



WE KNOW SERVICES

Preliminary Ecological Appraisal Report

Site

Ribbler's Lane, Kirkby

Client

McDonough Group

Report Date

February 2023

Version

First Issue

We Know Services
Court Hey Park, Roby Road, Huyton L16 3NA
E: info@weknowservices.co.uk
www.weknowservices.co.uk

Preliminary Ecological Appraisal – Ribbler's Lane, Kirkby



A view of the north-eastern side of the site.

Quality Assurance

The information which the author has prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Disclaimer

The report has been prepared for the sole use of the client, showing reasonable skill and care, for the intended purposes as stated in the agreement under which this work was completed. The report may not be relied upon by any other party without the express agreement of the client and the author. No other warranty, expressed or implied, is made as to the professional advice included in this report. Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No responsibility can be accepted by the author for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report assume that all relevant information has been supplied by those bodies from whom it was requested. No part of this report may be copied or duplicated without the express permission of the author and the party for whom it was prepared. Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

Executive Summary

Contents	Summary
Site Location	The site is located on Ribbler’s Lane, Kirkby, Liverpool, L32 7RB and is centred at Ordnance Survey National Grid reference SJ 41365 97125.
Proposals	The potential development proposal for the site includes the construction of a Children’s Home.
Scope of this Survey(s)	The purpose of this report is to: • Undertake a desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence; • Present the results of an extended Phase 1 Habitat Survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species and evidence of protected fauna or habitats capable of supporting such species; and • Evaluate potential ecological receptors on site and within the zone of influence; identify any constraints to the sites development and make any recommendations for further surveys, mitigation or enhancement.
Results and Evaluation	The site comprised a range of habitats including species poor defunct hedgerow, scrub and scattered trees. The following ecological constraints were identified on the site: • The site was assessed as having suitability to support nesting and foraging birds.
Recommendations	The following recommendations have been made: • It is recommended that priority habitats are retained and protected within the development where possible (trees). • Any vegetation removal should be undertaken outside of the nesting bird season (March to September inclusive) to minimise potential impacts on nesting birds. If this cannot be achieved, a nesting bird check by a suitably qualified ecologist should be undertaken no more than 48 hours prior to the vegetation removal. • One bird box should be installed on site either on retained trees or onto the development building.

Preliminary Ecological Appraisal – Ribbler’s Lane, Kirkby

Contents

1. Introduction	1
1.1. Site Description	1
1.2. Proposed Development	1
1.3. Purpose of the Report	1
2. Methodology.....	1
2.1. Historic Surveys	1
2.2. Desk Study	1
2.3. Field Surveys.....	1
2.4. Field Survey	2
2.5. Limitations.....	4
3. Baseline Ecological Conditions.....	5
3.1. Protected Sites.....	5
3.2. Ancient Woodland and Priority Habitats	7
3.3. Habitats	7
3.4. Protected and Notable Species	7
4. Discussion	13
4.1. Designated Sites	13
4.2. Habitats	13
4.3. Protected and Notable Species	13
5. Conclusion	15
6. PLANNING POLICY AND LEGISLATION.....	16
6.1. Local Planning Policy.....	17
6.2. Relevant Legislation	19
7. References	23

1. Introduction

We Know Services was commissioned by McDonough Group in February 2023 to undertake a Preliminary Ecological Appraisal (PEA) of Ribbler's Lane, Kirkby, hereafter referred to as "the site".

This report has been prepared by Ecological Consultant Lucy Bennison BSc (Hons), Qualifying CIEEM.

1.1. Site Description

The site is located within the Kirkby area of Liverpool and is centred at Ordnance Survey National Grid Reference SJ 41365 97125 (Figure 1). The site consisted of a species poor defunct hedgerow, scrub and scattered trees. To the north, east and west of the site are residential properties. To the south of the site is bluebell woods.

1.2. Proposed Development

The potential proposal for the site includes the development of a Children's Home, comprising a main building, garden, bin store, cycle store and garage.

1.3. Purpose of the Report

The purpose of this report is to:

- Undertake a desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence
- Present the results of an extended Phase 1 Habitat Survey, involving a walkover of the site to record habitat types and dominant vegetation, including

any invasive species, and; evidence of protected fauna or habitats capable of supporting such species

- Evaluate potential ecological receptors on site and within the zone of influence; identify any constraints to the sites development and make any recommendations for further surveys, mitigation or enhancement.

The details of this report will remain valid for a period of eighteen months from the date of the survey, after which the validity of this assessment should be reviewed to determine whether further updates are necessary. The recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

Scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

2. Methodology

2.1. Historic Surveys

Previous reports relevant to the site have been reviewed for this report. These reports include:

2.2. Desk Study

The desktop study comprised two elements:

- A data search obtained from Merseyside BioBank in February 2023.
- Online element including a search using: Multi Agency Geographic Information for the Countryside (MAGIC) (<https://magic.defra.gov.uk>) website and Ordnance Survey (OS) and Aerial Imagery (<https://www.bing.com/maps>).

