

PRELIMINARY ECOLOGICAL APPRAISAL

DECEMBER 2023

185 Manchester Road
Rochdale
OL11 3QY

U R B A N
G R E E N



QUALITY MANAGEMENT

Project No.:	UG2266			
Project:	185 Manchester Road			
Location:	Rochdale, OL11 3QY			
Title:	Preliminary Ecological Appraisal			
Document Type:	PEA	Issue No.:	01	
Date:	18/12/2023			
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Revision Status				
Rev	Date	Comment	Prepared	Checked
01	03/07/2025	Report amended to reflect revised development plans.	Siobhan Gandee	Toby Mills

NON-TECHNICAL EXECUTIVE SUMMARY

Mosaic Town Planning are proposing to develop land at 185 Manchester Road in Rochdale (hereafter referred to as 'the site'). The proposals include replacing the existing property with a 74-bed dementia care residential apartment with associated hard and soft landscaping.

Urban Green have been appointed to complete a Preliminary Ecological Appraisal of the site. The objectives of the assessment are to identify habitats on site and determine the suitability for any 'protected and/or notable' species that may occur on site. Further ecological surveys and mitigation are recommended to aim to minimise potential impacts on ecology, due to the proposed development.

Following the survey work, the key recommendations are summarised in the following table:

Current Site Use and Adjacent Site Use	The current site contains an existing residential dwelling contained within paved surfaces, a large, grassed garden and situated in a predominantly residential area with playing fields, schools, Highfield hospital and Mandale Park within the surrounding area.
Potential Impacts on Designated Sites	No potential impacts on designated sites nearby to the site are anticipated to occur due to the proposed development. The site is located at a sufficient distance from nearby designated sites, and the proposed development activities have been considered.
Habitats	The site comprised predominantly hardstanding paving, with a private garden of maintained modified grassland (with bordering bare ground flowerbeds), hedges, urban trees and ornamental plants.
Ecological Constraints	The following potential ecological constraints were identified during the assessment: • November is a suboptimal time to carry out ecological surveys due to being outside of the optimal plant growing season. • Offsite trees are currently protected by 'Dunster House Tree Preservation Order 1969' which require further licensing to manipulate. • There is potential for nesting birds on site. • Suitable habitats for common amphibians, nesting birds, commuting and foraging bats, hedgehog, and commuting and foraging badger.
Recommended Ecological Mitigation	The following mitigation measures are recommended to minimise potential impacts due to the proposed development: • Precautionary Working Methods during the construction phase for potential protected species including amphibians, bats, hedgehog, birds, and badger. • If any vegetation requires removal, it should be completed outside of the breeding bird season (March to September, inclusive). If this is not feasible, a Nesting Bird Check is to be completed by a qualified ecologist within 48 hours before removal is completed. • Lighting mitigation recommended to consider commuting and foraging bats.
Recommended Further Surveys and Reports	No further surveys are required.

Recommended
Ecological
Enhancements

The National Planning Policy Framework (NPPF) (2023) highlights the requirement for planning policies and decisions to conserve and enhance the natural environment. The proposed development provides the opportunity to enhance the site and ecological enhancements have been recommended.

Suggestions include:

- Bat and bird boxes placed on new buildings/retained trees.
- Planting and retaining linear features such as hedgerows and trees between garden plots where possible.
- Inclusion of 'hedgehog highways'
- Incorporation of an ecologically sensitive planning scheme on the site.

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1 Introduction

1.1 Background to the Scheme

Mosaic Town Planning are proposing to develop land 185 Manchester Road in Rochdale (hereafter referred to as ‘the site’). The proposals include replacing the existing property with a 74-bed dementia care residential apartment with associated soft and hard landscaping.

Urban Green have been appointed to undertake a Preliminary Ecological Appraisal (PEA) of the site.

The author of the report is Olivia Jones, MSc, BSc (Hons), Assistant Ecologist at Urban Green.

1.2 Site Context

The site is located at National Grid Reference SD 89171 12306 and comprises a total area of approximately 0.2ha (see Figure 1).

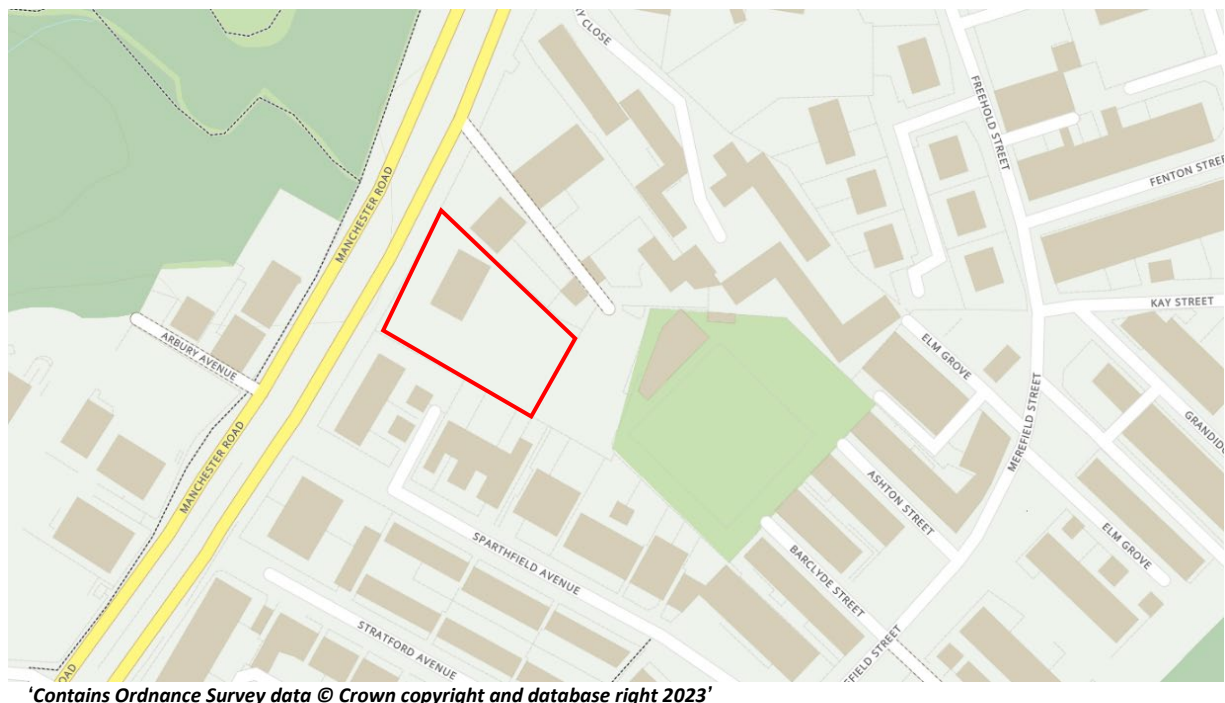


Figure 1 – Site Extent

The site is located in a densely urban area, approximately 1.2km from the centre of Rochdale. Rochdale train station is located approximately 790m north-east, with the railway lines running behind the site approximately 200m away. Mandale Park and various playing fields are situated to the north and south-east of the site. Due to the site’s location close to the city centre and railway lines/station, there is a high level of disturbance.

