

Extended Phase One Habitat Survey (Preliminary Ecological Appraisal) Baileys Lane

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Prepared for: FAS

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1. Introduction

Amenity Tree have undertaken this Preliminary Ecological Assessment (PEA) at land off Baileys Lane, Halewood, Knowsley, L26 0TY. The area surveyed comprised of modified grassland, scrub, scattered trees, Hard standing and building, species-poor ornamental hedge, and native hedge

1.1 Background to the project

The client is proposing the re development of site into residential development consisting of 2 new buildings to provide 18 affordable dwellings, along with associated landscaping and parking facilities.

1.2 Site location, context and main habitats

The site is bounded by Baileys Lane to the west including residential units to the north, Finch Woods, agricultural fields, a new housing development and scrub land to the east, and commercial facilities to the south.

1.3 Report purpose

To prepare a Preliminary Ecological Assessment or Extended Phase One Habitat Survey for the development site following CIEEM guidelines (*Guidelines for Preliminary Ecological Appraisal, April 2013*). The purpose of the report is to provide information relating to the location, extent and distribution and impact on the conservation of wild plants and animals and natural and semi natural habitats affected by development. This report sets out the methods, results and recommendations arising from the above work.

1.3.1 Surveyor information

Simon Brain has attained a Post Graduate Certificate in Biological Recording and has attended residential FSC Field Courses for Land mammal, Songbird Barn Owls (CIEEM) and Advanced Bird Survey Techniques. He holds a NE

Class 2 bat license (17334-CLS). He has over ten years experience as a practice ecologist and 30 years experience as an arborist.

Ryan Whitmarsh is an experienced ecologist who has attained a BSc (Hons) and has undertaken a range of ecological surveys for protected species and Preliminary Ecological Appraisals (PEA). He has attended courses in bats and is currently working towards a Class 2 Bat License.

2. Desk Study

2.1 Methodology

The desk study collated information on designated statutory and non-statutory wildlife sites within 1km search radii around the proposed development site.

Information on statutory and non-statutory designated sites and legally protected/notable species records were obtained from <http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx> and contained in section 2.2 below.

2.2 Designated sites, species and habitats - Results Overview

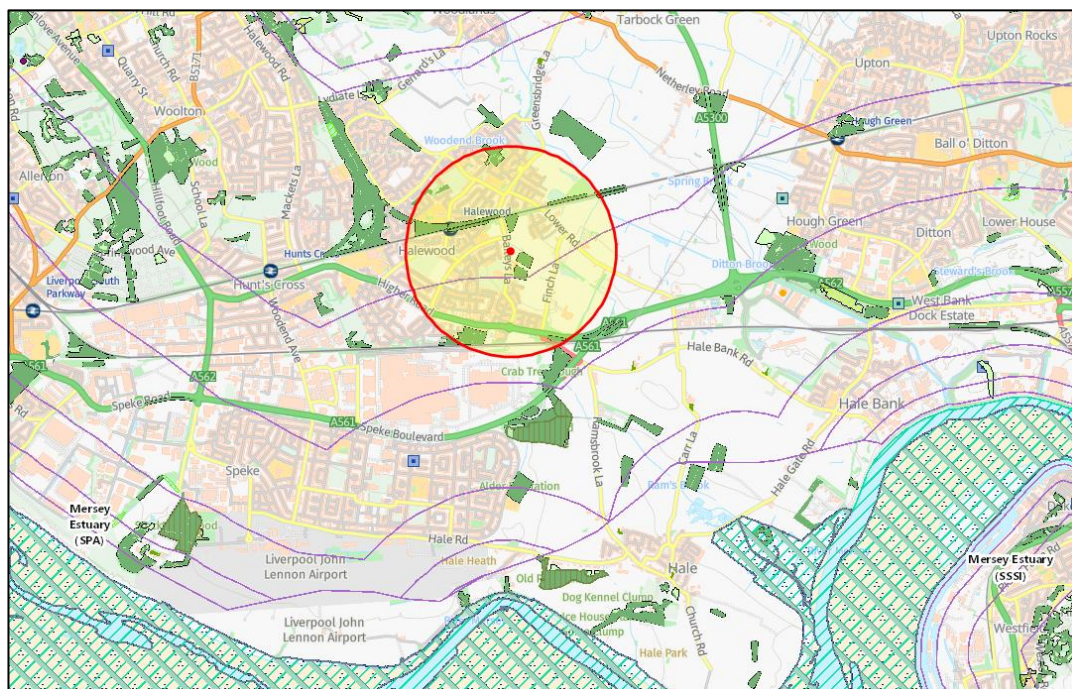
Multi-Agency Geographic Information for the Countryside (MAGIC) website (<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>) has confirmed no statutory designations apply to the site and the site boundaries.