The geographical extent of the search area was related to the significance of sites and species and potential zones of influence. For this site the following search areas were considered appropriate:

- 2km for sites of International Importance (e.g. Special Areas of Conservation (SAC), Special Protection Area (SPA), Ramsar sites);
- 2km for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSI), protected or otherwise notable species and non-statutory designated sites of County Importance (e.g. Local Wildlife Sites (LWS));
- 2km for biological records, and
- 1km for ancient woodland and mapped priority habitats.

The data search did not cover Tree Preservation Orders (TPOs); or Conservation Areas designated for their special architectural and historic interest.

2.3. Field Surveys

The following methodologies have been used to identify the ecological receptors present on or near the site and which are relevant to the proposed development. Survey extended beyond the site to a distance of 50m where accessible.

2.4. Field Survey

Habitats

An extended Phase 1 habitat survey was undertaken on the site on 23rd February 2023 by Knowsley Borough Council's Ecological Consultant Lucy Bennison BSc (Hons). The weather conditions were:

- Temperature: 7°C
- Wind speed: 1 Beaufort
- Cloud cover: 1/8 Oktas
- No precipitation

The vegetation and broad habitat types within the site were recorded using the Phase 1 categories (JNCC, 2016), with the sites suitability to support notable flora assessed according to the Chartered Institute of Ecology and Environmental Management guidelines (CIEEM, 2017). Dominant plant species were recorded for each habitat present using standard nomenclature (Stace, 2019).

Protected and Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations 2017 (as amended), Schedule 5 of the Wildlife and Countryside Act (W&CA) 1981 (as amended), the Countryside Rights of Way (CRoW) Act 2000, those given extra protection under the Natural Environment and Rural Communities (NERC) Act 2006, and species included in the North Merseyside LBAP.

The presence of some species was determined using standard best practice guidance and are listed below.

Badger

The site was surveyed for evidence of badger *Meles meles* setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, et al., 1989).

Otter

The site was assessed for its suitability to support otter *Lutra lutra* using standing Government advice (Chanin, 2003).

Bats

Roosting Bats – Buildings / Structures / Trees

Any suitable buildings, structures or trees on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) – hereafter referred to as the 'BCT Guidelines'.

Foraging / Commuting Bats

Potential habitat for foraging and commuting bats were assessed on site according to the BCT Guidelines.

Birds

Bird Species identified at the time of survey were noted and nesting birds recorded as seen. An assessment of habitats was undertaken to determine the likely value to breeding and foraging birds.

Great Crested Newt & Common Amphibians

The site was appraised for its suitability to support great crested newt *Triturus cristatus* based on guidance outlined in the Herpetofauna Workers' Manual (Gent & Gibson, 2003) and the Great Crested Newt Conservation Handbook (Langton, et al., 2001). This appraisal also considered waterbodies within 500m of the site and their potential to be used for breeding newts. Each pond was assessed using the Habitat Suitability Index (HSI) (Oldham, et al., 2000) which assigns a value to the pond calculated from 10 pre-identified features. The HSI value gives a correlation of likely use by GCN and below 0.46 the waterbody is considered to have less likelihood of GCN presence however this metric is a guide and should be assessed on a site by site basis as waterbodies with low HSI have been known to support GCN.

Habitat suitability and evidence of other common amphibians was recorded on site where relevant.

Reptiles

The site was appraised for its suitability to support reptiles using guidance outlined in the Herpetofauna Workers' Manual (Gent & Gibson, 2003).

Invertebrates

The site habitats were appraised for suitability to support assemblages of invertebrates and commented on in the report as appropriate.

Other Species

The site was also appraised for its suitability to support other protected or notable fauna with regard to the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS42020:2013 Biodiversity – Code of Practice for Planning and Development (BSI, 2013). Evidence of any current or historical presence of such species was recorded.

Invasive Species

Evidence of species listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended, were recorded as seen.

2.5. Limitations

The optimal time to undertake an extended Phase 1 habitat survey is April-September. The survey was completed in February which is outside the optimal survey window. As such, certain species of flora may not have been visible that are present during the Spring and/or Summer.

Any absence of desk study records cannot be relied upon to infer absence of a species/habitat as the absence of records may be a result of under-recording within the given search area.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. This survey focuses on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation, from only a single visit. This report cannot, therefore, be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

In accordance with CIEEM's Advice Note on the Lifespan of Ecological Reports and Surveys (CIEEM, 2019), the details of this report will remain valid for a period of 18-months from the date of the survey (i.e. until August 2024). After which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

3. Baseline Ecological Conditions

3.1. Protected Sites

One statutory designated site was identified within 2km of the proposed development. Details of designated and local non-designated sites within 2km obtained from Merseyside BioBank are detailed below in Table 1.