1.3 Purpose of this Report

This report has been produced to set out the methods, results, and conclusions of a PEA. The purpose of the PEA report is to identify habitats on site and determine the sites potential value for protected and/or notable fauna and flora, with the addition of potential impacts on designated sites. This will inform the need for any further ecological surveys and/or mitigation to minimise the potential impacts on ecology on site and within the local area.

Further information and details of UK legislation for those species which are formally protected is defined in Appendix 1, which are considered throughout the assessment.

The National Planning Policy Framework (NPPF) (2023) and other Local Planning Policies are considered with the PEA. Ecological enhancements are advised to be in line with relevant Planning Policies.

2 Methods

The PEA assessment and Report follows the good practice methodology as detailed within the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2019).

2.1 Desk Study

2.1.1 Online Resources and Local Records Centre

Due to the size and low impact of the proposed development and being located within a predominantly urban area of Rochdale, a 1 km Local Data Search was conducted as it is deemed an appropriate distance for the Zone of Influence.

Sources of information used in the desk study are presented in Table 1.

Table 1 – Desk Study Sources of Information

Source	Date Consulted	Information Sought
MAGIC website (www.magic.gov.uk)	22/11/2023	Locations of statutory designated sites within 1km of the site boundary. Locations of Natura 2000 sites (Ramsar, Special Area of Conservation (SAC) and Special Protection Area (SPA)) within 5km of the site boundary. Locations of European Protected Species Licences (EPSL) and Class Licences within 1km.
Natural England (https://designatedsites/.naturalengland.org.uk/)	22/11/2023	Relevant statutory designated site citations.
JNCC (https://jncc.defra.gov.uk/)	22/11/2023	Information on European wildlife sites. Details of relevant Section 41 species and habitats.
Greater Manchester Ecology Unit	01/12/2023	Locally designated wildlife sites within 1km of site boundary. Records of protected and notable species within 1km of the site boundary.
Greater Manchester Local Biodiversity Action Plans	01/12/2023	Species and habitats which are given special conservation status at the local level.

2.2 Field Survey

2.2.1 Vegetation

The site was subject to a field survey on 16/11/2023, by Ecologist, Jake Healy and Assistant Ecologist, Olivia Jones of Urban Green. The weather conditions were 7°C, partly sunny (2/8 oktas), wind speed 1 Beaufort scale.

The methods were based on the standard methodology as detailed by The UK Habitat Classification User Manual (Butcher et al, 2020). A UKHab Habitat Plan has been produced to demonstrate habitats within the proposed development and the surrounding area. The mapping techniques are based on The UK Habitat Classification User Manual (Butcher et al, 2020) guidance.

Flora species listed as protected in the *Wildlife and Countryside Act 1981* (as amended) and species which are indicators of important and/or uncommon habitats, were searched for during the survey.

Species abundance is described using the DAFOR scale as shown in Table 2. Percentages are an approximate indication rather than a quantitative measure.

Table 2 – Key to Species Abundance

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

Any invasive species, including those listed on the revised (April 2010) Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were noted during the field survey when sighted.

2.2.2 Fauna

A site search for field signs of protected and notable fauna was undertaken, and incidental sightings are detailed. The searches completed were as follows:

- Suitability of any ponds to support notable and protected amphibians, and the suitability of the site’s terrestrial habitats to support amphibians.
- Suitability of the site to support reptiles by way of habitat structure and refuge piles, as well as links to the wider landscape.
- Search of any watercourses for signs or suitability for white clawed-crayfish (*Austropotamobius pallipes*), water vole (*Arvicola amphibius*) and otter (*Lutra lutra*) by way of burrows, resting places, holts, and foraging signs.
- Suitability of the site to support notable bird species. Bird nests and droppings of notable and protected bird species.
- Suitability of the site to support notable invertebrates.
- Search of the site for any invasive species.
- Badger (*Meles meles*) field signs such as setts, mammal, paths, snuffle holes and latrines.
- Suitability of the site to support notable terrestrial mammals including harvest mouse (*Micromys minutus*) and brown hare (*Lepus europaeus*).

2.3 Bat Assessment

2.3.1 Preliminary Roost Assessment

A Preliminary Roost Assessment (PRA) was carried out on the site buildings and trees using close-focussing binoculars.

The PRA methodology is based on information contained within the Bat Conservation Trust (BCT) guidelines, 4th edition (Collins, 2023). The categorisation within this report is based on that set out in Table 3, which is used as a basis for determining the requirement for further surveys.

Table 3 – Suitability of Buildings and Trees for Roosting Bats (adapted from Collins, 2023).

Category of Suitability	Typical Characteristics	Further Survey Requirements
High Roost Suitability	A structure/tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September, with at least two surveys between May and August.
Moderate Roost Suitability	A structure/tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but are unlikely to support a roost of high conservation status.	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September with at least one survey between May and August.
Low Roost Suitability	A structure/tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate condition and/or suitable surrounding habitat to be used on a regular basis by larger numbers of bats.	Structures: one emergence/re-entry survey between May and August. Trees: No further survey required but precautionary methods of felling recommended.
Negligible Suitability	Negligible habitat features on site likely to be used by roosting bats.	No further work required.

2.3.2 Commuting and Foraging Bats

The site was assessed for its suitability for use by commuting and foraging bats.

The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 3rd edition (Collins, 2023). The categorisation within this report is based on that set out in Table 4, which is used as a basis for determining the requirement for further surveys.

Table 4 – Suitability of Site for Foraging and Commuting Bats (adapted from Collins, 2023)

Category of Suitability	Typical Characteristics
High Suitability	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting or foraging bats such as; river valleys, streams, hedgerows, lines of trees or woodland edge. Site is close to or connected to known roosts.
Moderate Suitability	Continuous habitat connected to the wider landscape that could be used by commuting bats such as lines of trees, scrub or linked back gardens. Habitat connected to wider landscape that could be used for bats for foraging such as; trees, scrub, grassland or water.
Low Suitability	Habitat that could be used by small number of commuting bats such as; defunct hedgerow, isolated features not well connected to surrounding habitat or Isolated habitat that could be used by a small number of foraging bats such as a lone tree or patch of scrub.
Negligible Suitability	No features on site suitable for use by commuting and foraging bats.