The site is located within SSSI Impact Zone for Mersey Estuary SSSI, RAMSAR and SPA which are located 3.2km to the south. Millwood and Alder Wood Local Nature Reserve (LNR) are located 1300m north of site. The development proposal does not appear to conform to those development types that require the LPA to consult Natural England on the likely risks.

Multi-Agency Geographic Information for the Countryside website data has confirmed the following habitats and species apply to the site and its immediate locality:

- There are no section 41 habitats listed on the inventory on the site (priority woodland is adjacent 65m from site named Finch's Wood)
- There are numerous areas of listed woodland within the 2km.
- Wood pasture and Parkland (BAP) Priority Habitat is located 675m north of site.
- The site is covered by Countryside Stewardship Scheme for Lapwing species shown by data collation periods between 2005-2010
- The site is covered by the Grassland Assemblage Farmland Birds (2 species) (England).
- There are no important Bird Areas, Seabird considerations, or water and wetland considerations in respect of avian species which may be affected within 1km.
- The closest granted European Protected Species (EPS) license application by Natural England was for bat species (C-PIP) approximately 2,3km to the southwest from site. No granted European Protected Species licenses are within a 1km radius of site.

Figure 1
Statutory Land-Based Designation (DEFRA MAGiC based on 1km search radius)



Local Records Centre Data (ALERC)

A data search request was submitted to Merseyside BioBank <https://merseysidebiobank.org.uk> for the following records within a 1km radius of the site.

- records of **protected** taxa
- records of **BAP** taxa
- records of **Red Listed** taxa
- records of other '**notable**' taxa
- records of WCA schedule 9 taxa (including '**invasive plants**').
- a map showing the location of monad and tetrad references that overlap the search area
- a list of all **designated sites**
- citations, where available, for intersecting Local Wildlife Sites
- a list of **other sites of interest** (e.g. Ancient Woodlands) that intersect the search area
- a summary of the area for all available mapped **ecological network** features
- a map showing such features
- a map showing such sites
- a list of all **BAP habitats** which intersect the search area
- a map showing BAP habitats
- a summary of the area for all available mapped **Phase 1 and/or NVC habitats** found within 500m

A summary of relevant records received is provided below.

The following tables detail the North Merseyside BAP species that were recorded in the search area.

Group	Common Name	Scientific Name	Records	Dates	Designations
amphibian	Great Crested Newt	<i>Triturus cristatus</i>	48	1985-2012	LBAP
bird	Corn Bunting	<i>Emberiza calandra</i>	14	1994-2006	LBAP
	Grey Partridge	<i>Perdix perdix</i>	20	1975-2006	LBAP
	House Martin	<i>Delichon urbicum</i>	10	1975-2005	LBAP
	House Sparrow	<i>Passer domesticus</i>	16	1975-2005	LBAP
	Lapwing	<i>Vanellus vanellus</i>	16	1997-2007	LBAP
	Skylark	<i>Alauda arvensis</i>	18	1975-2007	LBAP
	Song Thrush	<i>Turdus philomelos</i>	17	1975-2007	LBAP
	Starling	<i>Sturnus vulgaris</i>	10	1975-2005	LBAP