Table 1. Statutory and non-statutory designated sites identified during the desk study

Site Name	Designation	Distance and direction from Site	Reasons for designation
Croxteth	LNR	1.11km south	The LNR was created from the former Mull Wood plus other woodland areas such as Cocked Hat Wood, Dam Wood, The Wilderness and Ice House Woods together with some agricultural land in the park. The reserve has woodland, rough grassland and pasture, several ponds and is bounded by the River Alt. A variety of birds breed in the woodland and the ponds are good for plants such as water dropwort and dragonflies.
Croxteth brook	Site of Biological Interest (SBI)	0.69km south-west	An open water course providing good water vole habitat.
Howard's Pits, Huyton	SBI	1.79km south-east	A mature broadleaf woodland with ponds and drainage ditches.
Kirkby Brook	SBI	1.17km north-west	An open water course providing good water vole habitat.
Kirkby Brook and Mill Brook	SBI	1.93km north-west	Stream course and banks rich in plants with exposures of sandstone in places and wet flushes.
Knowsley Brook	SBI	1.05km south-east	An open water course providing good water vole habitat.
Kraft Operational Land, Kirkby	SBI	1.13km east	A wetland with good species diversity. Drier areas of grassland add to the interest of the site.

Preliminary Ecological Appraisal – Ribbler's Lane, Kirkby

Site Name	Designation	Distance and direction from Site	Reasons for designation
Meadow, Kirkby (Mill) Brook	SBI	1.74km north-west	A meadow within a wet flush on the banks of Kirkby Brook. Sandstone exposures on the banks add to the diversity.
Otis Meadow	SBI	1.31km east	A mix of damp and dry grasslands with developing scrub. Unusual habitats within the Knowsley Industrial Estate.
River Alt, Kirkby	SBI	1.69km north-west	Open water course providing good habitat for water voles.
River Alt and adjacent sites through Gilmoss	LWS	2km west	The site is comprised of a number of parcels of land, spread over 3 distinct areas, with watercourses present within all but one of the sections. Four watercourses run through the site, two supporting small populations of Water Voles. Non-operational land surrounding the Wastewater Treatment Works is predominantly semi improved, unmanaged and mostly rank grassland with small areas of mature scrub and trees, and several areas of recently planted scrub and woodland. The most diverse area is known as Fazakerley Reedbed, which lies on the western side of the site, adjoining Lower Lane. It is one of the most important sites for birds in Liverpool; it is the only breeding site for Water Rail, Little Ringed Plover and Reed Warbler in the city.

In addition to the above designations, the nearest Natura 2000 site is the Ribble and Alt Estuaries Special Protection Area (SPA) located 10.4km west of the site. The SPA is designated for its assemblage of seabirds and waterbirds.

The site falls within a SSSI impact risk zone for Sefton Coast SSSI. The proposal of a Children's home does not fall within any of the risk categories listed. Therefore, no further consultation between the LPA and Natural England will be required.

3.2. Ancient Woodland and Priority Habitats

No ancient woodland was recorded within 2 km of the site. 22 parcels of priority habitat deciduous woodland are located within 2km of the site. The closest of which is located 0.05km west. Priority habitat good quality semi-improved grassland is located 1.06km east of the site.

3.3. Habitats

The following habitats have been identified through our assessment, species poor defunct hedgerow, scrub and scattered trees. The development plans indicate that all existing hedging is to be retained in full but the hedge along the northern boundary will be lowered to 1.2m in height. A Phase 1 habitat map can be found in Figure 2, with detailed Target Notes and photographs included in Appendix A, as appropriate.

Table 2. Habitats

Habitat	Result
Scattered Scrub	Scattered scrub is present in the western end of the site (TN01). Dominant species dominated by bramble <i>Rubus fruticosus</i> .
Scattered Trees	Scattered trees are present throughout the site, the majority running around the periphery of the site (TN02). Species was dominated by semi-mature cherry <i>Prunus cerasifera</i> with silver birch <i>Betula pendula</i> , Leyland cypress <i>Cupressus × leylandii</i> , mature poplar <i>Populus</i> and beech <i>Fagus</i> also present.
Species-Poor Defunct Hedgerows	A species poor defunct hedgerow followed the sites perimeter. Species composition included holly <i>Ilex</i> , hawthorn <i>Crataegus monogyna</i> , common privet <i>Ligustrum vulgare</i> and common ivy <i>Hedera helix</i> . (TN03)
Amenity Grassland	Amenity grass lined the boundary of the site surrounding the hedgerow. Species was dominated by annual meadow grass <i>Poa annua</i> , common nettle <i>Urtica dioica</i> , dandelion <i>Taraxacum</i> and ribwort plantain <i>Plantago lanceolata</i> . (TN04)
Bare Ground	Areas of bare ground are present at the centre of the site. Fly-tipping is also present. (TN05)

3.4. Protected and Notable Species

Data purchased from the Merseyside BioBank confirmed the presence of a number of protected and notable species within 2km of the site. Relevant data from the last 10 years are discussed in Table 3 below.

