over and immediately around the proposed development site, as well as the shelter offered by the boundary vegetation will be used by insect prey of bats during the bat active season.

5.3 Nesting and other significant use by birds

Value
The proposed development site has high potential value for birds nesting in the boundary trees, hedgerows and waterbody margins.
The proposed development site has high potential value for birds foraging.
The proposed development site has high potential value for over-wintering birds
Rationale
Based on the information available, there is a reasonable likelihood of nesting birds occurring in the boundary trees, hedgerows and waterbody margins, but no reasonable likelihood of nesting birds occurring within other bare ground within the proposed development site. Based on the information available, there is a reasonable likelihood of foraging birds occurring on the proposed development site throughout the year.

5.4 Important habitats and species (including Biodiversity Action Plan (BAP) broad habitats, as well as Species and Habitats listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006)

Value
The proposed development site has low potential value for Brown hare, hedgehog and common toad.
It is recognised the close and wider surroundings are judged to have high potential for use by Brown hare, hedgehog and common toad.
Rationale
Based on the information available, there is reasonable likelihood of Brown hare, hedgehog and common toad occurring on the proposed development site at any time of the year. Post development, conditions for these species will improve once bare ground has been recolonised by vegetation.

Value
The proposed development site has at least moderate value at a parish/neighbourhood scale for BAP broad habitats. The proposed development site has moderate potential secondary value at a parish/neighbourhood scale (breeding bird, overwintering birds, bats foraging and commuting).
Rationale
The habitats are not particularly notable in terms of extent, condition and species composition, but do make up part of the biodiversity resources at a local scale. The value in relation potential use by bats, birds and brown hare, hedgehog and common toad is particularly due to the context of the proposed development site in relation to other habitats in close proximity.

5.5 Hedges

Value
The proposed development site has low value at a parish/neighbourhood scale for the boundary hedgerows. Moderate potential secondary value at a parish/neighbourhood scale (breeding birds, over wintering birds, bats foraging and commuting).
Rationale
The hedgerows are not particularly notable in terms of extent, condition and species composition, but they do make up part of the biodiversity resources at a local scale.

5.6 Presence of undesirable species

Value
The value of the proposed development site is currently affected by the presence of species listed on Schedule 9 of the Wildlife and Countryside Act (1981) (as amended).
Rationale
Himalayan balsam is locally abundant within the tree belt and mixed communities habitat along the western boundary. There is potential for this species to spread within the proposed development site and adjacent areas.

5.7 Overall conclusions in relation to ecological value

The demonstrable value of the proposed development site is in relation to:

- The presence of BAP Broad Habitats
- The presence of foraging and commuting bats
- The presence of nesting birds
- The presence of wintering birds

The proposed development area also has potential value in relation to:

- Use by common toad, hedgehog and brown hare

6 Limitations of the survey

- 6.1** Inevitably with any ecological survey it cannot be guaranteed to detect all species and individuals, and surveys cannot be fully representative of all conditions. In this case it was concluded that the baseline surveys provide a robust data set on which to carry out the assessment. None of the limitations are considered likely to have materially affected the conclusions of this assessment.
- 6.2** Observations were limited to daytime surveys in March and April 2021. Limiting observations over 2 months during the spring does not take account of animal species activity on the site through the year. For example, development of vegetation across the proposed development site will inevitably change the value and potential value of the site for a range of species.
- 6.3** Limiting the survey period to February, March and April does not take account of plant growth through the year. It is likely that a number of flowering vascular plant species would not have been evident during the surveys.

7 Advice and recommendations

7.1 Presence of sites designated for ecological and wider environmental reasons

Ecological Receptor	Issue and rationale	Action
Sites designated for ecological and wider environmental reasons	The proposed development will not have an impact on any designated sites	No action required