	Swift	<i>Apus apus</i>	8	1975-2005	LBAP
flowering plant	Bluebell	<i>Hyacinthoides non-scripta</i>	45	1981-2022	LBAP
insect - dragonfly (Odonata)	Azure Damselfly	<i>Coenagrion puella</i>	66	1991-2024	LBAP
	Banded Demoiselle	<i>Calopteryx splendens</i>	25	2009-2020	LBAP
	Black Darter	<i>Sympetrum danae</i>	1	1991	LBAP
	Black-tailed Skimmer	<i>Orthetrum cancellatum</i>	10	2001-2007	LBAP
	Blue-tailed Damselfly	<i>Ischnura elegans</i>	86	1991-2024	LBAP
	Broad-bodied Chaser	<i>Libellula depressa</i>	22	2003-2024	LBAP
	Brown Hawker	<i>Aeshna grandis</i>	34	1996-2018	LBAP
	Common Blue Damselfly	<i>Enallagma cyathigerum</i>	15	1982-2024	LBAP
	Common Darter	<i>Sympetrum striolatum</i>	30	1991-2020	LBAP
	Emerald Damselfly	<i>Lestes sponsa</i>	1	2024	LBAP
	Emperor Dragonfly	<i>Anax imperator</i>	47	2002-2017	LBAP
	Four-spotted Chaser	<i>Libellula quadrimaculata</i>	35	2002-2024	LBAP
	Large Red Damselfly	<i>Pyrrosoma nymphula</i>	19	2008-2024	LBAP
	Migrant Hawker	<i>Aeshna mixta</i>	4	2016-2019	LBAP
	Red-eyed Damselfly	<i>Erythromma najas</i>	3	2016-2017	LBAP
	Ruddy Darter	<i>Sympetrum sanguineum</i>	2	2001	LBAP
	Southern Hawker	<i>Aeshna cyanea</i>	23	1951-2018	LBAP
reptile	Common Lizard	<i>Zootoca vivipara</i>	2	1833-1959	LBAP
terrestrial mammal	Bat	<i>Chiroptera</i>	4	2007-2012	LBAP
	Brown Hare	<i>Lepus europaeus</i>	31	1976-2022	LBAP
	Brown Long-eared Bat	<i>Plecotus auritus</i>	4	1988-2018	LBAP
	Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	20	1999-2020	LBAP
	Daubenton's Bat	<i>Myotis daubentonii</i>	1	2003	LBAP
	Noctule	<i>Nyctalus noctula</i>	3	2016-2018	LBAP
	Pipistrelle Bat species	<i>Pipistrellus</i>	15	1997-2015	LBAP
	Red Squirrel	<i>Sciurus vulgaris</i>	1	2008	LBAP
	Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	2	2008-2019	LBAP
	Water Vole	<i>Arvicola amphibius</i>	21	1993-2018	LBAP

The following tables detail the NERC Section 41 species that were recorded in the search area.

Group	Common Name	Scientific Name	Records	Dates	Designations
amphibian	Common Toad	<i>Bufo bufo</i>	38	1971-2021	Sect.41
	Great Crested Newt	<i>Triturus cristatus</i>	48	1985-2012	Sect.41
bird	Bullfinch	<i>Pyrrhula pyrrhula</i>	12	1975-2007	Sect.41.suppl
	Corn Bunting	<i>Emberiza calandra</i>	14	1994-2006	Sect.41.suppl
	Cuckoo	<i>Cuculus canorus</i>	4	1975-1999	Sect.41
	Dunnock	<i>Prunella modularis</i>	13	1975-2005	Sect.41.suppl
	Grasshopper Warbler	<i>Locustella naevia</i>	9	1997-2006	Sect.41
	Grey Partridge	<i>Perdix perdix</i>	20	1975-2006	Sect.41
	Herring Gull	<i>Larus argentatus</i>	1	2000-2005	Sect.41.suppl
	House Sparrow	<i>Passer domesticus</i>	16	1975-2005	Sect.41
	Lapwing	<i>Vanellus vanellus</i>	16	1997-2007	Sect.41
	Lesser Redpoll	<i>Acanthis cabaret</i>	3	1975-1982	Sect.41
	Linnet	<i>Linaria cannabina</i>	15	1975-2005	Sect.41.suppl
	Reed Bunting	<i>Emberiza schoeniclus</i>	12	1982-2006	Sect.41
	Skylark	<i>Alauda arvensis</i>	18	1975-2007	Sect.41,Sect.41.suppl
	Song Thrush	<i>Turdus philomelos</i>	17	1975-2007	Sect.41.suppl
	Starling	<i>Sturnus vulgaris</i>	10	1975-2005	Sect.41.suppl
	Tree Sparrow	<i>Passer montanus</i>	2	1999-2015	Sect.41
	Turtle Dove	<i>Streptopelia turtur</i>	1	1975-1976	Sect.41
	Willow Tit	<i>Poecile montanus</i>	7	1975-1999	Sect.41.suppl
	Yellowhammer	<i>Emberiza citrinella</i>	16	1975-2007	Sect.41
bony fish (Actinopterygii)	European Eel	<i>Anguilla anguilla</i>	2	2014	Sect.41
flowering plant	Cornflower	<i>Centaurea cyanus</i>	2	2002-2014	Sect.41
	Marsh Stitchwort	<i>Stellaria palustris</i>	2	1987	Sect.41
	True Fox-sedge	<i>Carex vulpina</i>	1	1979	Sect.41
insect - butterfly	Wall	<i>Lasiommata megera</i>	8	1994-2004	Sect.41
insect - moth	Sallow	<i>Cirrhia icteritia</i>	1	1971	Sect.41
mollusc	Mud Pond Snail	<i>Omphiscola glabra</i>	7	1996	Sect.41
reptile	Common Lizard	<i>Zootoca vivipara</i>	2	1833-1959	Sect.41
terrestrial mammal	Bat	<i>Chiroptera</i>	4	2007-2012	Sect.41
	Brown Hare	<i>Lepus europaeus</i>	31	1976-2022	Sect.41
	Brown Long-eared Bat	<i>Plecotus auritus</i>	4	1988-2018	Sect.41
	Hedgehog	<i>Erinaceus europaeus</i>	116	1973-2023	Sect.41
	Noctule	<i>Nyctalus noctula</i>	3	2016-2018	Sect.41
	Pipistrelle Bat species	<i>Pipistrellus</i>	15	1997-2015	Sect.41
	Red Squirrel	<i>Sciurus vulgaris</i>	1	2008	Sect.41
	Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	2	2008-2019	Sect.41
	Water Vole	<i>Arvicola amphibius</i>	21	1993-2018	Sect.41