Protected and notable species identified as a receptor for the site are detailed in Table 3. For species with legal protection arising from persecution, such as badgers, some details are purposefully omitted, but can be provided on request to inform the masterplan.

Table 3. Protected and Notable Species

Species	Legal protection	Result
Badger	Protection of Badgers Act 1992; Wildlife and Countryside Act 1981 (as amended) Schedule 6.	The data search returned no records of badger within 2km of the site. No evidence of badgers were found on the site or within the accessible areas of the 30m buffer from the site boundary. The site contained bare ground, scattered scrub and scattered trees. The ground was poor containing fly tipping and therefore would be unsuitable for badger foraging, commuting and sett creation. The site is also isolated from any suitable habitat by housing estates and associated infrastructure. As such it is considered unlikely for badgers to be present on site and they are discounted from further assessment.
Otter	Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5 & 6; Natural Environment and Rural Communities 2006 Section 41.	The data search returned two records of otter within 2km of the site. No evidence of otter was observed on site or within accessible areas of the 50m buffer from the site boundary. The site does not comprise any waterbodies or suitable habitat, as such there is little motivation for otter to use the site. Moreover, the site is isolated from suitable habitat by main roads and housing estates. Therefore, it is considered unlikely that otter would be present on site due to the lack of suitable habitat and they are discounted from further assessment.
Water vole	Wildlife and Countryside Act 1981 (as amended) Schedule 5; Natural	The data search returned ten records of water vole within 2km of the site. The closest of which was located along Kirby Brook, Knowsley.

Preliminary Ecological Appraisal – Ribbler's Lane, Kirkby

Species	Legal protection	Result
	Environment and Rural Communities 2006 Section 41.	The site does not comprise any waterbodies or suitable habitat, as such there is little motivation for water voles to use the site. Moreover, the site is isolated from suitable habitat by main roads and housing estates. Therefore, the habitats present on site are unsuitable to support water voles and they are discounted from further assessment.
Bats	Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5 & 6; Natural Environment and Rural Communities 2006 Section 41.	The data search returned a total of 32 records of bats within 2km of the site, including Common pipistrelle <i>Pipistrellus pipistrellus</i>, Soprano pipistrelle <i>Pipistrellus pygmaeus</i>, Daubenton's bat <i>Myotis daubentonii</i> and unidentified bat species. The closest record was located 1.56km west of the site. A review of MAGIC returned one result of a European Protected Species Licence within 2km of the site. Licence EPSM2009-1460 was located approximately 1.82km west of the site. This EPSL allowed for the destruction of a common pipistrelle resting place between January and December 2010. Roosting bats: The trees within the site were assessed for their suitability to support roosting bats. No potential roost features (PRF's) were identified. Foraging/ commuting bats: The habitats comprising the site were of negligible value to commuting and foraging bats. The site is isolated and small providing limited suitability for bats.
Birds	Wildlife and Countryside Act 1981 (as amended).	The data search returned one recent record for protected/notable bird species within 2km of the site. A breeding pair of NERC and LBAP species Lapwing <i>Vanellus vanellus</i>, located 1.61km west of the site. No obvious nesting behaviour was observed during the survey however, the trees and scrub are suitable nesting habitat for a number of bird species. There was a number of species recorded during the field survey including goldfinch <i>Carduelis carduelis</i>, coal tit <i>Periparus ater</i>,

Preliminary Ecological Appraisal – Ribbler's Lane, Kirkby

Species	Legal protection	Result
		collard dove <i>Streptopelia decaocto</i>, robin <i>Erithacus rubecula</i>, long tailed tit <i>Aegithalos caudatus</i>, blackbird <i>Turdus merula</i>, woodpigeon <i>Columba palumbus</i>, dunnoek <i>Prunella modularis</i> and blue tit <i>Cyanistes caeruleus</i>. In summary the site is mostly of value to passerine birds that may use the trees, hedgerow and scrub for nesting purposes.
Great Crested Newts (GCN) and Common Amphibians	GCN: Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5; Natural Environment and Rural Communities 2006 Section 41.	The data search returned one recent record for GCN within 2km of the site. Additionally, four records of smooth newt <i>Lissotriton vulgaris</i>, 15 records of Common frog <i>Rana temporaria</i> and four records of Common Toad <i>Bufo bufo</i> were located within 2km of the site. Review of MAGIC returned no results for granted European Protected Species Licence for GCN or survey licence returns within 2km of the site. No waterbodies were located within 500m of the site. Therefore, it is unlikely that GCN are to be found on site due to the lack of breeding habitat or connectivity to local ponds and so they are not discussed any further in this assessment.
Reptiles	<i>Smooth snake and sand lizard</i>: Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5; Natural Environment and Rural Communities 2006 Section 41. <i>Adder, grass snake, slow worm and common lizard</i>: Wildlife and	The data search returned no records for reptiles within 2 km of the site; however, it must be noted that the absence of records does not infer the absence of a species. The site provides negligible habitat suitability for reptiles and is isolated from any suitable local habitat. As such, reptiles are considered likely absent from the site and not discussed further in this assessment.