7.2 Protected species

Ecological Receptor	Issue and rationale	Action
Great crested newts (including other amphibians)	There is no reasonable likelihood of great crested newts occurring on the proposed development site. There is a reasonable likelihood of other amphibian species e.g. palmate newt and common toad occurring within the proposed development site.	Recommendation (mitigation): Works to waterbodies should ideally avoid the amphibian breeding season (February to end June). All works affecting waterbodies should adopt a precautionary working approach. The approach should ensure that measures are put in place to avoid potential harmful activities and with full regard for the welfare of amphibian species. Recommendation: (enhancement) New permanent ponds should be created or existing waterbodies restored (fish free) to make suitable opportunities for use by amphibian species. Any new or restored waterbodies should be managed to comply with the advice and guidance in: Baker, J., Beebee T., Buckley, J., Gent, A. and Orchard, D. (2011). <i>Amphibian Habitat Management Handbook</i>. Amphibian and Reptile Conservation, Bournemouth.
Reptiles	There is no reasonable likelihood of reptiles occurring on the proposed development site or close surroundings at any time of year.	No action required

Ecological Receptor	Issue and rationale	Action
Water voles	There is a reasonable likelihood of water voles occurring in close proximity to the proposed development site at any time of year. Water voles are fully protected under the Wildlife and Countryside Act 1981 (as amended). Water voles are protected against intentional killing, capture or injury and intentional or reckless disturbance, obstruction, damage or destruction of their burrows	Advice (surveys): No further surveys of water voles are required at the current time. Recommendation (mitigation): All people working at the site should be made aware of the likelihood of encountering water voles and how to identify these animals and signs of their presence. Recommendation (mitigation): All people working at the site should be made aware of the legal protection afforded to water voles and their own responsibilities as regards implementation of precautionary measures. Recommendation (mitigation): If a water vole is found at any time, work must stop until advice has been sought from appropriately experienced Ecologist. If the works will affect this species, precautionary measures will be required and suitable mitigation put in place.
Otters	There is a reasonable likelihood of otters occurring in close proximity to the proposed development site at any time of year. Otters are fully protected under the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 and under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).	Advice (surveys): No further surveys of bats are required at the current time. Recommendation (mitigation): All people working at the site should be made aware of the likelihood of encountering otters and how to identify these animals and signs of their presence. Recommendation (mitigation): All people working at the site should be made aware of the legal protection afforded to otters, and their own responsibilities as regards implementation of precautionary measures. Recommendation (mitigation): If an otter is found at any time, work must stop until advice has been sought from appropriately experienced Ecologist. If the works will affect this species, precautionary measures will be required and suitable mitigation put in place.

Ecological Receptor	Issue and rationale	Action
Badgers	There is no reasonable likelihood of badgers water voles occurring within the proposed development site.	No action required
Bats	There is a reasonable likelihood of bat species using the proposed development site for foraging and commuting; this includes common pipistrelle, soprano pipistrelle, and noctule bat species. All bat species are afforded full protection under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).	Advice (Surveys): No further surveys of bats are required at the current time. Advice(Protection):All existing waterbodies and vegetation should be retained to ensure feeding and commuting resources for bats are maintained. Recommendation (mitigation): It is recommended that any new lighting associated with the proposed development should comply with: https://www.gov.uk/guidance/light-pollution Institution of Lighting Professionals and Bat Conservation Trust (2018) <i>Bats and Artificial lighting in the UK; Bats and the Built Environment Series</i>. Specifically, it is recommended that the following practices are adopted: 1. Avoid artificial light spillage onto potential bat flyways and foraging features (includes trees, shrubs and waterbodies). 2. Ensure that lux levels falling onto bat flyways and foraging features are greater than 0.5 lux. 0.5 lux is the recommended upper limit of lighting for these features. 3. Avoid artificial uplighting onto vegetation. This should be subject to a compliance check by a suitably experienced ecologist. During work and post-development.