Locally Important Sites

The Netherley Brook and Ditton Brook Nature Improvement Area is located approximately 500m to the east, with Ditton Brook holding local populations of Water Vole. The closest Local Nature Reserve is Ditton Brook.

Figure 2
Nature Improvement Area Location Plan

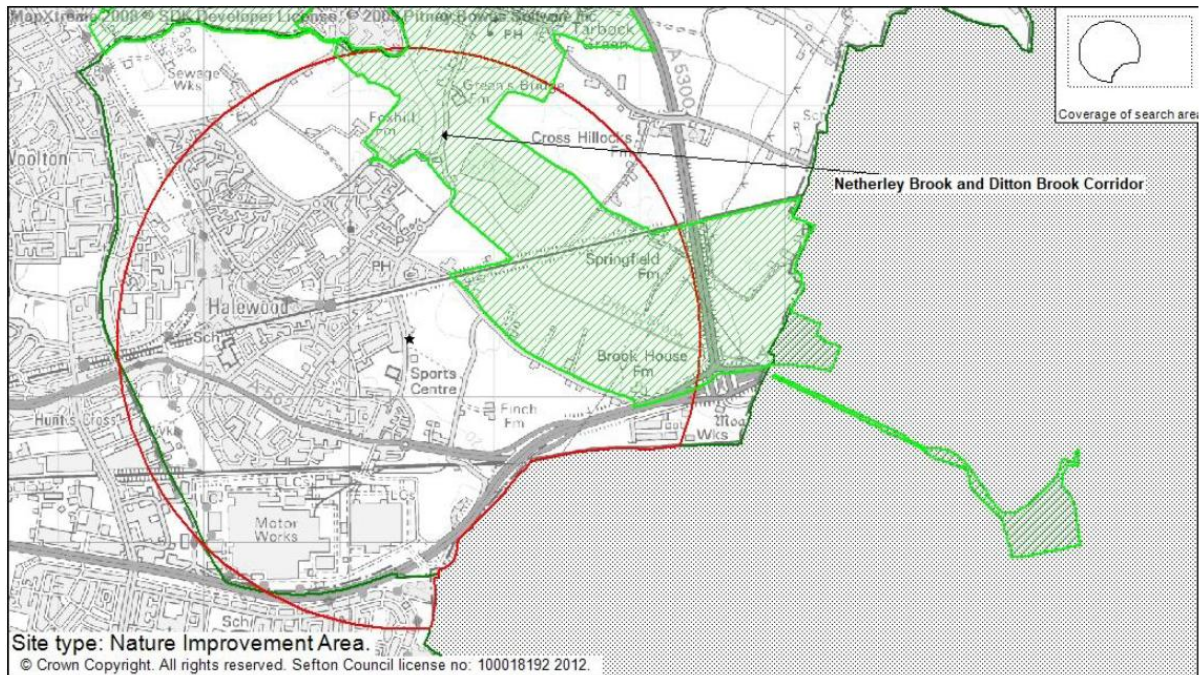
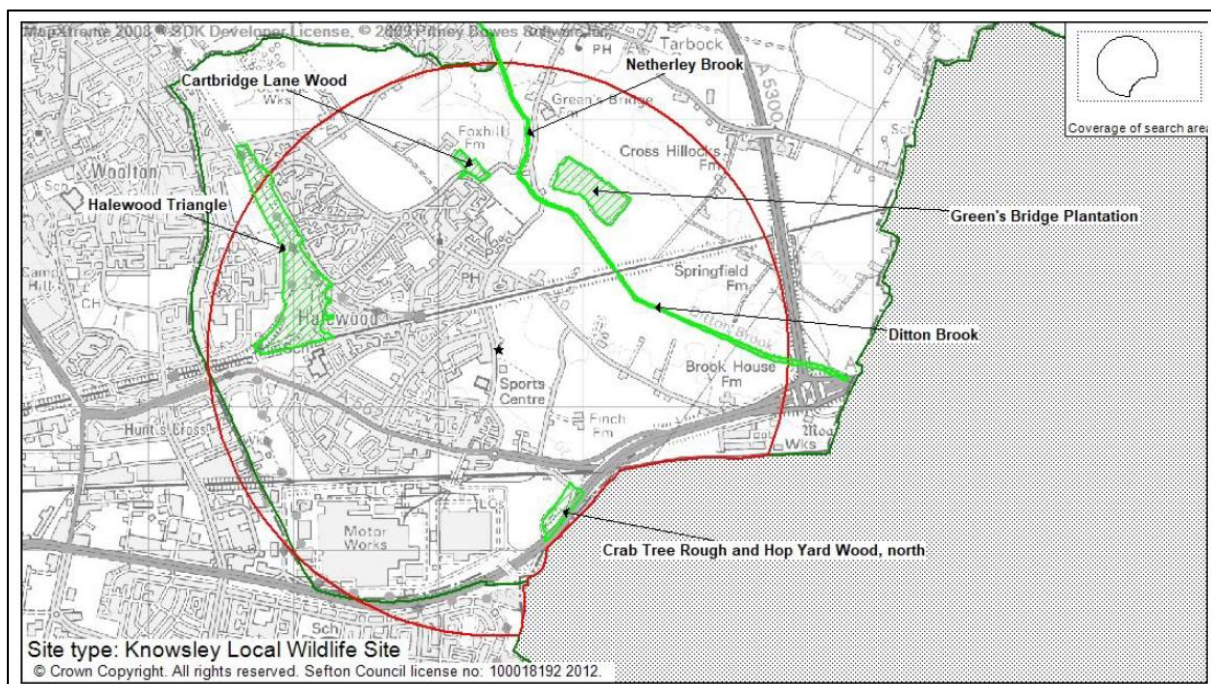


Figure 3
Local Nature Reserves



3. Extended Phase One Habitat Survey

3.1 Methodology and survey results

The site was visited on the 25th July 2024 and a survey of the site was conducted using the Joint Nature Conservation Committee (JNCC) Handbook for Phase 1 habitat survey 2010. Distinct habitats were identified and any features of nature conservation interest or habitat areas that were too small to map were subject to a more detailed description in a Target Note (T1 etc) and contained in Appendix 1 – Extended Phase 1 Habitat Survey Mapping and

3.1.2. Vascular Plants and Habitat

Habitat Code	Dominant species	Less frequent species
Hawthorn scrub	Rubus sp(p) Crataegus monogyna Salix sp(p)	Salix caprea
Scattered trees	Acer pseudoplatanus Crataegus monogyna	Salix caprea
Modified grassland	Festuca rubra Taraxacum officinale Trifolium repens	Dactylis glomerata Lolium perenne Poa annua Bellis perennis
Introduced shrub	Hebe sp Berberis darwinii	
Species-poor hedgerow	Lycesteria sp, Cuppressus sp	
Building and hard standing	NA	
Dry ditch located outside of red line boundary within influence.	Rubus sp(p) Ilex sp(p)	Chameanerion angustifolium

Target Notes – None taken

1: Japanese Knotweed Location (see habitat map)

3.1.3 Protected and Notable Species (Mammals)

Water Voles

The habitat on the site does not contain running/standing water habitat suitable for the species and no field signs of the species were observed in the survey area.