Preliminary Ecological Appraisal – Ribbler’s Lane, Kirkby

Species	Legal protection	Result
	Countryside Act 1981 (as amended) Schedules 5; Natural Environment and Rural Communities 2006 Section 41.	
Invertebrates	Some invertebrates are protected under Conservation of Habitats and Species Regulations 2017 and Wildlife and Countryside Act 1981 (as amended). Many invertebrates are also listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006).	The data search returned seven record of Lepidoptera (Moth and Butterfly), 24 Coleoptera (Beetles) and 21 Odonata (Damselfly and Dragonfly). The habitats comprising the site are isolated and considered to be of limited value to invertebrates.
Invasive species	Wildlife and Countryside Act 1981 (as amended) Schedule 9; Environmental Protection Act 1990.	The data search returned 69 records of invasive plant species within 2km of the site. Species included Himalayan balsam <i>Impatiens glandulifera</i>, Himalayan Cotoneaster <i>Cotoneaster simonsii</i>, Japanese knotweed <i>Fallopia japonica</i>, Japanese rose <i>Rosa rugosa</i>, Virginia creeper <i>Parthenocissus quinquefolia</i>, <i>Lamium galeobdolon subsp. Argentatum</i>, Floating pennywort <i>Hydrocotyle ranunculoides</i>, Nuttall’s Waterweed <i>Elodea nuttallii</i> and Rhododendron <i>Rhododendron ponticum</i>. No invasive non-native species were recorded on site during this assessment.
Other notable species	N/A	There are 41 records of Western European Hedgehog <i>Erinaceus europaeus</i> within 2km of the site. The closest of which is located on Ribbler’s Lane adjacent to site.

Preliminary Ecological Appraisal – Ribbler's Lane, Kirkby

Species	Legal protection	Result
		The site has potential to provide habitat for hedgehogs within the areas of scattered scrub and hedgerow.

4. Discussion

All of the works outlined below should be assumed as likely requirements for the pre-planning stage to inform a planning application, unless otherwise stated.

4.1. Designated Sites

Natura 2000 Sites

No Natura 2000 sites are located within 5km of the site. The closest Natura 2000 site is the Ribble and Alt Estuaries SPA located 10.4km west of the site. Due to the small nature of the development no major increases in recreational pressures are anticipated.

Sites of Special Scientific Interest

The site falls within a SSSI impact risk zone for Sefton Coast SSSI. The proposal of a Children's home does not fall within any of the risk categories listed. Therefore, no further consultation between the LPA and Natural England will be required. Due to the small nature of the development no major increases in recreational pressures are anticipated.

Local Designated Sites

One LNR was located within 2km of the site. Croxteth local nature reserve is located 1.1km south of the site boundary. Due to the small nature of the development no major impact is anticipated to the local site.

4.2. Habitats

The habitats of the highest ecological value on the site are the scattered trees and hedgerow providing potential nesting habitats for birds. Proposals for the site should aim to retain these trees where possible and root protection zones should be put in place.

4.3. Protected and Notable

Birds

The proposed development will require some tree and scrub removal. These activities may disturb or harm nesting birds during the nesting bird season, which runs from March to September inclusive. As such, it is recommended that vegetation removal is

undertaken outside the nesting bird season (i.e. October to February inclusive) to avoid potential impacts to nesting birds.

If vegetation removal is required during the nesting bird season, a nesting bird check must be undertaken by a suitably qualified ecologist no more than 48-hours prior to the works. Any nesting birds identified must be left in situ until the chicks have fledged as determined by the ecologist. The ecologist will also recommend an appropriate buffer to be maintained during this time.

The development will likely cause the loss of suitable nesting and foraging habitats for birds. It is recommended that bird boxes are provided within the site to compensate for the potential loss of nesting bird habitat. The boxes should be aimed at species identified in the local BAP (e.g. house sparrow, starling, and swift). These boxes should be positioned onto retained trees (house sparrow and starling), or onto the development units (swift). A quantity of one bird box per 10 housing units is recommended. A range of suitable boxes can be found for each species with examples listed below:

- Swift boxes (e.g. Vivara Pro Cambridge Brick Faced Swift Nest Box)
- Starling boxes (e.g. Vivara Pro Woodstone Starling Nest Box)
- House sparrow boxes (e.g. Vivara Pro Woodstone House Sparrow Nest Box)

Other Species

Hedgehogs are recorded to be present in the local area and may be present on site and the proposed development should seek to avoid harm to this species.