2.4 Habitat Suitability Index

No ponds were present on site or within 250m of the site boundary. As great crested newts' upper dispersal limit is generally considered to be up to 250m from a waterbody (though occurrence of greater distances does exist), ponds beyond this distance were not assessed due to limited connectivity (English Nature, 2001).

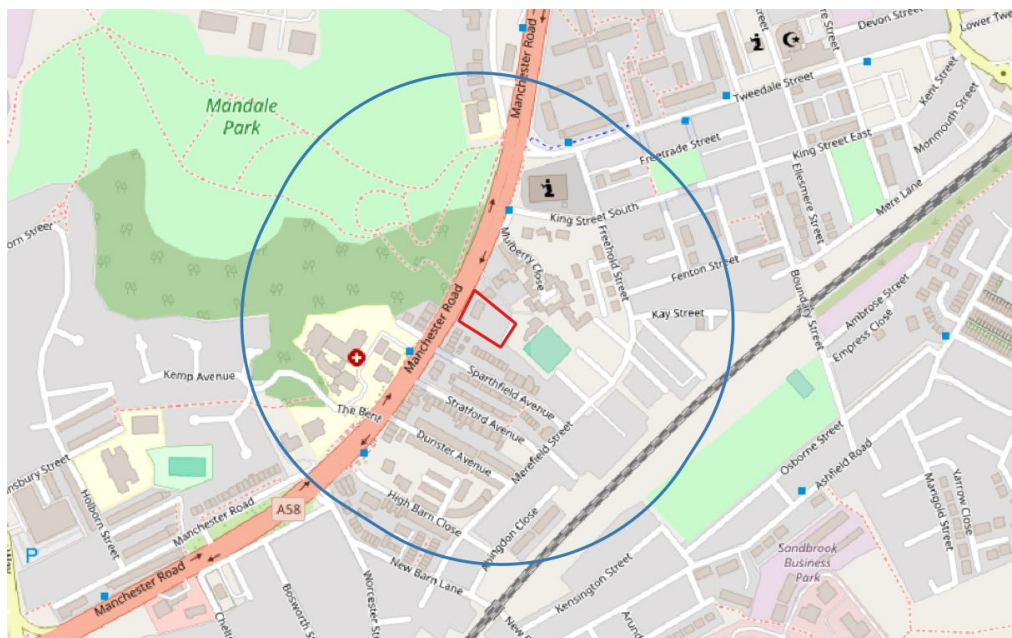


Figure 2. Map of waterbodies within 250m of the site.

2.5 Constraints to the Survey

Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.

This PEA does not constitute a full botanical survey. The protected species assessment provides a view of the likelihood of protected species occurring on the site based on the known distribution of species in the local area and the suitability of the habitat.

November is a suboptimal time for carrying out UKHab Habitat Surveys due to being outside of the optimal plant growing season. Therefore, it is likely that some plants are present on the site but were not evident at the time of the survey and were not recorded. This is not considered to be a significant constraint with regards to the general UKHab Habitat Survey results as the habitats remained consistent with previous surveys, and due to the size and location of the site and limited extent of the habitats, it is considered very unlikely that any rare or priority plant species were missed.

Access to the attic area was limited due to the insulation covering the roof space, so identification of bat access points was based on what could be seen from the attic entrance and an external roost assessment.

It should not, however, be taken as providing a full and definitive survey of any protected species group.

Where a lack of records is found during the desk search for a defined geographical area, it does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

The conclusions and recommendations detailed in this report are based upon the site redline boundary and the development proposals as outlined by the client at the time of writing. Should there be any changes to the site redline boundary or development proposals at a later stage, this assessment should be reviewed to determine whether any amendments or additional survey work is required.

The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.

2.6 Lifespan of Report

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 **22/05/2025**). After this date, this assessment should be reviewed to determine whether any updated surveys are required.

2.7 Definitions

For the purposes of this report, the term 'protected and notable species' relates to:

- Species included on Schedules 2 and 4 of *The Conservation of Habitats and Species Regulations 2017*;
- Species included on Schedules 1, 5 and 8 of the *Wildlife and Countryside Act 1981* (as amended), excluding species that are only protected in relation to their sale (see section 9[5] and 13[2]);
- Invasive non-native species included on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended);

- Species of principal importance for the conservation of/maintaining and enhancing biodiversity as required under: Section 41 of the *Natural Environment and Rural Communities Act 2006* (England), Section 7 of the *Environment (Wales) Act 2016*, Section 2[4] of the *Nature Conservation (Scotland) Act 2004*;
- Local species of importance as identified within various local biodiversity action plans; and,
- Badgers, which are protected under the *Protection of Badgers Act 1992*.

3 Baseline Ecological Conditions

3.1 Desk Study

3.1.1 Site Location

The site lies within a predominantly urban area of Rochdale, with residential buildings present in the immediate vicinity and residential properties and schools present in the wider area.

It is anticipated these habitats will provide suitable foraging, resting, and commuting resources within the local area for a variety of wildlife, such as birds, bats, and other terrestrial mammals.

Habitats within the surrounding area are limited to urban street planting and recreational parks, with Castleton Bowling Club and Playing Fields all present within 500m of the site. Dense woodland and vegetation of Mandale park is located approximately 25m north from site.

3.1.2 Designated Sites

One site that forms part of the National Site Network was located within 5km of the site boundary. No other statutory sites were located within 1 km of the site. Though one non-statutory designated site was located within 1km of the site and is detailed within Table 6.

Table 6 – Designated Sites within the Search Areas

Designated Site	Approx. Distance from Site	Details
Statutory designated sites		
Rochdale Canal (SSSI and SAC)	0.7km	Approximately 25ha of canal which supports a diverse range of aquatic flora, emergent vegetation, invertebrates, and waterside bird species. The canal supports significant populations of floating water-plantain (<i>Luronium natans</i>) and a wide range of pondweeds (<i>Potamogeton</i> sp.).
Non-statutory designated sites		
Community Forest (Pennine Edge Forest)	Covers site	Community woodland initiative on the eastern edge of Greater Manchester.