7.3 Nesting and other significant use by birds

Ecological Receptor	Issue and rationale	Action
Nesting and other significant use by birds	There is a reasonable likelihood of nesting birds occurring within the proposed development site throughout the nesting season (February to September). There is a reasonable likelihood of foraging birds occurring on the proposed development site throughout the year. Wild birds are protected under The Wildlife & Countryside Act 1981 (as amended). Offences include intentionally: 1. Killing, injuring or taking a wild bird. 2. Taking, damaging or destroying the nest of a wild bird while that nest is in use or being built. 3. Taking or destroying an egg of a wild bird. There is a reasonable likelihood of wintering birds occurring within the proposed development site (October to March).	Advice (mitigation): It is advised that the most appropriate way to address the risk of nesting birds is: Avoid vegetation cutting in all proposed work areas during the nesting season Or If works cannot be delayed all vegetation proposed for removal should be carefully checked, immediately prior to works commencing. Checks should be carried out by a suitably experienced ecologist. If the risk of nesting birds remains, then monitoring for nesting bird activity should continue for the duration of works. Prior to any work commencing (checks) and throughout works in nesting season (monitoring). Advice (mitigation): If works are to be undertaken during the nesting season, all people working at the proposed development site should attend a toolbox talk delivered by an appropriately experienced person, to be made aware of the likelihood of encountering nesting birds and how to identify them, the legal protection of nesting birds and their own responsibilities as regards implementation of precautionary measures. Prior to any work commencing. Advice (mitigation): If birds are found to be nesting within or in close proximity to the work area during proposed works, it will be necessary to stop and establish an exclusion area. The extent of the exclusion area, which should be determined by a suitably experienced ecologist, will depend on the bird species and the nature of the proposed works. At all times.

Ecological Receptor	Issue and rationale	Action
Nesting and other significant use by birds Continued.		Recommendation (mitigation): Provide sheltering and feeding resources for a range of birds continuously throughout the year. Leave all bird sheltering and foraging resources (vegetation and waterbodies) undisturbed as much as possible. Time any management of bird sheltering and foraging resources to avoid sensitive times of year and avoid removal of foraging resources such as fruits and berries. At all times. Recommendation (enhancement): Enable the development of dense sheltering woody vegetation (e.g. scrub), particularly in association with existing trees and the hedgerow. Use/encourage native species of local provenance. This should be subject to a compliance check by a suitably experienced ecologist. At all times.

7.4 Important habitats and species (including Biodiversity Action Plan (BAP) broad habitats, as well as Species and Habitats listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006)

Ecological Receptor	Issue and rationale	Action
Brown hare, hedgehog and common toad	There is a reasonable likelihood of brown hare, hedgehog and common toad occurring on the proposed development site at any time of year.	Recommendation (mitigation): All people working at the proposed development site should attend a toolbox talk delivered by an appropriately experienced person, to be made aware of the likelihood of encountering brown hare, hedgehog and common toad, how to identify them, the protection afforded to these species as part of the development and their own responsibilities as regards implementation of precautionary measures. Prior to any work commencing. Recommendation (mitigation): In order to minimise impacts to these species, potential sheltering features that are likely to be affected by the development, including areas of vegetation and stones, should be removed carefully by hand, avoiding where possible the hibernation period (October to March). Any common toads and/or hedgehogs encountered should be carefully moved to a safe area of suitable habitat, which should then remain undisturbed. Prior to any work commencing (checks) and throughout works (carefully moving animals).

Ecological Receptor	Issue and rationale	Action
Bare ground	Bare ground is a temporary feature due to and during on- going site preparation works.	Bare ground in this context, is of low ecological value and no specific mitigation measures are required.
Waterbodies	Potential damage/disturbance to retained waterbodies	Recommendation (mitigation): In order to minimise impacts to waterbodies and the species that depend on them. All personnel involved in works to waterbodies should adhere to a suitable method statement prepared to prevent any damage and/or disturbance. Recommendation (mitigation): All materials used by and generated as a result of the development should be stored away from the waterbodies in such a way as to avoid run-off and other contamination of the watercourse. Recommendation (mitigation): Works to waterbodies, should ideally avoid the amphibian and bird breeding seasons (February to August). Recommendation (enhancement): New permanent ponds should be created or existing waterbodies restored (fish free) to ensure suitable opportunities are for amphibians and bird species are made available. Any new or restored waterbodies should be managed to comply with the advice and guidance in: Baker, J., Beebee T., Buckley, J., Gent, A. and Orchard, D. (2011). <i>Amphibian Habitat Management Handbook</i>. Amphibian and Reptile Conservation, Bournemouth.