4.4. Enhancements

- A native planting scheme within the developments gardens will enhance the site for invertebrates and foraging birds, bats and small mammals.

5. Conclusion

The development proposals are not considered to have a potential impact on the statutory designated sites due to the development not being categorised within the SSSI IRZ.

The site has the potential to support protected species including birds and other species such as hedgehogs.

Key recommendations of the report are:

- Retention of trees where possible.
- Provision of bird boxes

Potential enhancements:

- Wildlife friendly planting

Provided the measures within this report for mitigation and enhancement can be adopted, it is anticipated that a design could be brought forward for this site that would be compliant with current local and national biodiversity planning policy.

6. Planning Policy And Legislation

National Planning Policy Framework

National Planning Policy Framework (NPPF)³ is the top tier of planning policy. The Framework provides guidance to local authorities and other agencies on planning policy and the operation of the planning system. Section 15 relates to 'Conserving and enhancing the natural environment'.

Relevant policies in relation to planning application include Paragraphs:

"174. Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

179. To protect and enhance biodiversity and geodiversity, plans should: a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and

local partnerships for habitat management, enhancement, restoration or creation; and b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

180. When determining planning applications, local planning authorities should apply the following principles: a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest; c) 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; and d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate." – see here for full details: <https://www.gov.uk/guidance/national-planning-policy-framework>

6.1. Local Planning Policy

The table below details the policies within Knowsley Local Plan Core Strategy (Adopted January 2016) which are relevant to the ecological features present on site.

Policy	Description
Policy CS8 Green Infrastructure	Maintenance and Enhancement of Knowsley's Existing Green Infrastructure: 1) Knowsley's existing Green Infrastructure and its beneficial functions will be protected, managed and/or enhanced, primarily to: a) Ensure more attractive and cleaner residential neighbourhoods; b) Sustain and promote biodiversity (including designated sites, priority habitats and protected and endangered species) in accordance with importance and contribution to ecological networks; c) Preserve the character and function of historic environments and valued landscapes; d) Mitigate the effects of climate change and flood risk; e) Mitigate air, water and noise pollution; f) Provide local opportunities for sport, recreation and allotments; and g) Provide sustainable transport linkages between residential neighbourhoods and easy access to employment and services. 2) To achieve the above, planning powers and other interventions will be used to: a) Protect and enhance strategically important areas of greenspace; b) Ensure an appropriate quantity and improved quality of locally important open spaces, including outdoor sports provision (and ancillary facilities of appropriate scale); c) Promote effective movement of wildlife through a network of strategic green links, by protecting, maintaining and improving existing and new open spaces, water courses (including water quality) and biodiversity assets; d) Protect, enhance and/or introduce biodiversity into existing areas of Green Infrastructure, through integration into the design of new development and public realm projects; e) Improve accessibility for communities to greenspace offering leisure and recreation opportunities; f) Protect and where possible improve green paths and cycleways linking residential areas, existing strategic areas of greenspace, employment locations, local community services and leisure facilities; g) Work in partnership with other districts and relevant bodies at a landscape scale to minimise the impact of development upon Knowsley's existing biodiversity and

	geological assets, and sustain the protection afforded to internationally important sites, including supporting habitat, for biodiversity outside of the borough; and h) Deliver new integrated and functional Green Infrastructure that helps to mitigate and adapt to climate change, such as sustainable drainage systems, carbon capture and storage, soft landscaping and green roofs. Strategic Green Links 4) Knowsley's strategically important green links are: a) Alt Corridor (Huyton) – stretching from Huyton Village through South Alt Park, Alt Park, Alt Meadows and into Stockbridge Village; b) Valley Corridor (Kirkby) – stretching through Valley Meadow, St. Chad's Park, Millbrook Park, Millennium Green and Mill Dam; c) Whiston to Cronton Corridor – stretching through Cronton, Stadt Moers Park and Whiston Greenway; d) Halewood Triangle – Halewood Park linkage with the Trans-Pennine Trail and to the national cycle network; e) M57 Green Belt Corridor; and f) Knowsley Hall Estate – including Knowsley Safari Park and Local Wildlife Sites. Approach to Green Infrastructure and New Development 6) New development must be served by Green Infrastructure to meet the needs of residents and the local environment, in a manner which will: a) Contribute to the creation of a high-quality residential environment; b) Provide access to high quality open space for leisure and recreational purposes; c) Seek to protect, maintain and where possible enhance biodiversity within and around new developments according to their designation and significance to provide space for nature; and 1. Provide adequate mitigation and/or, as a last resort, compensation for Green Infrastructure or biodiversity loss, in circumstances where harm resulting from the development is otherwise unavoidable.
CS2–Development Principles	Principle 4: Recognise environmental limits, protect and enhance environmental assets, enhance local character and promote quality of place by: a) (h) Maintaining or enhancing the quantity and quality of biodiversity and habitats, including potential impacts on nationally and internationally important sites for biodiversity;