Based on consultation with MAGIC, the site also falls within the Impact Risk Zone of Rochdale Canal Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI). This is located approximately 0.7km south-east of the site. This site is designated for the significant populations of floating water-plantain (*Luronium natans*) and diversity of pondweed species (*Potamogeton* sp.) supported within the predominantly mesotrophic waters.

3.1.3 Flora and Fauna

The following section summarises protected and/or notable species records that have been recorded within 1km west of the site.

Invertebrates

Four records of cinnabar moth (*Tyria jacobaeae*) were returned in the data search between 2012 and 2021, the closest record being approximately 190m from site.

One record of sawfly moth (*Xanthia icteritia*) was returned in 2015 approximately 980m from site.

One record of wall butterfly (*Lasiommata megera*) was returned in the data search in 2015, approximately 550m northeast of the site.

All species records returned are listed on Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006.

Vascular Plant

Six records of floating water-plantain (*Luronium natans*) were returned in the data search between 2006 and 2011, all located approximately 1km from site.

Floating water plantain is listed under Schedule 8 of the WCA (1981) as well on the Greater Manchester Local Biodiversity Action Plan (LBAP).

Great Crested Newt

One record of great crested newt (*Triturus cristatus*) was returned in 2005 approximately 410m from site. This species is listed under the LBAP, Schedule 5 of the WCA (1981), Section 41 of the NERC Act (2006) and as a European Protected Species (EPS) under the Conservation of Habitats and Species Regulations 2017.

Birds

A total of 282 records of protected or notable birds were returned within 1km of the site as detailed in Table 7.

Table 7 – Protected or notable birds recorded within 1km.

Scientific Name	Common Name	Protection	No. of records	Closest approximate distance from site	Date
<i>Tyto alba</i>	Barn owl	Sch.1****, LBAP*****	1	812m	2012
<i>Pyrrhula pyrrhula</i>	Bullfinch	BoCC5**, S41*****, LBAP*****	10	700m	2016
<i>Numenius arquata</i>	Curlew	BoCC5*, S41*****	1	820m	2015
<i>Prunella modularis</i>	Dunnock	BoCC5**, S41*****	68	700m	2010 and 2013
<i>Larus argentatus</i>	Herring gull	BoCC5*, S41*****	2	660m	2019
<i>Passer domesticus</i>	House sparrow	BoCC5*, S41*****, LBAP*****	40	670m	2019
<i>Alcedo atthis</i>	Kingfisher	Sch.1****, BoCC5**, LBAP*****	4	570m	2008
<i>Acanthis cabaret</i>	Lesser redpoll	BoCC5*, S41*****	1	708m	2010
<i>Falco peregrinus</i>	Peregrine	Sch.1****	38	600m	2012
<i>Turdus philomelos</i>	Song thrush	BoCC5**, S41*****, LBAP*****	13	210m	2019
<i>Sturnus vulgaris</i>	Starling	BoCC5*, S41*****	104	730m	2010 and 2013

* Listed Red on the Bird of Conservation Concern 5 (2021)

** Listed Amber on the Bird of Conservation Concern 5 (2021)

*** Listed black on the Bird of Conservation Concern 5 (2021)

**** Wildlife & Countryside Act (Sch 1, 5 & 8)

***** Listed on Section 41 (NERC Act, 2009).

***** Greater Manchester Biodiversity Action Plan (LBAP 2009)

Bats

Forty-five records of bats were returned during the data search, including common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Daubenton's bat (*Myotis daubentonii*), whiskered bat (*Myotis mystacinus*), an unidentified bat species and an unidentified pipistrelle species.

Roosting

Six of the bat records returned were roosting bats. Roosting species included common pipistrelle, soprano pipistrelle, daubenton's bat, one unidentified bat species and one unidentified pipistrelle species between 2012 and 2021. The closest record of bat roost attributed to common pipistrelle, located approximately 130m from site within the Highfield Hospital in 2020.

Field Signs

Various field signs of bats including species of common pipistrelle, daubenton's bat, whiskered bat and an unidentified pipistrelle species. Field sightings included foraging, bat detectors, casualties, and mist netting between 1997 and 2022. The closest field sign attributed to a deceased female common pipistrelle approximately 190m from site within Sparth Bottom Park.

The species listed are protected under the LBAP, WCA 1981 and are a European Protected Species through the Conservation and Habitats and Species Regulations (2017). Soprano pipistrelle are also listed on Section 41 of the NERC Act (2006).

MAGIC also detailed the presence of one granted EPSL within 1km of the site (Ref:EPSM 2009-709). This licence was to allow destruction of a resting place for common pipistrelle between 2009 - 2010. It was located approximately 860m north of the site.

Hedgehog

Twelve records of hedgehog were returned within 1km of the site, with the closest record located approximately 450m east of the site from 2020. Hedgehog are listed on Section 41 of the NERC Act (2006).

Badger

Four records of Badger were returned in the data search within 1km of the site, with the closest record being 830m south west from the site.

Badgers are protected by the Protection of Badgers Act (1992).

No Records Returned

The data search returned no records for:

- Common amphibians
- Reptiles
- Hazel dormice (*Muscardinus avellanarius*)
- Red squirrel (*Sciurus vulgaris*)
- Water vole
- White-clawed crayfish

- Otter
- Invasive non-native species

3.2 Field Survey

The site habitats and accompanying Target Notes are presented in the UKHab Habitat Map in Appendix 4.

Secondary codes are added to confirm the identity of a habitat (when necessary), and also to provide information on management and the environment relating to that habitat parcel. The number and type of secondary codes added to a primary habitat will vary depending on the habitats present. There is no limit to the number of secondary codes that can be used for a single parcel. More details regarding the secondary codes used can be found in Appendix 4.

3.2.1 Building (u1b5)

One large residential building is present onsite with an associated garage attached to the east of the building.



Photograph 1- Northern aspect of the building



Photograph 2- Southern aspect of the building



Photograph 3- Southern aspect of the building with view of the second floor



Photograph 4- Western aspect of the building with view of the chimney

3.2.2 Developed land; sealed surface (U1b)

Hardstanding parking is located to the immediate north of the building, with modified grassland stretching from the right side of the building to the rear garden.

3.2.3 Line of Trees/Bare ground (U1 109 1150)

A broken line of planted trees which comprises Hynoki cypress (*Chamaecyparis obtusa*), yew (*Taxus baccata*) and fir tree (*Pseudotsuga menziesii*) is located along the north-eastern boundary of the site. The bare ground was covered in leaf litter and appeared to be an ornamental flower bed.