Ecological Receptor	Issue and rationale	Action
Trees and hedges	Potential damage disturbance to vegetation	Recommendation (mitigation): Where possible, retain the all trees and hedges to minimise the loss of habitats. At all times. Recommendation (mitigation): Protect retained trees. Storage of materials, equipment and plant should not take place under the 'dripzone' of trees (i.e. under their canopy) which are to be retained. Best practice should be followed (i.e. BS5837: 2012 Trees in Relation to Design, Demolition and Construction) to ensure individual trees which are to be retained are not adversely affected. This should be subject to a compliance check by a suitably experienced ecologist/arborist. Before and during development Recommendation (compensation): Replace trees by planting locally native species. The number of trees should be at least equal to that being lost as a result of the proposed development. During and after development.

7.5 Undesirable species

Ecological Receptor	Issue and rationale	Action
Undesirable species	Himalayan balsam is locally abundant along the western boundary of the proposed development site. The proposed works will involve an amount of disturbance which could result in the spread of Himalayan balsam which is listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Section 14(2) of the Wildlife and Countryside Act 1981 (as amended) prohibits 'planting' or 'causing to grow' in the wild of any plant listed in Part 2 of Schedule 9.	Advice (mitigation): All people working at the site should be made aware of the legal issues associated with non-native invasive species and their own responsibilities as regards implementation of precautionary measures. Prior to any work commencing. Advice (mitigation): Precautionary measures should include a method statement and work procedures to avoid further spread of the species and contamination of areas on adjacent land as a result of the activities on the proposed work area. At all times Advice (mitigation): Minimise all disturbing activities, disturbance and movement of infected soils at all times and restrict all movements tracking through infected areas with schedule 9 species on foot or with machinery. At all times

8 References

Chanin P (2003a) *Ecology of the European Otter. Conserving Natura 2000 Rivers, Ecology Series No. 10*. English Nature, Peterborough.

Chanin P (2003b) *Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No 10*. English Nature, Peterborough

Chartered Institute of Ecology and Environmental Management (2017) *Guidelines for Preliminary Ecological Appraisal. Second Edition*. CIEEM, Hampshire.

Collins, J. (ed) (2016) *Bat Surveys for Professional Ecologists: Good Practice guidelines (3rd edn)*. Bat Conservation Trust

Creswell, W, J et al (Eds) (2012) *UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation*. The Mammal Society.

Ecology Services UK Limited (2015) *Water vole advice letter for a proposed development at Pendle Fisheries, A59 By pass, Barrow, Lancashire BB7 9DH* 2nd July 2015

Ecology Services UK Limited (2015) *Bat advice letter for a proposed development at Pendle Fisheries, A59 By pass, Barrow, Lancashire BB7 9DH* dated 28th June 2015

Ecology Services UK Limited (2015) *Report of Great Crested Newt Survey Pendle Fisheries, Barrow, Lancashire BB7 9DH* dated 2nd July 2015

Ecology Services UK Limited (2021) *Re. Proposed development at Pendle View Fisheries, A59 Barrow, BB7 9DH* Advice letter dated 30th April 2021.

Harris, S., Cresswell, P. and Jefferies, D.J. (1989) *Surveying Badgers*. Mammal Society.

JNCC (2010) *Handbook for Phase 1 habitat survey: A technique for environmental audit*, Joint Nature Conservation Committee, Peterborough, UK

Milner Ecology (2015) *Pendle Fisheries, Barrow, Extended Phase 1 Habitat Survey*. Milner Ecology

Stace, C. (2019) *"New Flora of the British Isles – 4th edition"*. Cambridge University Press.

The UK Biodiversity Steering Group (1994) *"Biodiversity: The UK Action Plan."* HMSO

Preliminary Ecological Appraisal
Pendle Fisheries, Barrow, Lancashire

Appendices

App 1 – Photographs of proposed development site

Appendix 1 Photographs of the proposed development site



Western boundary along the A59, planted hawthorn hedge



Northern boundary, defunct hedgerow with farm field immediately adjacent



Canada goose sat on nest between the fishing pools on a vegetated grass margin



Himalayan balsam found present along the western boundary



Example of mixed communities, established trees, tall herb and semi-improved grassland along the western boundary



Example of re-growth from probable pool dredgings



View of waterbody (fishing pool)



View of waterbody edge adjacent to the north boundary



Pendle Fisheries Habitat Map

Compiled 27th May 2021