Bat species

Bats are comprehensively protected under UK and European legislation. Bats are largely ubiquitous there is green infrastructure linking the site to the wider landscape. The site contains foraging habitat. Trees and buildings may need to be removed for development which could contain bat roosts.

Badgers and Hedgehog

Badgers are protected under Schedule 6 of the Wildlife and Countryside Act 1981, and under the Protection of Badgers Act 1992, which prohibits deliberate interference with the animal or its sett. Badger records are present in the LRC data. A standard badger survey was undertaken making checks on site and in the immediate site margins. For example, up to 20m+ from site was checked for signs for field signs of Badger (hair, tracks, prints, dropping or latrines), a number of large mammal runs were found onsite but originated from rabbits as they lead to burrows and droppings were located on one. A number of areas of small indentations leaving exposed bare ground were indicative of badger foraging.

No field signs were found for hedgehog, however suitable foraging habitat does exist due to the presence of trees and grassland and the semi urban nature of the site.

3.1.4 Amphibians

The desktop and field survey exercises indicate a field pond is located within 70m east of the site adjacent to the propriety woodland, with several other ponds located within 250m. There is no aquatic breeding habitat associated with the site itself and sub optimal foraging, dispersal or hibernating habitat for amphibians to be present.

A review of adjacent planning applications sites and the ALERC records for GCN revealed there are no records of this species within a 1km radius, with the closest positive record being over 1.2km to the northwest from 2012. It is considered highly unlikely that the adjacent ponds, or ponds within the immediate locality will have been colonised by GCN populations from confirmed sites due to the distance from the survey site, and major dispersal barriers such as A roads, railway lines and urban context. A full amphibian appraisal was not considered proportionate due to the lack of suitable habitat on site and that no ponds or optimum habitat will be affected by the development proposals. A dry ditch is located outside of the redline boundary to the north, but is within 10m influence. The ditch at the time of survey did not appear to have held water for some time, with tree species and bramble scrub well established along its length.

3.1.5 Birds

All birds with only minor exceptions are protected under the Wildlife and Countryside Act (1981), as amended. It is also an offence to disturb birds whilst nesting or displaying breeding behaviour, during the breeding season.

Urban birds may use the site such as house sparrow and starling which are birds of conservation concern. Building number 4 had large areas of Pidgeon faces located around the internal parts of the walls and a pair of birds were resting on the metal frame at the time of survey. No evidence of Swift, Barn Owl or Swallow was discovered in any of the buildings.

3.1.6 Vascular Plants

The Wildlife and Countryside Act 1981 section 13 1(b) affords some wild flowers protection from uprooting. No other IUCN listed, BAP or other notable plants were identified. A small stand of single non-native invasive (WCA Schedule 9) vascular plants were found (Japanese Knotweed) which were located towards the northern portion of the site behind building number 4. This stand of Knotweed is currently undergoing a phased treatment plan to eradicate it from site.

3.1.7 Reptiles

All native reptile species in the UK are protected under law from killing or sale. No habitat exists on the site for these species to be present.

3.2. Constraints to the Surveys

The timing of the site visit was optimal for all species and habitats to be identified within the framework of a Phase 1 survey.

4. Summary and Impact

4.1 Summary – Protected habitats

The surveys have confirmed that the site does not support a habitat protected under Section 41 of the Natural Environment and Rural Communities (*NERC*) Act 2006 - Habitats and Species of Principal Importance in England. There are no priority hedgerows on the site.

Summary - Protected species

No evidence of protected species was recorded on site. No other evidence of protected species was found during the site walkover. A non-native vascular plant was discovered.

Summary – Protected sites

There are no statutory or non-statutory designated sites within the boundaries of the development site or within the site margins.

Impact – General

The development proposal seeks to construct new dwellings and associated infrastructure and there is a direct loss of amenity grassland, introduced shrub, scrub, building and hard standing for the footprint of the development.