Photograph 5 – Urban trees within bare ground

3.2.4 Line of trees (w1g6 75 and w1g6)

Two lines of trees (w1g6 75 and w1g6) are situated in the south of the site, comprising of sycamore (*Acer pseudoplatanus*) and a line of Leyland cypress (*Cupressus x leylandii*) with occasional beech (*Fagus sylvatica*), one failed small laurel shrub (*Prunus laurocerasus*) in understory with Japanese skimmia (*Skimmia japonica*) at one end.



Photograph 6 – South-eastern line of trees



Photograph 7 – South-western line of trees

3.2.5 Scattered trees (g4 11 64 75 231)

The mixed scattered trees throughout the modified grassland of the site comprise of several young wild cherry trees (*Prunus avium*). There are three rhododendron (*Rhododendron ponticum* cf.) trees next to the building. One is a large rhododendron with a species of cotoneaster (TN1) and a juvenile beech tree emerging from the bottom.



Photograph 8 – Scattered planted cherry trees throughout the modified grassland (g4 11 64 75 231).



Photograph 9 – Rhododendron (*Rhododendron ponticum*) trees surrounding Ref TN1.

3.2.6 Modified Grassland (g4 11 64 75 231)

The ground flora (Map ref: g4 11 64 75 231) comprises perennial rye grass (*Lolium perenne*), fescue (*Festuca* sp.) and a highly mossy lawn with dandelion (*Taraxacum officinale*), clover (*Trifolium* sp.), creeping buttercup (*Ranunculus repens*), honey fungus (*Armillaria*), willowherb (*Epilobium hirsutum*), fox glove (*Digitalis purpurea*), onion (*Allium cepa*), rose (*Rosaceae*), fuchsia (*fuchsia* sp.), yellow archangel (*Lamium galeobdolon*), pansy (*Viola* × *wittrockiana*), herb-robert (*Geranium robertianum*), common daisy (*Bellis perennis*) and ragwort (*Jacobaea vulgaris*). This grassland is bordered by hardstanding stone paths.



Photograph 10- Overview of the modified grassland on site (g4 11 64 75 231)

3.2.7 Hedgerow (h2b 75 1180 239 and u1 109 1150 1160)

Introduced leyland cypress borders the entrance of the site and is highly dense and regularly maintained. There is a small gap between the bottom of the hedge and the ground, filled with associated dead leaves, sticks, rocks and soil.



Photograph 11- First half of the hedgerow



Photograph 12- Second half of the hedgerow

3.2.8 Introduced Shrub

A bare ground flowerbed is also present alongside the hedgerow, which is vegetated with ornamental planting, including hydrangea (*Hydrangea* sp.), all supported with a fence to the rear.



Photograph 13 - Flowerbed with various planted vegetation (u1 109 1150 1160)



Photograph 14- Flowerbed with various planted vegetation (u1 109 1150 1160)

3.2.9 Deadwood (TN2)

One pile of deadwood was located on the site as reference TN2 on the map. This comprised of general dead small tree branches, sticks, leaves, wood shavings and a sheet of cardboard.



Photograph 15 - Medium sized deadwood pile (TN2)

3.3 Site Suitability for Protected and Notable Species

3.3.1 Species Discounted from Assessment

Water vole, otter and white-clawed crayfish have been discounted from assessment as no aquatic habitats are located on site or within proximity. The closest aquatic habitat is located approximately 0.7km east, relating to Rochdale Canal, which may support these species, however it is unlikely that they would travel to the site.

Hazel dormouse mainly occur in southern counties, especially in Devon, Somerset, Sussex, and Kent. There are few recorded localities north of the Midlands, though they are present in parts of the Lake District and in scattered Welsh localities (Matthews *et al.*, 2018). The species are not generally known to be present within the area (Wembridge *et al.*, 2016). The habitats on site are of limited value due to limited areas of extensive woodland and scrub. As such, the species are reasonably discounted from site.

Red squirrel has been discounted from the assessment. Red squirrel populations are limited to small areas of northern England and are not known to be present in the area; with no previous records returned in the data search. It is anticipated that high abundances of grey squirrel (*Sciurus carolinensis*) are present within this region (Shuttleworth/RSST n.d.). This species will displace red squirrel through competition as well as cause increased red squirrel mortality through the spread of squirrel pox (The Mammal Society, 2020).

3.3.2 Vascular Plants

As the site comprises a private residential dwelling and associated garden, all vegetated habitats on site are planted or managed for ornamental value, and there is limited opportunities for notable species to establish.

Overall, notable species of plants have been reasonably discounted from this report.

3.3.3 Invertebrates

The deadwood pile found on site has the opportunity to support a wide range of invertebrates. The decomposition of wood provides nutrient-rich habitat for fungi, a nursery for beetle larvae, nesting and a larder for insectivorous birds and other animals. However, there is little suitable habitat for notable species within the site extent and surrounding area.

No aquatic habitats or high floristic diversity was located on site which would provide an important resource for invertebrates during their life cycle. It is anticipated common species will be present within the garden's plants and trees.

Overall, the presence of notable invertebrates within the site is reasonably discounted.

3.3.4 Amphibians

No ponds were located within site or within 250m of the site boundary. As great crested newts' upper dispersal limit is generally considered to be up to 250m from a waterbody (though occurrence of greater distances does exist), great crested newts are not anticipated to be present on site (English Nature, 2001).

The site comprised a mosaic of unmanaged habitats which may provide suitable foraging resources and cover for common amphibians such as common toads. Ornamental water bodies may be located within nearby residential gardens which may provide suitable conditions for breeding common amphibians.

The presence of great crested newts within the site is reasonably discounted, though common amphibians may occur on site.

3.3.5 Reptiles

The site was found to provide limited value for reptiles, given the majority of the site comprised of modified grassland, buildings, and hardstanding areas, which lack the structure and habitat quality to support the species group. The woodland and scrub habitats could provide some terrestrial cover for the species, though these are generally confined to the boundaries.

Overall, the habitats on site were of limited value and no records of the species group were identified. Reptiles are not considered to be present on site.

3.3.6 Birds

Ground nesting

The onsite hedgerow may provide suitable conditions for ground nesting birds that nest within hedgerow bases. Therefore, ground nesting birds cannot be ruled out from using the site, although are likely restricted to the hedgerow. Due to the presence of recreational activity in the garden and presence of domestic cats (*Felis catus*) in the area. More optimal habitat is present within the wider area i.e. Mandale Park, that would be used preferentially.

Passerine

The site does offer some suitable habitats for nesting birds, with several large trees and hedgerows present. Several passerine bird species were observed during the site visit within the site extent, including robin (*Erithacus rubecula*) and blue tit (*Cyanistes caeruleus*). As a result, it is likely that passerine birds use the tree habitats to nest in during the nesting season. The data search confirmed the nearby presence of passerine birds including bullfinch, dunnock, house sparrow, lesser redpoll, and starling.