CS21 – Greenspaces and Trees	Enhancement of Natural and Semi-Natural Greenspace and Tree Protection 10) The Council will encourage proposals for new development to incorporate: a) Retention of existing trees, woodland, vegetation and other habitat features which offer a positive contribution to the local environment in terms of visual amenity, recreation value or biodiversity/wildlife interest; b) Appropriate planting of trees, other soft landscaping and installation of habitat features for the benefit of biodiversity; and 1. Adequate replacement provision where tree loss is unavoidable, comprising two additional trees for every tree lost and taking account of species and size.
--	--

6.2. Relevant Legislation

Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the ‘Habitats Directive’, is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Birds Directive

The EC Directive on the Conservation of Wild Birds (79/409/EEC) or ‘Birds Directive’ was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Conservation of Habitats and Species Regulations 2017 (as amended)

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by Ministers, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.

The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:

<https://www.legislation.gov.uk/uksi/2018/1307/note/made>

The 2019 amendments related to the EU exit. Most of these changes involved transferring functions from the European Commission to the appropriate authorities in England and Wales. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant. The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change.– see here for full details:

<https://www.legislation.gov.uk/ukdsi/2019/9780111176573>

The Regulations make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5.

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the ‘Bern Convention’ and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

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

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to: intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant; unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 ‘Animals which are Protected’ contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 ‘Plants which are Protected’ of the Act, contains 185 species,

including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Protection of Badgers Act 1992

The Act imposes a classification of soil and other waste containing viable propagules of invasive non-native plant species as controlled waste. This has been applied to Japanese Knotweed *Reynoutria japonica*, with the result that waste containing this species must be disposed of in accordance with the duty of care set out in section 34 of the Act.

Protection of Badgers Act 1992

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: “any structure or place which displays signs indicating current use by a badger”.

Natural Environment and Rural Communities Act 2006

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.

Hedgerow Regulations 1997

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

Birds of Conservation Concern

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2015 (Eaton *et al*, 2015) and identified 67 red list species, 96 amber species, and 81 green species. The criteria are complex, but generally:

Red list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.

Amber list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.

Green list species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed.

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

The Environment Act 2021

The Environment Bill has now been entered into legislation becoming The Environment Act 2021, and provides a tool to implement changes in England across environmental sectors including air quality, biodiversity, water, and waste reduction and resource efficiency. The Act includes a target to halt the decline of nature by 2030, and mandates [Biodiversity Net Gain](#) for developments. The Act is described as:

“A Bill to make provision about targets, plans and policies for improving the natural environment; for statements and reports about environmental protection; for the Office for Environmental Protection; about waste and resource efficiency; about air quality; for the recall of products that fail to meet environmental standards; about water; about nature and biodiversity; for conservation covenants; about the regulation of chemicals; and for connected purposes”.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP’s may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision-making process.

Wild Mammals (Protection) Act 1996

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It’s application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.

7. References

1. Bat Conservation Trust, 2018. Bats and Artificial Lighting in the UK. Bats and the Built Environment series
2. Bright, Morris & Mitchell-Jones, 2006. The dormouse conservation handbook. 2nd ed. Peterborough: English Nature.
3. BSI, 2013. BS 42020 – a code of practice for biodiversity in planning and development, London: BSI Group.
4. Chanin, 2003. Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No 10, Peterborough: English Nature.
5. CIEEM, 2017. Guidelines for Preliminary Ecological Appraisal. 2nd ed. Winchester: CIEEM.
6. Collins, 2016. Bat Surveys for Professional Ecologists: Good Practice Guidelines. 3rd ed. London: The Bat Conservation Trust.
7. Gent & Gibson, 2003. Herpetofauna Workers' Manual. Peterborough: JNCC.
8. Harris, Cresswell & Jefferies, 1989. Surveying badgers. An occasional publication of the mammal society – No. 9. London: Mammal Society.
9. JNCC, 2016. Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit. Peterborough: JNCC.
10. Langton, Beckett & Foster, 2001. Great Crested Newt Conservation Handbook. Halesworth: Froglife.
11. Oldham, Keeble, Swan & Jeffcote, 2000. Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal, pp. 10 (4), 143-155.
12. Stace, 2019. New Flora of the British Isles. 4th ed. Suffolk: C&M Floristics Middlewood Green