Impact - Species

The full extent of protected species that may reside on this site will require confirmation following further surveys as recommended in section 4.2. The following general impacts are considered to apply:

Species	Impact of species of development
Amphibians	Sub optimal foraging habitat recorded and it is considered highly unlikely that amphibian species will use the site .
Badger/hedgehog	Badger has low potential to be onsite, hedgehog may use the site for commuting but no suitable habitat for foraging/shelter exists.
Bats	Loss of sub optimal commuting and foraging. Potential roost sites in trees / buildings
Birds	Breeding bird survey required.
Reptiles	No impact to reptilian species.
Vascular plants	No significant loss of vascular plant and a single non-native protected plant was identified.
Water vole	No impact considered likely.

4.2 Recommendations for protected species

4.2.1 Mammals

Bat species

A Bat Roost Assessment of all trees and the buildings to be removed is required. The Bat Roost Assessment may recommend the need for a summer emergence survey/s on the identified roost features in trees / building. The site is not likely to hold great significance for commuting and foraging bat species due to site size.

Badgers / hedgehog

No evidence of these species was found but a pre start check shall be made to ensure no badger activity has developed since this walkover survey. Measures are required to incorporate hedgehog into the development plans.

4.2.2 Amphibians

No other further surveys are recommended for these species.

4.2.3 Avian

A breeding bird appraisal / survey will be required prior to any tree to removal ascertain the importance of the site to breeding birds at that time. This may require hand searching and dawn observations depending upon the time of year.

4.2.4 Vascular Plants

No other further surveys are required for vascular plants. A non-native eradication plan is currently being implemented for the eradication of Japanese Knotweed..

4.2.5 Reptiles

No further surveys are required for these species.

5. Recommendations, mitigation, enhancement measures

5.1 Recommendations, mitigation, enhancement measures

Mitigation applies to works required to comply with legislation when developing land where protected species reside, or protected habitats are being lost. Enhancement relates to biodiversity improvements often made under the National Planning Policy Framework.

At present there is no evidence of protected species on the site, which could be affected by development. Other protected species that may be present on site include bats, badgers and hedgehog.

The extent of protected species requires the surveys referred to in section 4.1 and 4.2 to be complete before mitigation can be proposed to support this development. Upon completion of these surveys mitigation, compensation and enhancement measures can be provided and confirmed.

The provision of a Biodiversity enhancement report and a Biodiversity Net Gain Assessment is considered to apply to the site in accordance with the NPPF guidelines and best practice.

Appendix 1: Site Images, buildings.



Building 1, Farmhouse



Building 2, Outbuilding



Building 3, Barn



Building 4, Garage

Site Images, habitats.

Detailing the urban setting, areas of hard standing, introduced shrub, amenity grass/vegetated garden, hedgerows, tree groups, and area of scrub to the rear of the garage building which contains a small stand of Japanese knotweed and a dry ditch just outside of the red line boundary looking north towards the adjacent housing development.



Appendix 2: Species List

Acer pseudoplatanus
Bellis perennis
Berberis darwinii
Buddleja sp.
Chamerion angustifolium
Convolvulus arvensis
Corylus avellana
Crataegus monogyna
Dactylis glomerata
Digitalis purpurea
Epilobium parviflorum
Fallopia japonica
Festuca rubra
Galium aparine
Geranium robertianum
Hebe sp
Hordeum glaucum
Lolium perenne
Ligustrum vulgare
Malus sylvestris
Plantago lanceolata
Poa annua
Prunus laurocerasus
Pyrus sp
Sorbus aucuparia
Ranunculus repens
Ribes sp.
Rubus agg.
Taraxacum officinale
Trifolium repens
Urtica dioica
X Cupressocyparis leylandii

Appendix 2: Extended Phase 1 Habitat Survey Map



UK HABITAT MAP KEY

-  Broadleaf scattered trees
-  Modified grassland
-  Introduced shrub
-  Hawthorn scrub
-  Ornamental hedge
-  Urban sealed and building
-  Dry ditch
-  Target Note:
Japanese Knotweed Location

AMENITYTREE
ENVIRONMENTAL PLANNING CONSULTANTS

The Annexe, Willow Hill Cottage, School Lane,
Burwardsley, Chester. CH3 9NX
Tel. 01829 770075

Client:

DK Architects

Project:

Baileys Lane, Halewood, Liverpool L26 0UA
12180

Detail:

HABITATS PLAN - Overview

Drawn By:

PS

Date:

07.10.2024

Scale:

1:500@A3

Drg No:

TR-01

Revision:

V1