The site was confirmed to provide value for nesting passerine birds.

3.3.7 Bats

Preliminary Roost Assessment

A PRA was completed on the building and trees located on site and adjacent. Please refer to Appendix 2 for the results of the PRA and imagery of Potential Roosting Features (PRF) identified during the survey.

In summary, there were no features that were considered as suitable for bat roosts.

Commuting and Foraging Bats

The trees and deadwood pile onsite are anticipated to provide value for foraging bats as these will attract invertebrate prey. No linear features are located within the site which may provide suitable commuting conditions; however, bats may instead utilise the broadleaved trees outside the site boundary for commuting and the nearby local wildlife reserves.

The site is considered to have low commuting and foraging value.

3.3.8 Hedgehog

The deadwood habitat and hedgerow base will provide suitable cover and foraging habitats for hedgehog.

Hedgehogs are potentially present within the site.

3.3.9 Badger

No badger setts or badgers were observed onsite. A large park with associated dense woodland and foraging landscapes is located across the road from the site (Mandale Park) which could have potential sett-building opportunities within the broadleaved woodland and scrub.

The site may serve as an occasional foraging source for badgers, however the potential for a badger sett on site is considered highly unlikely.

3.4 Invasive, non-native Species

3.4.1 Flora

Three invasive non-native species were recorded on site, comprising rhododendron, variegated yellow archangel, and cotoneaster sp. (*Cotoneaster sp.*). The cotoneaster plant found at TN1 has the potential to be part of the Schedule 9 invasive variety, however this was not confirmed on site. Rhododendron, variegated yellow archangel, and some species of cotoneaster are listed on Schedule 9 of the WCA (1981).

3.4.2 Fauna

No invasive non-native fauna species were recorded on site.

4 Ecological Constraints and Recommended Mitigation

4.1 Proposed Development

Mosaic Town Planning are proposing to develop land at 185 Manchester Road in Rochdale (hereafter referred to as ‘the site’). The proposals include replacing the existing property with a 74-bed dementia care residential apartment building with associated soft and hard landscaping.

4.2 Designated Sites

The site is located within the impact risk zone for one SSSI and SAC within the local area. The site is located within the impact risk zone for the Rochdale canal SAC and SSSI, located approximately 700m south of the site. It is anticipated that the designated site is a sufficient distance away and are separated by anthropogenic barriers such as the residential areas, such that no impacts as a result of development are anticipated.

One non-statutory community forest is located within 1 km of the site boundary, however due to the nature and proposals of the scheme it is anticipated the potential impacts will not be of significance.

4.3 Habitats

The site comprised of a residential building with private vegetated garden. The garden featured residential raised and bare ground flower beds with introduced shrubs, scattered trees, modified hedgerows, and modified grassland. It is assumed that the deadwood and hedgerows are of highest value for nesting passerine birds, insects and commuting small mammals.

The site strategy shows that the urban-to-urban redevelopment of the site is larger than the current building to accommodate the construction of the new 74-bed dementia care residential apartment building, meaning that it will require most of the current grassland and foliage to be removed and habitat value will likely suffer. The construction also requires eight individual trees (T3, T4, T8, T10 and T13-T16), one tree group (G9) and three hedgerows (H1, H2 and H7) too be removed within the site boundary (more information can be found in the AIA report, section 4.5) which will be a significant loss in ecological biodiversity and habitat.

Site habitats and accompanying target notes are presented in the Phase 1 Habitat Map in Appendix 4.

4.3.1 Broadleaved Woodland and Trees

The associated AIA report (Urban Green, 2023) highlights that the ‘Dunster House Tree Preservation Order 1969’ is currently in effect at the site, relating to offsite trees T6, T10 and T11 which are detailed in the associated AIA.

Generally, the protection measures of retained trees will be through the use of temporary protective demarcation fencing to protect the trees and shrubs. The fencing must extend outside the canopy of the retained trees and must remain in position until all plots have been developed to ensure protection is provided throughout the construction phase.

The fencing will be in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations.

It is recommended that replacement tree planting at a 1:3 ratio is required to compensate for loss of any trees. It is recommended that the planting comprises native species and species known to be of value for the attraction of wildlife. This will include fruiting and flowering species.

4.3.2 Hedgerow

Hedgerows are a Habitat of Principle Importance and listed on Section 41 of NERC Act (2006) and as such should be protected within the development. It is recommended that the hedgerow on site is retained as part of the development which will maintain existing commuting and foraging opportunities for a variety of species across the site.

The recommendations detailed in Section 4.3.1 should be followed in relation to the hedgerow also.

4.4 Fauna

4.4.1 Amphibians

Great crested newts were deemed unlikely to be present on site and no further consideration for the species is required. However, there is opportunity for common amphibians (such as common toad) to be present due to neighbouring residential areas with features such as ornamental ponds.

It is recommended that Reasonable Avoidance Measures are to be followed during site clearance. All site contractors are to be inducted to the potential presence of the species. Any debris is to be cleared by hand, and any common amphibians located moved carefully, by hand, to outside of the development area.

4.4.2 Birds

Tree or vegetation removal should be undertaken outside of the breeding bird season (March to September, inclusive). If this is not possible, a suitably experienced ecologist should check the habitat for breeding bird activity no more than 48 hours before clearance. If nesting activity is found, nests must be left in situ until the young have fledged.

The site has been assessed to provide some suitable habitat for nesting birds, therefore it is recommended that the landscape scheme for this site contains a range of habitats such as scrub and trees, which will provide suitable shelter and nesting habitat for a range of bird species which are likely to be present in the surrounding area.

4.4.3 Bats

Roosting Bats

As stated in Section 3.3.7, the building was assessed as having negligible bat roosting potential (See appendix 2 for full PRA results).

Foraging and Commuting Bats

The site was assessed as being of low value to commuting and foraging bats. It is recommended that the landscape designs for this site contain a mix of native plant species and those known to be of value to native invertebrate species, providing additional value to local bat populations as a foraging resource.

Construction lighting should not be directed towards retained and surrounding habitats including the broadleaved woodland and grassland. The construction lighting may impact bats which are sensitive to light. Directional lighting will be achieved by angle and orientation of beam, use of a cowl, louvre or other light shield, or a combination of these.