Figure I: Site Location Plan

SEE APPENIDX XXV

Preliminary Ecological Appraisal – Ribbler’s Lane, Kirkby



Figure 2: Phase I Habitat Plan

SEE APPENDIX XXVII

Preliminary Ecological Appraisal – Ribbler’s Lane, Kirkby



Appendix A: Target Notes

DAFOR Scale		Description	Indicative percentage ranges
D	Dominant	Covers most of the area	90% or greater
A	Abundant	Very common throughout the area	50 – 89%
F	Frequent	Common or with many individuals	20 – 49%
O	Occasional	Occurs in several places but not throughout. Populations are not large	5 – 19%
R	Rare	Occurs in low numbers in relation to the size of the area	Less than 5%
L" will be used to indicate abundance in a localised area, e.g. LA = locally abundant			

Target Note	Description	Photographs
TN01	Scattered scrub habitat covers the west end of the site. Approximate central grid reference: SJ 41357 97130 Species: Bramble <i>Rubus fruticosus</i> – D Common ivy <i>Hedra helix</i> – F Tree saplings: Cherry - <i>Prunus cerasifera</i> Laurel - <i>Laurus nobilis</i>	

Preliminary Ecological Appraisal – Ribbler's Lane, Kirkby

TN02	Scattered mature/semi-mature trees are present along the boundary of the site with additional trees present central west of the site. Approximate central grid reference: SJ 41384 97122 Species: Cherry plum <i>Prunus cerasifera</i> Poplar <i>Populus</i> Beech <i>Fagus</i>	
TN03	A species poor defunct hedgerow followed the sites perimeter. Approximate central grid reference: SJ 41362 97134 Species: Holly <i>Ilex</i> - A Hawthorn <i>Crataegus monogyna</i> - D Common privet <i>Ligustrum vulgare</i> - R Common ivy <i>Hedera helix</i> – A	 

Preliminary Ecological Appraisal – Ribbler's Lane, Kirkby

TN04	Amenity grass lined the boundary of the site surrounding the hedgerow. Approximate central grid reference: SJ 41398 97112 Species: Annual meadow grass <i>Poa annua</i> – D Common nettle <i>Urtica dioica</i> – O Dandelion <i>Taraxacum</i> - F Ribwort plantain <i>Plantago lanceolata</i> – R Ragwort <i>Jacobaea vulgaris</i> – O Broad leaved dock – R Common poppy <i>Papaver rhoeas</i> – O Cleavers <i>Galium aparine</i> – F Shepherd's purse <i>Capsella bursa-pastoris</i> – R Henbit deadnettle <i>Lamium amplexicaule</i> – R	
TN05	Areas of bare ground are present at the centre of the site gradually being covered by common ivy. Fly-tipping is also present. Approximate central grid reference: SJ 41383 97116. Species: Common ivy <i>Hedera helix</i> – A Daffodil <i>Narcissus</i> - F Cleavers <i>Galium aparine</i> - O	

Appendix B: Frame of Reference for Geographical Value

International and European value	Ramsar Sites, Special Protection Areas, Biosphere Reserves, Special Areas of Conservation. Sites supporting populations of internationally important species. Any regularly occurring population of an internationally important species, which is threatened or rare in the UK. i.e. it is a UK Red Data Book species or listed as occurring in 15 or fewer 10km squares in the UK (categories 1 and 2 in the UK BAP) or of uncertain conservation status or of global conservation concern in the UK BAP. A regularly occurring, nationally significant population/number of any internationally important species.
National value	SSSIs or non-designated Sites meeting SSSI selection criteria, NNRs, Marine Nature Reserves, NCR Grade 1 Sites. Sites containing viable areas of key habitats identified in the UK Biodiversity Action Plan. Any regularly occurring population of a nationally important species which is threatened or rare in the region or county (see local BAP). A regularly occurring, regionally or county significant population/number of any nationally important species.
Regional value	Sites containing viable areas of threatened habitats listed in a Regional BAP (or some Natural Areas), comfortably exceeding SINC criteria, but not exceeding SSSI criteria. Any regularly occurring, locally significant population of a species listed as being nationally scarce which occurs in 16-100 10km squares in the UK or in a Regional BAP or relevant Natural Area on account of its regional rarity or localisation; A regularly occurring, locally significant number of a regionally important species.
County / Metropolitan	Sites meeting the criteria for county or metropolitan designation (SINC, CWS, etc.). Ancient semi-natural woodland, LNRs or viable areas of key habitat types listed in county BAPs/Natural Areas. Any regularly occurring, locally significant population of a species which is listed in a County/Metropolitan “red data book” or BAP on account of its regional rarity or localisation; A regularly occurring, locally significant number of a County/Metropolitan important species.
Local	Undesignated Sites or features considered to appreciably enrich the habitat resource in the District or Borough or within a zone of influence. A population of a species that is listed in a District/Borough BAP because of its rarity in the locality or in the relevant Natural Area profile because of its regional rarity or localisation; A regularly occurring, locally significant number of a District / Borough important species during a critical phase of its life cycle.