An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered within the scheme during its condition, to minimise impacts of lighting. The recommendations are as follows:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Internal lighting should be positioned away from windows to minimise light spill, where appropriate.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres, and hoods, that effectively contain light spill from unintended areas, where appropriate.
- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating any suitable retained bat habitats, particularly the hedgerows and trees, that are potential commuting and foraging habitat for bats.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use, where appropriate.
- Column heights of lighting can be considered to minimise light spill.

4.4.4 Hedgehog

Hedgehog may be present on site, as such checks for hedgehogs should be carried out prior to any grassland, hedgerow, and deadwood removal to avoid harming this species during works.

4.4.5 Badgers

No badger setts were found on site, though they are known to inhabit the surrounding area.

It is not anticipated the proposed development will impact the species due to there being no record of badger setts within the development area. It is considered that the badgers located within the local area and on site are generally tolerate to anthropogenic disturbance as the site is located within a residential area.

Badgers are highly mobile and opportunistic within urban habitats, and whilst deemed unlikely to be present on site, cannot be ruled out entirely. Since they cannot be ruled out, the following Precautionary Working Methods will be adhered to during construction phase to ensure that no badgers are impacted by the proposed development:

- All site operatives will be inducted to the potential presence of the species and the species legal protection.
- All site operatives will be inducted as to identifying potential badger setts and should be vigilant if they suspect they locate a new sett during works and inform the site manager immediately. A minimum 20m buffer will be maintained from the potential sett until an ecologist has been to site.
- All excavations will be battened at a 45-degree angle or ramps to be positioned to allow escape should animals become trapped.

- All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November each year when extra care is needed to avoid potential impacts on pregnant females.

4.5 Invasive Species

Non-native invasive flora species were identified during the site walkover including rhododendron ponticum, variegated yellow archangel and cotoneaster. As such, it is recommended, prior to the development, that an invasive species specialist should be contracted to map the extent of invasive species present within the site and produce a detailed management plan for the removal and eradication of such species onsite.

5 Opportunities for Enhancement

The National Planning Policy Framework (NPPF) (2021) highlights the requirement for planning policies and decisions to conserve and enhance the natural environment.

Paragraph 174 states that this should be achieved by (in terms of this assessment only):

- 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);*
- 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;*

Specific enhancement recommendations for the site include the following:

- Bat and bird boxes could be placed on the new buildings / retained trees. A plan to show the locations of these boxes and the specifications should be produced by a suitably qualified ecologist once the layout is finalised.
- Planting and retaining linear features such as hedgerows and trees between garden plots where possible, to add commuting features withing the site.
- The inclusion of 'hedgehog highways' to facilitate movement across the site. This includes holes of 13 x 13cm at the bases of fence panels, leaving a sufficient gap beneath gates and/or leaving brick spaces at the bases of brick walls.
- An ecologically sensitive planting scheme could be incorporated on the site to promote invertebrate use of the site, which could benefit local bat and bird species.

6 Conclusion

The PEA has met the objectives of the report, by demonstrating the following:

- The major habitats identified on site included mixed woodland/scattered trees, modified grassland, hedgerow, and deadwood and are detailed in Section 3.2.
- No potential ecological constraints were identified. This can be found in Section 4.
- General ecological enhancements are listed within Section 5.

No further surveys are required to facilitate this development. This assessment is based upon the proposed development information provided. If the proposed plans were to change, the advice of an ecologist should be sought to understand if any further survey effort is required.

7 References

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Appendix 1 – Relevant Legislation

Legislation relating to European Protected Species (e.g. bats, hedgehog, great crested newt)

European Protected Species and their resting places (e.g. bat roosts) are protected under the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CROW) Act 2000, and the Conservation of Habitats and Species Regulations 2017.

The Conservation of Habitats and Species Regulations 2017 transpose the European Union's 'Habitats Directive' (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) into UK law. The Regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' (EPS), and the adaptation of planning and other controls for the protection of European Sites. EPS are listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to:

- Intentionally kill, injure or take certain animals listed in Schedule 5;
- Intentionally or recklessly damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Intentionally or recklessly disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any structure or place which any such animal uses for shelter or protection.

In addition, under this legislation there are offences relating to sale, possession and control of wild animals listed in Schedule 5.

Under the Conservation of Habitats and Species Regulations 2017 it is an offence to:

- Deliberately capture, injure or kill any wild animal listed as a European Protected Species;
- Deliberately disturb wild animals of any such species in such a way as to be likely:
 - to impair their ability:
 - to survive, to breed or reproduce, or to rear or nurture their young, or;
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate, or;
- to affect significantly the local distribution or abundance of the species to which they belong.
- Deliberately take or destroy the eggs of such an animal, or;
- Damage or destroy a breeding site or resting place of such an animal.

In addition, under this legislation there are offences relating to possession, control sale and exchange of an EPS.

Great crested newt, otter and several species of bat are listed as a SoPI under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Legislation for amphibians (other than great crested newt)

Under the Wildlife and Countryside Act 1981 (as amended) the four widespread amphibian species, smooth newt (*Triturus vulgaris*), palmate newt (*Triturus helveticus*), common toad (*Bufo bufo*) and common frog (*Rana temporaria*) receive limited protection through section 9(5) only which makes selling, offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative) an offence.

Common toad is listed as a SoPI under Section 41 of the NERC Act 2006.

Legislation relating to breeding birds

All birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981 (as amended) and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy the egg of any wild bird; and
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird.

Schedule 1 of the Wildlife and Countryside Act 1981 provides further protection for selected species (including peregrine falcon (*Falco peregrinus*), barn owl (*Tyto alba*), little ringed plover (*Charadrius dubius*) and black redstart (*Phoenicurus ochruros*) during the breeding season. If any person intentionally or recklessly disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird. That person shall be guilty of an offence.

A number of bird species are listed as SoPI under Section 41 of the NERC Act 2006.

Conservation status - Birds of Conservation Concern (Eaton et al. 2015)

The UK's leading bird conservation organisations have worked together on the third quantitative review of the status of the birds that occur regularly in the UK, updating the last review in 2011. The status of birds within the UK have been regularly monitored through a series of surveys, including the national Breeding Bird Survey, Common Bird Census, sea bird monitoring programs and wetland monitoring programs. The result of this review and continued monitoring is The Population Status of Birds in the UK, Birds of Conservation Concern 4: 2015.

Birds are assessed against criteria to place each species on one of three alert lists, red, amber or green. Red list species are considered to be of high conservation concern, being either globally threatened, having historical UK population declines, having a rapid population decline or breeding range contraction of 50% or more in the last 25 years.

Amber list species are considered to be of medium conservation concern as they meet one or more of the following criteria (but none of the red list criteria): Red listed for historical decline in a previous review but with substantial recent recovery (more than doubled in the last 25 years), a UK breeding range contraction of between 25% and 49%, a reduction of breeding or non-breeding population of 25-49% in the last 25 years, a 5-year mean of 1-300 breeding pairs in the UK, an unfavourable European conservation status, at least 50% of the UK breeding population found in 10 or fewer sites, or where the breeding population in the UK represents 20% or more of the European breeding populations.

Green list species are considered to be of low conservation concern. They include all regularly occurring species that do not qualify under any of the red or amber criteria are green listed. The green list also includes those species listed as recovering from Historical Decline in the last review that have continued to recover and do not qualify under any of the other criteria.

Legislation relating to invasive plant species

Several non-native invasive plant species such as Himalayan balsam (*Impatiens glandulifera*), giant hogweed (*Heracleum mantegazzianum*), Japanese rose (*Rosa rugosa*), variegated yellow archangel (*Lamium galeobdolon*), rhododendron and Japanese knotweed (*Reynoutria japonica*) are listed under Schedule 9 of the Wildlife and Countryside Act, 1981 (as amended), which makes it an offence to ‘...plant or otherwise cause the species to grow in the wild’. This includes spreading or transferring contaminated soil from one area to another.

Estate Managers and landowners have a duty to pro-actively treat knotweed outbreaks. Under the Natural Environment and Rural Communities Act 2006 (NERC), subsection 14ZA (1), makes it an offence to sell, offer or expose for sale, or to have in one’s possession or transport for the purpose of sale, any Schedule 9 animal or plant or anything from which such an animal or plant can be propagated, including rhizomes of Japanese knotweed. Under subsection 14ZA (2) it is also an offence to publish or cause to be published any advertisement for the purchase or sale of these animals and plants.

The Environmental Protection Act 1990 (EPA 1990) contains a number of legal provisions concerning controlled waste. Any Japanese knotweed contaminated soil or plant material that is intended for discard is likely to be classified as controlled waste.

The Environmental Protection (Duty of Care) regulations 1991 also imposes a ‘duty of care’ on persons concerned with controlled waste, which includes any materials incorporating Japanese knotweed including soil, grass cuttings, general wastes and ash arising from the burning of knotweed. The duty applies to any person, who produces, imports, carries, keeps, treats or disposes of controlled waste. Failure to appropriately dispose of any material containing Japanese knotweed may lead to prosecution under Section 33 and 34 of the EPA 1990 and Section 14 (2) of the Wildlife & Countryside Act 1981 (as amended).

If knotweed stands are to be treated with herbicides, The Control of Pesticides Regulations (1986) applies. These regulations require any person who uses a pesticide to take all reasonable precautions to protect the health of human beings, creatures and plants, safeguard the environment and in particular avoid the pollution of water. If pesticides are to be used in or near to a watercourse, the Environment Agency should be contacted, and approval must be sought (application to use herbicides in or near water).

Waste leaving the site must be handled responsibly and in accordance with the law at all stages between its production and final recovery or disposal. Waste must be transferred to an authorised person, who is either a registered waste carrier or exempted from registration by the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991.

Additional legislation regarding the transport of Japanese knotweed contaminated materials is covered by the Hazardous Waste Regulations 2005 (HWR 2005). This contains provisions about the handling and movement of hazardous waste. Consignment notes must be completed when any hazardous waste is transferred, which includes details about the hazardous waste properties and any handling requirements. Untreated Japanese knotweed is not classed as hazardous waste, but material containing knotweed which has been treated with certain herbicides, may be classified as hazardous waste.

If any waste soil or knotweed is sent for landfill either before or after treatment, it must go to a landfill that is authorised to receive it.

The Hedgerows Regulations 1997

The Hedgerows Regulations 1997 were introduced to protect hedgerows of importance from destruction. However, the legislation does not apply to any hedgerow (even if it is within the list above) which is within or marking the boundary of the curtilage of a dwelling house.

For the Regulations to be applicable, the hedgerow must be at least 20 metres in length or, if less than 20 metres, it must meet another hedgerow at each end. A hedgerow is deemed to be important if it is more than thirty years old and meets at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

If a hedgerow which qualifies under the Regulations is to be removed, the landowner must contact the Local Planning Authority (LPA) in writing by submitting a hedgerow removal notice. The LPA then has a period of 42 days to decide whether or not the hedgerow meets the importance criteria of the regulations.

Legislation relating to badger

Badgers are protected under the Protection of Badgers Act 1992 (as amended) which makes it an offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so;
- intentionally or recklessly damage, destroy or obstruct access to a badger sett; and
- disturb a badger when it is occupying a sett.

These provisions have implications for construction or preparation works undertaken in the vicinity of an active sett and may be confounded by distance from the sett entrance. Any works resulting in ground penetration, vibration or noise near an identified badger sett entrance/s have the potential to disturb badgers and advice should be sought from a suitably experienced ecologist under such circumstances. If disturbance to an active sett is probable, then a licence may need to be obtained from Natural England before any works commence.

Appendix 2 – Preliminary Roost Assessment

Building Reference	Internal or External?	Description	Evidence	Category of Suitability
B1	Internal	The building onsite features an open attic space which was assessed for any bat potential. No gaps, droppings or bats were observed during the PRA. It is expected that this feature has no bat potential.		Negligible
	External	B1 comprised a two-storey brick building with a slate patched roof, a lean to, and attached garage. The building was in good condition throughout with no defects in the brickwork or slates that would provide suitable access points or roosting opportunities.		Negligible

Building Reference	Internal or External?	Description	Evidence	Category of Suitability
T3	External	Sessile Oak (<i>Quercus petraea</i>) Tree T3 did not have any suitable cracks, holes or cavities which could be considered for bat potential.		Negligible
T4	External	Sycamore (<i>Acer pseudoplatanus</i>) Tree T4 also had no suitable cracks, holes or cavities which could be considered for bat potential.		Negligible

Appendix 3 - Habitat Map and Target Notes

Hierarchical code	Code	Meaning
Primary Code	u1b5	Building
	h3h	Mixed Scrub
	g4	Modified Grassland
	u1b	Developed land; sealed surface
	h2b	Other hedgerows
	w1g6	Line of broadleaved trees
Secondary Code	11	Scattered Trees
	64	Mown
	75	Active management
	80	Unmanaged
	109	Residential
	230	Garden
	231	Vegetated garden
	1100	Urban greening
	1150	Flowerbed
	1180	Hedgerow
	1160	Introduced shrub